神戸市外国語大学 学術情報リポジトリ

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メタデータ	言語: eng
	出版者:
	公開日: 2022-12-21
	キーワード (Ja):
	キーワード (En):
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URL	https://kobe-cufs.repo.nii.ac.jp/records/2671

CHAPTER 6

Eastern Pwo Karen Verb Particles Indicating 'Up' and 'Down'

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[ABSTRACT]

Eastern Pwo Karen has the verb particles thán 'up' and làn 'down' derived from the verbs thán 'ascend' and làn 'descend'. These verb particles have six basic uses that can be classified based on the meanings they exhibit: Directional, Inchoative, Intensive, Restrictive, Integrated, and Special. Furthermore, Directional usage can be classified into three categories and Inchoative into two, resulting in a total of nine different uses. All Eastern Pwo Karen verbs can be divided into eleven groups, based on the criteria regarding which of the nine uses the verb particles thán and làn exhibit when co-occurring with them, or do not co-occur with them. This article discusses in detail the meanings of the above nine uses, and further discusses the characteristics of the eleven verb groups. It also clarifies, as one of its conclusions, whether or not a verb can co-occur with these verb particles is unpredictable.

1. Introduction

Pwo Karen belongs to the Karenic branch of the Tibeto-Burman languages (cf. Matisoff 2003). It is an analytic SVO (subject-verb-object) type language, which does not have a tense or person marking on the predicate. These are characteristics shared by all Karenic languages (see Kato 2021). This article deals with the Hpa-an dialect of Pwo Karen, which belongs to the Eastern Pwo Karen group. The Hpa-an dialect is spoken around Hpa-an, the capital city of Karen State, Myanmar. This dialect belongs to the Eastern Pwo Karen group; for the classification of the Pwo Karen dialects, see Kato (2009), in which Western Pwo Karen, Htokilibang Pwo Karen, Eastern Pwo Karen, and Northern Pwo Karen are proposed. West-Central Thailand Pwo Karen reported by Phillips (2018) seems to be a variation of Pwo Karen, which seems very close to Eastern Pwo Karen. For an overview of the phonology and morphosyntax of the Hpa-an dialect, see Kato (2017, 2019b). Hereafter, the Hpa-an dialect of Pwo Karen is referred to as EPK (Eastern Pwo Karen).

This study aims to examine what verbs the EPK verbal particles thán 'up' and làn 'down' can co-occur with, and what meanings they exhibit when they co-occur with a verb. A similar study was conducted by Kato (2013) on Western Pwo Karen. However, EPK has been briefly discussed only by Kato (2004). This study is much more detailed than that of Kato (2004).

As shown in Kato (2021, 2022), the basic structure of an EPK clause can be represented as in Figure 1:

(NP1) (verb particle(s)) V (verb particle(s)) (NP2) (NP3) (adverbial elements)

Figure 1: Basic structure of the Eastern Pwo Karen clause

NP1 is the subject; NP2 is the indirect object and NP3 is the direct object. V(= verb) appears after the subject. A verb particle is a particle that appears before or after V. The underlined part is called the verb complex. A concatenated type of verb serialization (see Kato 2017, 2019b) can appear in the V position. Kato (2004) lists eleven verb particles that appear before the verb and fifty verb particles that appear after the verb. Between the elements of a verb complex, noun phrases never appear. For example, the following sentence (1), also used in Kato (2021, 2022), would help in understanding the structure of a clause more clearly. The forms m_{∂} , indicating irrealis, and $b\acute{a}$, indicating opportunity, appearing before and after the verb $2\acute{a}n$ 'eat', are verb particles.

(1) nə 7án bá kΰ ?á?á 1á jə yéin phèn mə IRR eat OPP cake much LOC 1SG house inside 'You will also get a chance to eat a lot of cake inside my house.'

The functional words $th\acute{a}n$ 'up' and $l\grave{a}n$ 'down' discussed in this article are verb particles that appear after the verb, like the verb particle $b\acute{a}$ in (1). Let us look at an example. Sentences (2) and (3) shown below are examples of $th\acute{a}n$ and $l\grave{a}n$, respectively. In both the examples, these verb particles appear after the verb $y\^{e}$. The particle $th\acute{a}n$ in (2) represents an upward direction, while $l\grave{a}n$ in (3) represents a downward direction. Since direction is the most concrete of the meanings that these verb particles express, in this article, the verb particles $th\acute{a}n$ and $l\grave{a}n$ are glossed as 'up' and 'down', respectively.

- (2) ʔəwê γê thán lá ja dàu phàn 3SG come up LOC 1SG room inside 'He came up to my room.'
- (3) ʔəwê γê làn lá jə dàu phòn 3SG come down LOC 1SG room inside 'He came down to my room.'

The verb particles $th\acute{a}n$ and $l\grave{a}n$ are derived from the verbs $th\acute{a}n$ 'ascend, rise, climb' and $l\grave{a}n$ 'descend, drop', respectively. The verb $th\acute{a}n$ denotes an upward movement, while $l\grave{a}n$ denotes a downward movement. Examples (4) and (5) are of the verbs $th\acute{a}n$ and $l\grave{a}n$:

(4) lənijò thî thán today water ascend 'Today, the water level rose.' (5) lənìjò thî 1à_N today water descend 'Today, the water level dropped.'

Let us briefly discuss the grammaticalization of thán and làn in two aspects. First, the verb particles $th \dot{a} N$ and $l \dot{a} N$, as in (2) and (3), have phonological features not found in the verbs thán and làn, as in (4) and (5). That is, the verb particle thán may be pronounced lán or ván, and the verb particle làn may be pronounced vàn. For example, the verb complex $y\hat{\varepsilon}$ thán (come / up) 'come up' in (2) may be pronounced $y\hat{\varepsilon}$ lán or $y\hat{\varepsilon}$ kàn. Similarly, $y\hat{\varepsilon}$ làn (come / down) 'come down' in (3) may be pronounced $y\hat{\varepsilon} \, \kappa \dot{\alpha} N$. This phonological phenomenon is observed very frequently in any of the uses of thán and làn described in Section 2. The verbs thán and làn are never pronounced this way. In other words, phonetic reduction has occurred in the verb particles thán and làn. Second, the meanings expressed by the uses of verb particles thán and làn as discussed in the following sections, except for the directional meanings of their Directional use, have become abstract and are no longer related to the meanings of the original verb thán and làn, denoting actions of moving up and moving down. Therefore, semantic bleaching has occurred in the verb particles thán and làn. The point is that erosion (phonetic reduction) and desemanticization (semantic bleaching), both of which are common in grammaticalization (Heine and Kuteva 2002: 2), are observed in the verb particles thán and làn. Thus, there would be no problem in calling thán and làn, as discussed in this article, verb particles.

Among the EPK motion verbs, thàin 'return' is grammaticalized in addition to thán and làn. For example, as in philân thàin (give / return) 'return, give back', thàin denotes a backward direction. Motion verbs for 'go' and 'come' are grammaticalized in various languages (Heine and Kuteva 2002), but EPK $l\hat{l}$ 'go' and $y\hat{\epsilon}$ 'come' have not been grammaticalized. However, the younger generation have begun using $y\hat{\varepsilon}$ for the purpose of expressing graduality as in $y\hat{\epsilon} = 2\hat{a} th\hat{a}N$ (come / many / up) 'It has gradually increased'. This could be considered a grammaticalization of $y\hat{\varepsilon}$ 'come'.

Before moving on to the next section, it is necessary to mention the classification of verbs. As discussed in Kato (2008), all EPK verbs can be divided into two categories: active verbs, which denote actions or events, and stative verbs, which denote states. Other important verb classifications in EPK include those based on volition and transitivity, but the classification of active and stative verbs is particularly important when describing the functions of thán and làn. There are several tests to distinguish between active and stative verbs. The simplest tests include those using adverbs such as ?èphlé 'fast', xèxè 'slowly', or ?èchón 'strongly' and adverbial phrases such as $n\bar{\imath}$ nàrì (two / hour) 'for two hours'. Active verbs can co-occur with at least one of these adverbial expressions, but stative verbs cannot co-occur with any of them. For example, the active verb 2án 'eat' can co-occur with $\frac{\partial \hat{e}phl\hat{\epsilon}}{\partial t}$ as in $\frac{\partial \hat{e}phl\hat{\epsilon}}{\partial t}$ (eat / fast) 'east fast', but the stative verb \hat{v} 'good' cannot co-occur with any of them.

2. A survey of the verb particles thán and làn

I made a list of about 280 verbs by consulting Hattori (1957) and inquired two native EPK speakers (Mr. Saw Khin Maung Aye and Ms. Naw Snow Paw) in Pwo Karen and Burmese whether the verb particles *thán* and *làn* could co-occur with each verb and, if so, what kinds of meanings they expressed and in what situations they are used. The survey was conducted for approximately two hours each week over three months, from September to December 2021, with both consultants present during the survey. As a result of the survey, it was found that both thán and làn have verbs that they can and cannot co-occur with. It was also found that based on the meanings that thán and làn express when co-occurring with verbs, the uses of thán and làn can be categorized into six basic uses: Directional, Inchoative, Intensive, Restrictive, Integrated, and Special. The Directional can be further divided into Directional 1, Directional 2, and Directional 3, and the Inchoative can be further divided into Inchoative 1 and Inchoative 2. Thus, there are a total of nine uses: Directional 1, Directional 2, Directional 3, Inchoative 1, Inchoative 2, Intensive, Restrictive, Integrated, and Special. In any of these uses, thán and làn do not appear in the same verb complex. Each use will be explained below. Note that làn can represent reflexivity in the form "V $l \dot{a} n \theta \dot{a}$ ", as discussed in detail in Kato (2019a). The form $\theta \hat{a}$ is a middle marker. This use is not treated in this article because it is considered to be a kind of idiom in which $l \dot{a} N$ has to appear with $\theta \dot{a}$. Also, the expression in the form of "V thán V làn", such as 25 thán 25 làn (stay / up / stay / down) 'behave', is also considered a kind of idiom, and it will not be discussed in this article.

Directional is the use of indicating an upward or downward direction: $th \dot{a} n$ indicates an upward direction and $l \dot{a} n$ a downward direction. This use can be further divided into three categories: Directional 1 is the case in which the direction of movement of the referent of the subject is indicated; Directional 2 is the case in which the direction of the action denoted by the verb is indicated; and Directional 3 is the case in which the direction of movement of the referent of the object is indicated. Examples are shown in (6) through (8). Sentence (6) is an example of Directional 1 usage, and expresses that the referent of the subject "I" moved to "his house", which is situated at a higher level than the starting point. Sentence (7) is an example of Directional 2 usage, and expresses that the action of looking was performed in an upward direction. Sentence (8) is an example of the use of Directional 3, and expresses that the referent of the object "firewood" was moved upward.

- (6) jə lì thán lá ?ə yéin
 1SG go up LOC 3SG house
 'I went to his house.'
- (7) jə jō thán ?ə γéin 1SG look up 3SG house 'I looked up at his house.'

(8) Pawê chó thán θéinmū 3SG lift up firewood 'He lifted up the firewood.'

Inchoative is the use of indicating the start of an action or state. This use can be further divided into two: Inchoative 1 is the case in which starting of an action is indicated; and Inchoative 2 is the case in which starting of a state (change of state) is indicated. Sentence (9) is an example of Inchoative 1 usage. This example expresses that the action of building started. Sentences (10) and (11) are examples of the use of Inchoative 2. Example (10) expresses that the state of there being many humans has started, and (11) expresses that the state of there being few humans has started.

- (9) ?əwê θόων thán γέιν 3SG build up house 'He started to build a house.'
- (10) phlòon ?á thán person many up 'The number of people increased.'
- (11) phlòun cà làn person few down 'The number of people decreased.'

Intensive is a use to indicate that an action is performed vigorously, carefully, or precisely. Sentences (12) and (13) are examples.

- (12) thîkhlóphó lànjwà làn river flow down 'The river is flowing vigorously.'
- (13) ja kúı làn θéinphài1SG peel down bark'I peeled the bark vigorously/carefully.'

Restrictive is a use that limits the meaning of a verb to one of two possible ones when the verb can express two different meanings. Take the verb $\theta \hat{o}$ 'wear' for example. See (14):

(14) ?əwê θò châin mōkhó
 3SG wear shirt a.while.ago
 'He put on a shirt a while ago. / He was wearing a shirt a while ago.'

The verb $\theta \hat{o}$ can express two meanings: the action of putting on clothes and the action of keeping clothes on. Thus, (14) can express two meanings: 'he put on a shirt a

while ago' and 'he was wearing a shirt a while ago'. In this case, the use of $th\acute{a}N$, as in (15), limits the meaning to 'he put on a shirt a while ago'. In other words, the meaning of the verb is restricted by $th\acute{a}N$. This is the Restrictive use.

(15) ?əwê θò thán châin mōkhó 3SG wear up shirt a.while.ago 'He put on a shirt a while ago.'

Integrated usage is when the verb is not used without $th\acute{a}N$ or $l\grave{a}N$ and always appears with $th\acute{a}N$ or $l\grave{a}N$. See (16) for example:

(16) Pawê pàu thán pàintarân 3SG open up window 'He opened a window.'

The verb $p \dot{a}v$ 'open' is never used alone, and is always followed by $th \dot{a}N$. In other words, $p \dot{a}v$ $th \dot{a}N$ is united as a single expression. In the Integrated use, since $th \dot{a}N$ and $l \dot{a}N$ are integrated with the verb, they do not have a generalizable meaning or function, unlike the uses we have seen.

Finally, the Special usage is when "verb + $th\acute{a}$ " or "verb + $l\grave{a}$ " as a whole expresses an idiomatic meaning. See (17) and (18) for example:

- (17) Pawê cáin thán lá châin khlôun 3SG walk up LOC shop outside 'He got out of the store.'
- (18) ?əwê cáin làn lá thə?àn 3SG walk down LOC Hpa-an 'He got off (the bus) in Hpa-an.'

The verb *cáin* means 'to walk'. However, while *cáin thán* expresses the meaning 'walk upward', it also expresses the meaning 'get out' as a whole, as in (17). Similarly, while *cáin làn* means 'walk downward', it also means 'get off' as a whole, as in (18). These meanings 'get out' and 'get off' are idiomatic. The particles *thán* and *làn* exhibiting the Special use, similar to the case of Integrated use, have no generalizable meaning or function.

The co-occuring verb generally determines the use(s) exhibited by *thán* and *làn*. Thus, EPK verbs can be classified based on which of the above nine uses the co-occurring *thán* or *làn* exhibits. That is, for the following Group (A) through (I): (A) <Directional 1>; (B) <Directional 2>; (C) <Directional 3>; (D) <Inchoative 1>; (E) <Intensive>; (F) <Inchoative 1 & Intensive>; (G) <Inchoative 2>; (H) <Restrictive>; (I) <Integrated>; and (J) <Special>. The brackets "< >" read that *thán* or *làn* co-occurring with a verb of the group in question exhibits the bracketed use(s). In the verbs of Group (F), two uses, i.e., Inchoative 1 and Intensive, are observed. In addition, verbs that do not co-occur with either *thán* or *làn* are labeled Group (K). Defined in this way, all verbs in EPK belong to one of the 11 groups from Group (A) to (K). The number of verb groups is two more than the nine uses because we have

Group (F), where two uses are observed, and Group (K), whose verbs do not cooccur with either thán or làn. In some verbs, thán and làn may exhibit the Directional use as well as another one. In such cases, the Directional use is adopted as the basis for classification of the verbs because it retains the directional meanings of the original verbs and is considered the most basic.

Table 1 shows the results of the survey. The order of the verbs in each group is the alphabetical order of the English translation (Note that when the verbs in each group can be subgrouped according to their co-occurrence possibility with thán and làn, they are arranged alphabetically within the subgroup). All verbs are assigned a serial number. The column of "a/s" indicates whether the verb in question is an active or stative verb: "a" is an active verb, and "s" is a stative verb. The thán and làn columns indicate whether these verb particles can co-occur with each verb. That is, when the verb does not co-occur with thán or làn, the symbol '-' is used; and when the verb can co-occur with thán or làn, the six basic uses exhibited by the cooccurring thán or làn are given in abbreviated forms. The abbreviated forms are: Up (= Directional, upward), Down (= Directional, downward), Incho (= Inchoative), Restr (= Restrictive), Inten (= Intensive), Integ (= Integrated), and Spec (= Special). Directional use is divided into two categories, upward and downward, for clarity, thus the number of abbreviations is seven. If more than one use is given in one column (e.g., "Up, Spec"), it means that the verb particle can be used in either of the specified ways.

The "verbs" treated in this article include collocations and idioms, which are composed of a noun and a verb and have verb-like characteristics as a whole. No. 8 $li \ \gamma \hat{\epsilon}$ is such an example. "(wind / come)" refers to the meaning of the respective word. That is, in this case, li means 'wind' and $y\hat{\varepsilon}$ means 'come', and the entire expression means 'wind blows'. In collocations and idioms consisting of a noun and a verb, thán or lan = lan =appears is represented by '[]'.

Table 1: Co-occurrence possibilities of *thán* and *làn* with verbs and the meanings that *thán* and *làn* exhibit

	Verb	Meaning	a/s	thán	làn	Notes			
(A) <i< td=""><td colspan="9">(A) <directional 1=""></directional></td></i<>	(A) <directional 1=""></directional>								
1	γε̂	'come'	a	Up	Down				
2	jùi	'fly'	a	Up	Down				
3	1 <u>ì</u>	'go'	a	Up	Down				
4	phŵ	'jump'	a	Up	Down				
5	thàin	'return'	a	Up	Down				
6	klí	'run'	a	Up	Down				
7	cáin	'walk'	a	Up, Spec	Down, Spec	cáin thán and cáin làn of the Special use mean 'get out' and 'get off', respectively.			
8	lì γĉ [] (wind / come)	'wind blows'	a	Up, Incho	Down	lì ʔτú 'wind blows' [89] is a synonym.			
(B) <	(B) <directional 2=""></directional>								

9	?áncà	'ask'	a	Up	Down	
				Incho		
10	bò	'bend'	a	Up	Down	
11	kò	'call'	a	Up	Down	
12	phé	'cut'	a	Up	Down	
13	dá	'find'	a	Up	Down	dá 'see, visible' [198] is a homonym.
14	màbò	'help'	a	Up	Down	
15	mè	'punch'	a	Up	Down	
16	thôn	'kick ~ with one's heel'	a	Up	Down	
17	thè	'kick ~ with the back of one's leg'	a	Up	Down	
18	jū	'look'	a	Up	Down	
19	dàʊné	'point at'	a	Up	Down	
20	pō	'read'	a	Up, Incho	Down	
21	kògà [] nò (shout / mouth)	'shout'	a	Up, Incho	Down	
22	khlàin	'speak'	a	Up, Incho	Down	
23	chè	'stab'	a	Up	Down	
24	thàʊ	'wipe'	a	Up	Down	
(C) <i< td=""><td>Directional 3></td><td></td><td></td><td></td><td></td><td></td></i<>	Directional 3>					
25	jò	'carry ~ on one's shoulder'	a	Up	Down	
26	càʊlé	'draw'	a	Up	Down	
27	chó	'lift ~ with one's hand'	a	Up	Down	
28	θὰυ	'move (vt)'	1	T T	D	
			a	Up	Down	
29	θao θəwài	'pump'	a	Up Up	Down	
		'pump' 'push'	+			
29 30 31	θəwài chán ?όk <u>í</u>	'pump' 'push' 'put'	a	Up	Down	
29 30 31 32	θəwài chán ?όk <u>í</u> khwái	'pump' 'push'	a a	Up Up	Down Down	
29 30 31 32	θəwài chán 7όk <u>í</u> khwái nchoative 1>	'pump' 'push' 'put' 'throw'	a a a	Up Up Up Up	Down Down Down	
29 30 31 32	θəwài chán ?όk <u>í</u> khwái	'pump' 'push' 'put'	a a a	Up Up Up	Down Down Down	
29 30 31 32 (D) <i< td=""><td>θəwài chán 7όk<u>í</u> khwái nchoative 1></td><td>'pump' 'push' 'put' 'throw'</td><td>a a a a</td><td>Up Up Up Up</td><td>Down Down Down Down</td><td></td></i<>	θəwài chán 7όk <u>í</u> khwái nchoative 1>	'pump' 'push' 'put' 'throw'	a a a a	Up Up Up Up	Down Down Down Down	
29 30 31 32 (D) <i< td=""><td>θewài chán 26k<u>í</u> khwái nchoative 1> thán 2ánlū [] thî (bathe /</td><td>'pump' 'push' 'put' 'throw' 'ascend, climb'</td><td>a a a a</td><td>Up Up Up Up Up Incho</td><td>Down Down Down -</td><td></td></i<>	θewài chán 26k <u>í</u> khwái nchoative 1> thán 2ánlū [] thî (bathe /	'pump' 'push' 'put' 'throw' 'ascend, climb'	a a a a	Up Up Up Up Up Incho	Down Down Down -	
29 30 31 32 (D) <i 33</i 	θοwài chán γόk <u>í</u> khwái nchoative 1> thán γάνιѿ [] thî (bathe / water)	'pump' 'push' 'put' 'throw' 'ascend, climb' 'bathe'	a a a a a	Up Up Up Up Up Incho	Down Down Down	

38	yàyòn	'break (vi)'	a	Incho	_	
39	θέων	'build'	a	Incho	_	θόων 'plant' [125]
			u			is a homonym.
40	khàtháwn	'bundle'	a	Incho	-	
41	m <u>í</u> ?án []	'burn'	a	Incho	-	
	(fire / eat)					
42	bàinbòn	'coil'	a	Incho	-	
43	рәко̀и	'collect'	a	Incho	-	
44	?ánphôn	'cook'	a	Incho	-	
45	kàu	'cough'	a	Incho	-	
46	yán	'cry, weep'	a	Incho	-	
47	blá	'get cured, get	a	Incho	-	
		recovered'				
48	tháwnlī	'dance'	a	Incho	-	
49	mà	'do'	a	Incho	-	
50	mîmān	'dream'	a	Incho	-	
51	?à	'drink'	a	Incho	-	
52	?án	'eat'	a	Incho	-	
53	γòn	'end, finish'	a	Incho	-	
54	dó	'fold'	a	Incho	-	
55	θànán	'forget'	a	Incho	-	
56	màchòn	'help'	a	Incho	-	
57	lân wēdài	ʻlightning	a	Incho	-	
		flashes'				
58	?ánxûi	'look for'	a	Incho	-	
59	θŝ	'make sound'	a	Incho	-	
60	dàʊ	'make war'	a	Incho	-	
61	tàin	'make'	a	Incho	-	
62	lókwè	'play'	a	Incho	-	
63	thè	'pluck'	a	Incho	-	
64	thōn	'pound'	a	Incho	-	
65	?ánmờ	'put ~ in one's	a	Incho	-	
		mouth'				
66	chà	'sew'	a	Incho	-	
67	còcó	'shake'	a	Incho	-	
68	wàthó	'shiver'	a	Incho	-	
69	mà [] thàkhớ	'sing'	a	Incho	-	
	(do / song)		<u></u>			
70	mî	'sleep'	a	Incho	-	
71	nī	'smile, laugh'	a	Incho	-	
72	kəch <u>í</u>	'sneeze'	a	Incho	-	
73	?άνγιίι	'steal'	a	Incho	-	
74	?wì	'steam (vi),	a	Incho	-	
		steam comes				
		out'	<u></u>			

		I	T			1
75	?άνγὃυν	'steam (vt),	a	Incho	-	
		braise'				
76	màlớ	'study; teach'	a	Incho	-	
77	?ánchàu	'suck'	a	Incho	-	
78	phô	'swell (vi)'	a	Incho	-	
79	jā [] thî	'swim'	a	Incho	-	
	(swim /					
	water)					
80	là	'tell'	a	Incho	_	
81	chônmón	'think,	a	Incho	_	
01		consider'		Inche		
82	lân xwèin []	'thunder'	a	Incho	_	
02	(thunder /	tituliaci	a	IIICIIO		
	coo)					
83	cèn	'tie'	a	Incho	_	
84	?ókhò	'wait for'	a	Incho	_	
85		'wave hand'		Incho		
0.5	jàn [] cứi (wave / hand)	wave nand	a	IIICIIO	-	
86		6:14?		Incho		
	lànjí	'wilt'	a		-	
87	nèn	'win'	a	Incho	-	
88	thŵtərài	'wind (as rope	a	Incho	-	
	1) 0 (5 7	or paper)'		T 1		n ^6 : 111 ·
89	lì ?úi []	'wind blows'	a	Incho	-	$li \ y\hat{\varepsilon}$ 'wind blows' [8] is a synonym.
	(wind / blow					[0]
	(vt))					
90	mà [] kəlôʊn	'work'	a	Incho	-	
	(do/job)					
	ntensive>	T		1	1	1
91	khā	'break (vi)	a	-	Inten	
		(as a branch)'				
92	?ánlŵ	'dry \sim in the	a	-	Inten	
		sun'				
93	lànthé	'fall, drop'	a	-	Inten	
94	lànjwà	'flow'	a	-	Inten	
95	?ánlōn	'lend (as	a	-	Inten	
		money, rice)'				
96	?ánlèin	'lend (general	a	-	Inten	
		things)'				
97	?ánláin	'lick'	a	-	Inten	
98	mînàn	'lie down'	a	-	Inten	
99	lân phlà []	'lightning	a	_	Inten	
	(thunder /	strikes'				
	strike)					
100	lànphlī	'melt (vi)'	a	_	Inten	
101	kúi	'peel'	a	_	Inten	
102	chèn	'rain'	1		Inten	
102	CHĐN	14111	a		IIIICII	1

103	kwéphəjā	'release'	a	_	Inten	
103	khwá	'scratch'	a	-	Inten	
105	?ánchâ	'sell'	a	_	Inten	
106	lànbàn	'sink (vi)'	a	_	Inten	
107	chînàn	'sit down'	a	_	Inten	
108	thớphl <u>ì</u>	'spit'	a	_	Inten	
109	bàichài	'squeeze'	a	_	Inten	
110	jāin	'step on'	a	_	Inten	
111	?ánjū	'swallow'	a	_	Inten	
112	chíchâ	'urinate'	a		Inten	
113	Pányá	'welcome'	a	-	Inten	
	ranya nchoative 1 & Int		а	-	IIIteII	
114	Pánká	'bake'		Incho	Inten	
115	Páin	'bite, chew'	a	Incho	Inten	
116	Pánxó	'broil'	a	Incho	Inten	
117	ná	'count'	a	Incho		
117	kàbài		a	-	Inten Inten	
	-	'cover; shut'	a	Incho		
119	? <u>í</u> châ	'defecate'	a	Incho	Inten	
120	kháwn	'dig'	a	Incho	Inten	
121	cô	'fry'	a	Incho	Inten	
122	chônná	'listen'	a	Incho	Inten	
123	jōdèin	'mix'	a	Incho	Inten	
124	?ò	'peel'	a	Incho	Inten	<i>θόων</i> 'build' [39]
125	θέων	'plant'	a	Incho	Inten	is a homonym.
126	γάνδιώ	'rear, nourish'	a	Incho	Inten	
127	?ópwài	'take a rest'	a	Incho	Inten	
128	pjò	'vomit'	a	Incho	Inten	
129	?ánchûjwà	ʻwash	a	Incho	Inten	
		(as clothes)'				
130	klàin	'whet'	a	Incho	Inten	
131	kè	'write'	a	Incho	Inten	
(G) <i< td=""><td>nchoative 2></td><td></td><td></td><td></td><td></td><td></td></i<>	nchoative 2>					
132	châ	'ache'	S	Incho	-	
133	тэ̂м	'alive'	S	Incho	-	
134	γέγ	'bad'	S	Incho	-	
135	γ̈́	'be, exist'	S	Incho	-	cf. 25 'stay, live' [274]
136	kέ	'be, become'	S	Incho	-	
137	xîlà	'beautiful'	S	Incho	-	
138	káin	'bent'	s	Incho	-	
139	dΰ	'big'	S	Incho	-	
140	khá	'bitter'	S	Incho	-	
141	θân	'black'	S	Incho	-	
142	mé bló []	'blind'	S	Incho	-	
	(eye / blind)					
	/			•	•	

143	lâ	'blue'	C	Incho		
143	 	'chilly'	S	Incho	-	
144	γōN		S		-	
	wànkhwàn	'circular'	S	Incho	-	
146	chêin	'clean'	S	Incho	-	
147	nā ʔèn []	'deaf'	S	Incho	-	
1.40	(ear / bad)	6.1		т 1		
148	jó	'deep	S	Incho	-	
149	?wí	'delicious'	S	Incho	-	
150	cîcá	'dirty'	S	Incho	-	
151	xâin	'dry'	S	Incho	-	
152	lànlài	'dull, blunt'	S	Incho	-	
153	γὸ	'early'	S	Incho	-	
154	khà	'expensive'	S	Incho	-	
155	jàin	'far'	S	Incho	-	
156	phlέ	'fast'	S	Incho	-	
157	bón	'fat'	S	Incho	-	
158	xŵ	'flat'	S	Incho	-	
159	thánphô	'float'	S	Incho	-	
160	khlàʊ	'free'	S	Incho	-	
161	xwè	'full, be filed'	S	Incho	-	
162	<u>γì</u>	'good'	S	Incho	-	
163	y <u>î</u>	'green'	S	Incho	-	
164	nā xôn []	'hard of	S	Incho	-	
	(ear / heavy)	hearing'				
165	nòn	'hard'	S	Incho	-	
166	phímé	'hate'	S	Incho	-	
167	γôν	'hear'	S	Incho	-	
168	xôn	'heavy'	S	Incho	-	
169	γέ	'hot, spicy'	S	Incho	-	
170	khō	'hot'	S	Incho	-	
171	θàwī	'hungry'	S	Incho	-	
172	jò	'inflamed (as	S	Incho	-	
		liver)'				
173	ném	'intoxicated'	S	Incho	-	
174	θà	'itchy'	S	Incho	-	
175	θ <u>í</u> jâ	'know'	S	Incho	-	
176	təcwī	'late'	S	Incho	-	
177	phàn	'light, bright'	s	Incho	-	
178	khè	'lit'	S	Incho	-	
179	thô	'long, high'	S	Incho	-	
180	?έ	'love'	S	Incho	-	
181	?á	'many'	S	Incho	-	
182	thángā	'married'	S	Incho	_	
183	má	'mistaken'	s	Incho	-	
184	θân	'new'	s	Incho	_	
107	Jun	110 **	1 5	IIIOIIO	1	I

185	θàςā	ʻold		Inaha		
185	Daca		S	Incho	-	
186	lànlì	(animate)'		Incho		
180	Ianii		S	Incho	-	
187	máin	(inanimate)' 'plump'		Incho		
	†		S	_	-	
188	cùi	'pointed'	S	Incho	-	
189	γὸ (wὸ)	'red'	S	Incho	-	
190	nán	'remember'	S	Incho		
191	dúcā	'rich'	S	Incho		7/41 250101
192	bá	'right'	S	Incho	-	bá 'cheap' [218] and bá 'hit' [270] are homonyms.
193	mêin	'ripe; cooked'	S	Incho	-	
194	?úı	'rotten'	S	Incho	-	
195	ρόυνΙόυν	'round'	S	Incho	-	
196	yân	'salty'	S	Incho	-	
197	θὰμέ	'scared, afraid of'	S	Incho	-	
198	dá	'see, visible'	S	Incho	-	dá 'find' [13] is a homonym.
199	chônkàin	'sick'	S	Incho	-	
200	nôn	'smell'	S	Incho	-	
201	phl <u>î</u>	'smooth'	S	Incho	-	
202	khào	'solid'	S	Incho	-	
203	cháin	'sour'	S	Incho	-	
204	nôncí	'stink'	S	Incho	-	
205	lòn	'straight'	S	Incho	-	
206	chón	'strong'	S	Incho	-	
207	khō?wì	'sultry'	S	Incho	-	
208	chôn	'sweet'	S	Incho	-	
209	tán	'thick'	S	Incho	-	
210	kwí	'ticklish'	s	Incho	-	
211	pwài	'tired'	s	Incho	-	
212	lá?èn	'ugly'	s	Incho		
213	lèn	'warm'	s	Incho	-	
214	có	'wet'	S	Incho	_	
215	?wà	'white'	S	Incho	-	
216	lē	'wide'	S	Incho	-	
217	bàn	'yellow'	S	Incho	-	
218	bá	'cheap'	S	-	Incho	<i>bá</i> 'right' [192]
		•	5			and <i>bá</i> 'hit' [270] are homonyms.
219	khléin	'cold'	S	-	Incho	
220	εúι	'cool'	S	-	Incho	
221	khài	'dark'	S	-	Incho	
222	çà	'few'	S	-	Incho	
223	xwî	'light, not	S	-	Incho	
		heavy'		<u> </u>	<u> </u>	

225	224	?éin	'narrow'	C	_	Incho
226 phi				S	-	
227 pî 'small' s - Incho		<u> </u>		1	-	
228 xwē 'thin, skinny' s - Incho		-		1	-	
229 bèn				†	-	
230 θàbán 'young' s - Incho				1	-	<u> </u>
230	229	bən	,	S	-	Incho
θà xwî [] (heart / light) 'ighd' s Incho Incho	220	0.11.7				7 1
Cheart / light Cheart / light Seasoned' Seas		ļ	'young'	†	-	<u> </u>
Seasoned' Seas	231		glad'	S	Incho	Incho
Seasoned' Seas	232	blà	ʻlightly	S	Incho	Incho
234 ?wì 'slow' s Incho Incho 235 pháo 'soft' s Incho Incho 236 phút 'carry ~ on one's back' 237 béin [] mé (close / eye) close eyes' a Restr - (close / eye) close eyes' a Restr - 238 tháo 'ride' a Restr - 239 chîthśun 'stand' a Restr - 240 kòn 'wear (as sarong)' sarong)' 241 θò 'wear (as a Restr - (I) < Integrated> 242 phà 'born' - Integ - 243 tài 'go out' - Integ - 244 pào 'open (vt)' - Integ - 245 mé 'start, begin' - Integ - 247 kàn 'yawn' - Integ - 248 náo 'enter' - Integ - 249 blà 'hang' - Integ - 250 jwà 'make ~ flow' - Integ 251 bèn 'sink (vt)' - Integ 252 pjá 'take off - Integ 253 kwé 'take off - Integ 255 cáinyà 'run away' a Spec - 256 lòn 'follow' a Spec - 256 lòn 'follow' a Spec - 256 lòn 'follow' a Spec - 257 chim carret carr						
234 ?wì 'slow' s Incho Incho 235 pháo 'soft' s Incho Incho (H) < Restrictive> 236 phút 'carry ~ on one's back' a Restr - 237 béin [] mé (close / eye) 'close eyes' a Restr - 238 tháo 'ride' a Restr - 239 chîthśum 'stand' a Restr - 240 kòn 'wear (as sarong)' a Restr - 240 kòn 'wear (as shirt)' a Restr - 241 θò 'wear (as shirt)' a Restr - 241 θò 'born' - Integ - 242 phà 'born' - Integ - 242 phà 'born' - Integ - 243 tài 'go out' - Integ -	233	bàυ	'near'	S	Incho	Incho
(H) <restrictive> 236 phút</restrictive>		?wì	'slow'	S	Incho	Incho
(H) <restrictive> 236 phút</restrictive>	235	pháo	'soft'	s	Incho	Incho
236 phút					1	
One's back'			'carry ~ on	a	Restr	-
237	230	Pires			1 tosti	
(close / eye)	237	héin [] mé		а	Restr	_
238 tháo 'ride' a Restr - 239 chítháun 'stand' a Restr - 240 kòn 'wear (as sarong)' a Restr - 241 θò 'wear (as shirt)' a Restr - 241 θò 'born' - Integ - 242 phà 'born' - Integ - 242 phà 'born' - Integ - 243 tài 'go out' - Integ - 244 pàu 'open (vt)' - Integ - 245 mé 'sprout' - Integ - 245 mé 'start, begin' - Integ - 247 kàn 'yawn' - Integ - 248 náu 'enter' - - Integ 250 jwà 'make ~ flow' -	237		close cyes	u u	Restr	
239 chíthóuin 'stand' a Restr -	238		ʻride'	а	Restr	_
240 kòn 'wear (as sarong)' a Restr -			<u> </u>	1		
Sarong)' Sarong' Sa	-			1	-	
241 θò 'wear (as shirt)' a Restr -	240	KON	`	a	Kesti	
shirt)'	2/1	Aà		0	Doctr	
(I) <integrated> 242 phà 'born' - Integ - 243 tài 'go out' - Integ - 244 pào 'open (vt)' - Integ - 245 mé 'sprout' - Integ - 246 cà 'start, begin' - Integ - 247 kàn 'yawn' - Integ - 248 náo 'enter' - Integ - 249 blà 'hang' - Integ 250 jwà 'make ~ flow' - Integ 251 bèn 'sink (vt)' - Integ 252 pjá 'take off (as clothes)' - Integ 253 kwé 'take off (as clothes)' - Integ (J) <special> 254 cáinphlò 'run away' a Spec - 255 cáinyà 'run away' a Spec - 256 lòn 'follow' a Spec -</special></integrated>	241	00	,	a	KCSII	_
242 phà 'born' - Integ - 243 tài 'go out' - Integ - 244 pào 'open (vt)' - Integ - 245 mé 'sprout' - Integ - 246 cà 'start, begin' - Integ - 247 kàn 'yawn' - Integ - 248 náo 'enter' - - Integ 249 blà 'hang' - - Integ 250 jwà 'make ~ flow' - Integ 251 bèn 'sink (vt)' - - Integ 252 pjá 'take off - - Integ 253 kwé 'take off - - Integ 254 cáinphlò 'run away' a Spec - 255 cáinyà 'run away' a Spec	(I) <in< td=""><td>tagrated></td><td>Silit)</td><td></td><td></td><td></td></in<>	tagrated>	Silit)			
243 tài 'go out' - Integ - 244 pào 'open (vt)' - Integ - 245 mé 'sprout' - Integ - 246 cà 'start, begin' - Integ - 247 kàn 'yawn' - Integ - 248 náo 'enter' - Integ 249 blà 'hang' - Integ 250 jwà 'make ~ flow' - Integ 251 bèn 'sink (vt)' - Integ 252 pjá 'take off - - Integ 253 kwé 'take off - - Integ 254 cáinphlò 'run away' a Spec - 255 cáinyà 'run away' a Spec - 256 lòn 'follow' a Spec -			'born'		Integ	
244 pào 'open (vt)' - Integ - 245 mé 'sprout' - Integ - 246 cà 'start, begin' - Integ - 247 kàn 'yawn' - Integ - 248 náo 'enter' - - Integ 249 blà 'hang' - - Integ 250 jwà 'make ~ flow' - - Integ 251 bèn 'sink (vt)' - - Integ 252 pjá 'take off - - Integ 253 kwé 'take off - - Integ 254 cáinphlò 'run away' a Spec - 255 cáinyà 'run away' a Spec - 256 lòn 'follow' a Spec -			-			
245 mέ 'sprout' - Integ - 246 cà 'start, begin' - Integ - 247 kàn 'yawn' - Integ - 248 náo 'enter' - - Integ 249 blà 'hang' - - Integ 250 jwà 'make ~ flow' - - Integ 251 bèn 'sink (vt)' - - Integ 252 pjá 'take off - - Integ 253 kwé 'take off - - Integ (J) <special> 254 cáinphlò 'run away' a Spec - 255 cáinyà 'run away' a Spec - 256 lòn 'follow' a Spec -</special>				1		1
246 cà 'start, begin' - Integ - 247 kàn 'yawn' - Integ - 248 náo 'enter' - Integ 249 blà 'hang' - Integ 250 jwà 'make ~ flow' - Integ 251 bèn 'sink (vt)' - Integ 252 pjá 'take off - Integ (as clothes)' - Integ 253 kwé 'take off - Integ (J) <special> 254 cáinphlò 'run away' a Spec - 255 cáinyà 'run away' a Spec - 256 lòn 'follow' a Spec -</special>			<u> </u>			
247 kàn 'yawn' - Integ - 248 náo 'enter' - - Integ 249 blà 'hang' - - Integ 250 jwà 'make ~ flow' - - Integ 251 bòn 'sink (vt)' - - Integ 252 pjá 'take off (as clothes)' - - Integ 253 kwé 'take off (as clothes)' - - Integ (J) <special> 254 cáinphlò 'run away' a Spec - 255 cáinyà 'run away' a Spec - 256 lòn 'follow' a Spec -</special>			-	 		
248 náυ 'enter' - - Integ 249 blà 'hang' - - Integ 250 jwà 'make ~ flow' - - Integ 251 bèn 'sink (vt)' - - Integ 252 pjá 'take off (as clothes)' - - Integ 253 kwé 'take off (as clothes)' - - Integ (J) < Special> 254 cáinphlò 'run away' a Spec - 255 cáinyà 'run away' a Spec - 256 lòn 'follow' a Spec -						-
249 blà 'hang' - Integ 250 jwà 'make ~ flow' - - Integ 251 bòN 'sink (vt)' - - Integ 252 pjá 'take off (as clothes)' - - Integ 253 kwé 'take off (as clothes)' - - Integ (J) <special> 254 cáinphlò 'run away' a Spec - 255 cáinyà 'run away' a Spec - 256 lòN 'follow' a Spec -</special>				-		- T.
250 jwà				-		
251 bèn 'sink (vt)' - - Integ 252 pjá 'take off - - Integ 253 kwέ 'take off - - Integ (as clothes)' - - Integ (as cloth		t		1	-	
252 pjá 'take off (as clothes)' - - Integ 253 kwé 'take off (as clothes)' - - Integ (J) <special> 254 cáinphlò 'run away' a Spec - 255 cáinyà 'run away' a Spec - 256 lòn 'follow' a Spec -</special>		-			-	
(as clothes)' - - Integ 253 kwέ 'take off (as clothes)' - - Integ (J) <special> 254 cáinphlò 'run away' a Spec - - 255 cáinyà 'run away' a Spec - - 256 lòn 'follow' a Spec -</special>			<u> </u>	-	-	
253 kwέ 'take off (as clothes)' - - Integ (J) < Special > 254 cáinphlò 'run away' a Spec - 255 cáinγà 'run away' a Spec - 256 lòn 'follow' a Spec -	252	pjá		-	-	Integ
(J) < Special > 254 cáinphlò 'run away' a Spec - 255 cáinyà 'run away' a Spec - 256 lòn 'follow' a Spec -					ļ	
(J) < Special> 254 cáinphlò 'run away' a Spec - 255 cáinyà 'run away' a Spec - 256 lòn 'follow' a Spec -	253	kwέ		-	-	Integ
254 cáinphlò 'run away' a Spec - 255 cáinyà 'run away' a Spec - 256 lòn 'follow' a Spec -			(as clothes)'			
255 cáinyà 'run away' a Spec - 256 lòn 'follow' a Spec -			1	1	1	
256 lòn 'follow' a Spec -		*		a	Spec	-
	255	cáinyà	'run away'	a	Spec	-
257 Zánnàn 'distribute' a - Spec	256	lòn	'follow'	a	Spec	-
	257	7ánnàn	'distribute'	a	-	Spec

258	θά	'breathe'	a	Spec	Spec	
(K) <n< td=""><td>No use></td><td>•</td><td></td><td>•</td><td></td><td></td></n<>	No use>	•		•		
259	?óphlé	'bear (vt)'	a	-	-	
260	báthài	'bump, hit'	a	-	-	
261	phón	'catch'	a	-	-	
262	khwè	'crawl'	a	-	-	
263	bjàn	'cure'	a	-	-	
264	cà	'defeat'	a	-	-	
265	làn	'descend'	a	-	-	
266	θî	'die'	a	-	-	
267	pjáυ	'follow'	a	-	-	
268	yàphlò	'get astray'	a	-	-	
269	ph <u>í</u> lân	'give'	a	-	-	
270	bá	'hit'	a	-	-	bá 'right' [192] and bá 'cheap' [218] are homonyms.
271	?όχάυ	'marry'	a	-	-	
272	dákhòn	'meet'	a	-	-	
273	tònnón	'run into someone'	a	-	-	
274	cài	'say'	a	-	-	
275	? 5	'stay, live'	a	-	-	cf. 25 'be, exist' [135]
276	pətháʊ	'stop (vi, vt)'	a	-	-	
277	dΰ	'strike'	a	-	-	
278	màn <u>ī</u>	'take'	a	-	-	
279	nán [] θà (remember / heart)	'wake up'	a	-	-	
280	θà thán [] (heart / ascend)	'angry'	S	-	-	
281	θà làn [] (heart / descend)	'sad'	S	-	-	

In following Section 3, findings of the survey will be discussed for each of the groups (A) through (K).

3. Discussion

As shown in the previous section, the uses of the verb particles $th \dot{a} n$ and $l \dot{a} n$ can be classified into six categories based on the meanings they exhibit: Directional, Inchoative, Intensive, Restrictive, Integrated, and Special. Of these, the Directional use of the verb particles can be further divided into Directional 1, Directional 2, and Directional 3, and the Inchoative use into Inchoative 1 and Inchoative 2, resulting in a total of nine uses. Furthermore, all EPK verbs can be classified into the following 11 groups based on which of these nine categories the co-occurring $th\acute{a}n$ or $l\grave{a}n$ exhibits: (A) <Directional 1>; (B) <Directional 2>; (C) <Directional 3>; (D) <Inchoative 1>; (E) <Intensive>; (F) <Inchoative 1 & Intensive>; (G) <Inchoative 2>; (H) <Restrictive>; (I) <Integrated>; (J) <Special>; and (K) <No use>. The following subsections discuss the characteristics of the verbs in each group and the meanings of the uses exhibited by $th\acute{a}n$ and $l\grave{a}n$ in each group. The numbers bracketed by "[]" represent the verb numbers in Table 1.

3.1 (A) < Directional 1>

All the verbs in this group ([1]–[8]) denote the movement of the referent of the subject. Any of these verbs can co-occur with both $th\acute{a}n$ and $l\grave{a}n$. When co-occurring with these verbs, $th\acute{a}n$ indicates that the direction of movement of the referent of the subject is above the horizontal axis, while $l\grave{a}n$ indicates that it is below the horizontal axis. Sentence (19) is an example with the verb $l\grave{i}$ 'go' [3], which belongs to group (A). The verb particle $th\acute{a}n$ in this sentence indicates that the subject "I" went to a higher position than the starting point, e.g., went to "his house" on the mountain from the foot. The sentence obtained by replacing $th\acute{a}n$ in (19) with $l\grave{a}n$ is (20). This sentence, for example, expresses that "I" went from the top of the mountain to "his house" at the foot.

- (19) jə l<u>ì</u> thán lớ ?ə yéin =(6) 1SG go up LOC 3SG house 'I went to his house.'
- (20) jə l<u>ì</u> làn lá ?ə yéin 1SG go down LOC 3SG house 'I went to his house.'

As discussed in Section 2, and shown in (17) and (18), *cáin* 'walk' [7] is also used with *thán* and *làn* exhibiting the Special use. *cáin thán* means 'get out' as well as 'walk upward', and *cáin làn* means 'get off (a vehicle)' as well as 'walk downward'. This is why "Spec" is noted in the *thán* and *làn* columns. Kato (2004: 294) considered the *thán* in *cáin thán* 'get out' to denote an outward movement, but the examples shown in Kato (ibid.) which appear to denote an outward movement are in fact either of the Special use, such as *cáin thán*, or of the Integrated use, such as *tài thán* 'go out' [243].

 $li \ y \hat{\epsilon}$ (wind / come) [8] is an idiom, meaning 'wind blows'. The reason that "Incho" is noted in the *thán* column is that $li \ y \hat{\epsilon}$ *thán* (wind / come / up) means not only 'wind blows upward', but also 'wind begins to blow'. $li \ y \hat{\epsilon}$ (wind / come) 'wind blows' [8] has a synonymous idiom $li \ 2iu$ (wind / blow (vt)) [89], but the latter is not applied as per the Directional usage.

3.2 (B) < Directional 2>

All the verbs in this group ([9]–[24]) can co-occur with both $th\acute{a}n$ and $l\grave{a}n$. $th\acute{a}n$ and $l\grave{a}n$ indicate that the direction of the action denoted by the verb is above or below the horizontal axis, respectively. All the verbs in this group are active verbs. It is

difficult to generalize the semantic features common to these verbs. Since it is also difficult to generalize what the "direction of action" is, it would be best to illustrate it with examples.

Example (21) is a sentence with the verb mè 'punch' [15]. In this example, thán indicates that the fist moved above the horizontal axis during the punching action. Using $l \dot{a} N$ instead of thán as in (22) indicates that the first moved below the horizontal.

- (21) ja thán ?əwê mè 3SG 1SG punch up 'I punched him.'
- (22) jə ?awê mè 1àn 1SG punch down 3SG 'I punched him.'

Similarly, when thán or làn co-occurs with bò 'bend' [10], phé 'cut' [12], dàuné 'point at' [19], chè 'stab' [23], and thàu 'wipe' [24], the direction of the hand movement is expressed. In the case of thôn 'kick ~ with one's heel' [16] and thè 'kick ~ with the back of one's leg' [17], the direction of the movement of the foot is expressed. Since $b\hat{o}$ 'bend' [10] describes the action of bending a wire or the like, a part of the referent of the object is also bent according to the direction of bending. In this respect, this verb is similar to the verbs in Group (C), where the movement of the referent of the object is denoted, but in Group (C) the movement of the entire referent of the object is denoted, and that is different from the meaning of $b\dot{o}$, which changes only a part of the referent of the object. Therefore, this verb is included in Group (B), not Group (C).

Example (23) with the verb $j\bar{v}$ 'look' [18] and thán expresses that the gaze was directed above the horizontal axis when the action of looking was performed. For example, if "his house" is on a mountain and one sees it from the foot of the mountain, this sentence is used. Conversely, *làn* is used instead of *thán* when looking at a house at the foot of a mountain from the top of it.

39 (23) jə įΰ thán yéin =(7)1SG look up 3SG house 'I looked up at his house.'

Similarly, for the verb $d\hat{a}$ 'find' [13], the direction of gaze is indicated by thán and

In the situation expressed by example (24) with the verb $k\hat{o}$ 'call' [11] and $th\hat{a}N$, "he" is at a higher position than the actor. If "he" is at a lower position than the actor, *làn* is used.

(24) jə kò thán ?əwê 1SG call 3SG up 'I called him.'

In this example, it can be considered that the voice is seen as a kind of line connecting the actor and the listener, and its direction is indicated. The same is true for $2\dot{a}nc\dot{a}$ 'ask' [9] and $khl\dot{a}in$ 'speak' [22]. The same is also true for $p\bar{b}$ 'read' [20], although the situation is a bit more unique. The expression $p\bar{b}$ thán lái $2\dot{a}v$ (read / up / book) 'read a book' expresses a situation in which a book is read aloud. If the listener of the voice is at a higher position than the actor, thán is used, and if the listener is at a lower position, $l\dot{a}n$ is used.

Example (25) with the verb $m \grave{a} b \grave{o}$ 'help' [14] and $t h \acute{a} N$ is used when "he" lives in a higher position than the actor. For example, Mae Sot, a town on the Thai side, is higher than Hpa-an, the capital of Karen State. If the actor "I" lives in Hpa-an and "he" lives in Mae Sot, (25) with $t h \acute{a} N$ is used. Conversely, if the actor lives in Mae Sot and "he" lives in Hpa-an, then $l \grave{a} N$ is used.

(25) jə màbò thán ?əwê 1SG help up 3SG 'I cooperated with him.'

Thus, in this group, the direction of action is, in some sense, indicated by *thán* or *làn*.

Note that for the verb $2\dot{a}nc\dot{a}$ 'ask' [9], $p\bar{s}$ 'read' [20], $k\partial c\dot{a}$ $n\dot{o}$ 'shout' [21], and $khl\dot{a}in$ 'speak' [22], $th\dot{a}n$ may express an inchoative meaning when co-occurring with them. Therefore, they are given the note "Up, Incho" in the $th\dot{a}n$ column.

Another unique use found in the uses of Directional 1 and Directional 2 should also be noted. The place of a respected person such as a Buddhist monk or king is seen as a high place, and $th\acute{a}N$ is sometimes used to describe movement to the residence of a Buddhist monk or king, or an action toward them. For example, $l\grave{l}$ $th\acute{a}N$ (go / up) expresses going to the residence of a Buddhist monk or king; and $khl\grave{a}iN$ $th\acute{a}N$ (speak / up) expresses speaking to a Buddhist monk or king.

3.3 (C) < Directional 3>

All the verbs in this group ([25]–[32]) can co-occur with both $th\acute{a}n$ and $l\grave{a}n$. They are all active verbs, which represent a causative action resulting in a movement of the referent of the object. If the direction of movement of the referent of the object is above the horizontal axis, $th\acute{a}n$ is used; if below, $l\grave{a}n$ is used.

See example (26) with the verb $ch\acute{o}$ 'lift ~ with one's hand' [27] and $th\acute{a}n$. This sentence expresses the upward movement of the referent of the object, "firewood". This sentence is used, for example, in a situation where firewood is moved up from the ground to a shelf. Conversely, in a situation where firewood is moved down from the shelf to the ground, $l\grave{a}n$ is used instead of $th\acute{a}n$, as seen in (27).

(26) ?əwê chó thán θéinmū =(8) 3SG lift up firewood 'He lifted up the firewood.'

(27) ?əwê chó làn θέινητι 3SG lift. down firewood 'He lifted down the firewood.'

The verb *chó* describes the action of carrying something by hand, while *jò* 'carry \sim on one's shoulder' [25] describes carrying something on the shoulder. In situations in which firewood is moved onto a shelf or taken down from a shelf by carrying it on the shoulder, jò is used instead of *chó*.

Let us look at another verb. (28) and (29) are examples using khwái 'throw' [32].

- (28) ?awê khwái thán 1อิตก 3SG throw un stone 'He threw up a stone.'
- (29)?əwê khwái là_N ได้ซก 3SG throw down stone 'He threw down a stone.'

If the stone flies above the horizontal axis, (28) is used; if it flies below, (29) is used. Thus, in this group, the direction in which the referent of the object moves is indicated by thán or làn.

3.4 (D) <Inchoative 1>

In the verbs of this group ([33]–[90]), starting of an action is expressed by thán. All the verbs in this group are active verbs; however, it is difficult to find more specific semantic commonalities among the verbs belonging here.

Note that *làn* has a use for indicating the starting of a state, as will be discussed in 3.7, but cannot be used to indicate the starting of an action.

In the use of Inchoative 1, thán has meanings such as 'start to V', 'have come to V', or 'be now V-ing'. See example (30) with the verb θάων 'build' [39].

(30) ?awê θáшn thán véin =(9)3SG build house up 'He started building a house.'

This use of thán can be paraphrased by using the verb cà 'start, begin' [246]. cà belongs to Group (I), as discussed in 3.9, and always appears with thán. This cà thán can be followed by a verb to express the meaning of 'start to V'. The following verb functions as the object of cà thán. Thus, (30) can be paraphrased as (31) below.

(31) ?awê cà thán θέωιν yéin 3SG start up build house 'He started building a house.'

Examples (30) and (31) can represent the same situation. However, when than is used, as in (30), there tends to be an implicature that the action was not performed at all in the preceding phase. Thus, (30) can mean 'He finally started to build a house' or 'He is, after all, building a house now'. Moreover, emphasis is sometimes placed on this implicature rather than on inchoativity, with connotations such as 'only this time' or 'take this opportunity to V'. If (30) is used with such a connotation, it could be translated as 'Only this time he built a house' or 'He decided to take this opportunity to build a house'.

For active verbs that do not co-occur with thán in Inchoative 1 usage, i.e., active verbs that do not belong to either Groups (D) or (F), thán cannot be used to express the inchoative aspect. In the case of such a verb, the only way to express the inchoative aspect is to use cà thán. For example, when using ?ánláin 'lick' [97], belonging to Group (E), to mean 'start to lick', one needs to say cà thán ?ánláin instead of using the unacceptable combination *?ánláin thán. However, in the case of verbs belonging to Groups (A) and (B), thán may express the inchoative aspect for some verbs, in addition to a directional meaning. For example, khlàin 'speak' [21] with thán postposed can mean 'to start to speak' as well as 'to speak upwards'; thus, the note "Incho" is placed in the thán column.

As will be discussed in 3.7, stative verbs cannot co-occur with ca ha, but any stative verb can co-occur with ha or ha to express an inchoative meaning, so no problems arise from their inability to co-occur with ha.

In some languages, the verb denoting upward movement has become an element indicating completion. For example, the Japanese words agaru 'ascend' and ageru 'raise' can express completion when they appear as the second element of a compound verb (see, e.g., Tsujimura 2014: 205–213), e.g., kaki-agaru (write-ascend) 'finish being written' and kaki-ageru (write-raise) 'finish writing'. However, completion is never expressed by the EPK verb particle $th\acute{a}n$. Thus, $\theta\acute{a}un$ $th\acute{a}n$ $y\acute{e}in$ in (30) cannot be used to mean 'finish building a house'. If one wants to express the meaning of 'finish building a house', it is necessary to use the intransitive verb $y\grave{o}n$ 'end, finish, be over' [53], as in the following example.

(32) ?əwê θόων γέιν γὸν jào 3SG build house finish PFV 'He finished building a house.'

The part of $\partial w\hat{e} \theta \dot{\partial} u N y \dot{e} i N$ in this sentence is a clause embedded as the subject of $y \dot{o} N$. Note that $j \dot{a} v \dot{o} i n$ (32) is a particle indicating perfective, but using $j \dot{a} v \dot{o} v \dot{o} i n$ with the verb particle $th \dot{a} N \dot{o} i n$ the same clause cannot express completion. For example, the sentence $\partial w \dot{e} \theta \dot{o} u N t \dot{a} N y \dot{e} i N j \dot{a} v (3SG / build / up / house / PFV)$ means 'He has started building a house'. Kato (2004: 296) gives several examples of the use of $th \dot{a} N \dot{o} i n N \dot{o$

There is one thing worth mentioning about this group, which is the fact that the verb $th\acute{a}n$ 'ascend, climb' [33], the origin of the verb particle $th\acute{a}n$, can co-occur with the verb particle $th\acute{a}n$, as shown in example (33).

(33) ?əwê thán thán θéin jàυ 3SG **PFV** climb up tree 'He has started climbing a tree.'

The verb thán, however, cannot co-occur with the verb particle làn. Additionally, the verb lan 'descend' [265], the origin of the verb particle lan, cannot co-occur with either of the verb particles thán or làn.

3.5 (E) <Intensive>

For the verbs in this group ([91]–[113]), the emphasis of the action is indicated by làn; thán does not have this use. All the verbs in this group are active verbs; however, it is difficult to find more specific semantic commonalities among the verbs in this group. It is certain that many of the verbs in this group are semantically related to a downward direction in some way. For example, in the situations represented by lànthé 'fall, drop' [93], lànjwà 'flow' [94], and lànbàn 'sink' [106], the referents of the subjects move downward; In the situations represented by mînàn 'lie down' [98], chînàn 'sit down' [107], and jāin 'step on' [110], the actions are downward movements; In the situations represented by thóphlì 'spit' [108] and 2ánjū 'swallow' [111], the referents of the objects move downward. However, this group also includes verbs that are not necessarily related to a downward direction, such as 2ánlōn 'lend (as money, rice)' [95], 2ánlèin 'lend (general things)' [96], kwéphəjā 'release' [103], Pánchâ 'sell' [105], and Pányá 'welcome' [113]. Thus, it is difficult to find characteristics common to all the verbs in this group.

The Intensive use of làn indicates that the action is performed in a more intensified manner than usual. The detailed meanings that can be expressed by this use of *làn* vary depending on the context in which the sentence is used. For example, events or actions are expressed as being performed vigorously, carefully, precisely, decisively, and so on. Below are example sentences with khā 'break (as a branch)' [91], lànjwà 'flow' [94], 2ánláin 'lick' [97], kú 'peel' [101], 2ánchâ 'sell' [105], chînàn 'sit down' [107], and Pányá 'welcome' [113].

- ?əthàin (34)θéintháwn khā làn jàʊ branch break down **PFV** 'A tree branch just broke vigorously.'
- (35)thîkhlóphớ lànjwà làn =(12)river flow down 'The river is flowing vigorously.'
- (36)?əwê ?ánláin 1à_N thwê 3SG lick down dish 'He licked the plate vigorously.'

- (37) jə kúi làn θéinphài =(13)
 1SG peel down bark
 'I peeled the bark vigorously/carefully.'
- (38) Pawê Pánchâ làn yéin 3SG sell down house 'He decisively sold his house.'
- (39) ?əwê chînàn làn 3SG sit.down down 'He sat down firmly.'
- (40) ʔəwê ʔányá làn hà 3SG welcome down 1PL 'He welcomed us warmly.'

3.6 (F) <Inchoative 1 & Intensive>

The verbs in this group ([114]–[131]) share features with Group (D) in that starting of an action is indicated by $th\acute{a}n$, and with Group (E) in that emphasis of an action is indicated by $l\grave{a}n$. These verbs have characteristics of both Group (D) and (E), thus setting up a separate group. All the verbs in this group are active verbs; however, it is difficult to find more specific semantic commonalities among the verbs in this group.

Since the verbs in this group can co-occur with both $th\acute{a}N$ as used in Inchoative 1 and $l\grave{a}N$ from its Intensive use, we can clearly observe the difference between these two uses in the verbs of this group. Let us take, for example, $n\acute{a}$ 'count' [117] and compare $n\acute{a}$ $th\acute{a}N$ in (41) with $n\acute{a}$ $l\grave{a}N$ in (42).

- (41) ?əwê ná thán péchân 3SG count up money 'He started counting the money.'
- (42) ?əwê ná làn péchân3SG count down money'He counted the money precisely.'

Example (41) expresses that the action of counting money was started. On the other hand, (42) expresses that the action of counting money was done with care. The difference in the meaning expressed by these two sentences will help us understand the difference of the uses of Inchoative 1 and Intensive. This difference can also be seen in the difference in co-occurability with $y \partial n$ (see (32)), which expresses the meaning of 'finish V-ing'. $n \dot{a} t h \dot{a} n$ cannot co-occur with $y \partial n$ as in (43), but $n \dot{a} t \dot{a} n$ can as in (44). It can be assumed that (43) is not acceptable because the inchoative meaning of $n \dot{a} t h \dot{a} n$ is inconsistent with the meaning of completion in $y \partial n$.

- (43) *?əwê péchân ná thán yòn jàυ 3SG money finish **PFV** count up 'untranslatable'
- (44)?əwê ná là_N péchân γòν jàυ 3SG money **PFV** count down finish 'He finished counting the money precisely.'

3.7 (G) < Inchoative 2>

In the verbs of this group ([132]–[235]), the starting of a state is indicated by thán or làn. All the verbs in this group are stative verbs. In (45), the starting of a state with many humans is indicated by thán, while in (46), the starting of a state with a few humans is indicated by làn. That is, the meaning of 'become V' is expressed by placing thán or làn after the verb.

- (45)phlòun ?á thán =(10)person 'The number of people increased.' (Lit: People became many.)
- (46) phlòυn cà 1à_N =(11)few person down 'The number of people decreased.' (Lit: People became few.)

When thán or làn is postposed to a stative verb, the entire verb complex takes on the characteristics of an active verb. For example, 2á 'many' [181] in (45) is a stative verb, and cannot co-occur with adverbs such as ?èphlé 'fast', xèxè 'slowly', and *Pèchón* 'strongly', or adverbial phrases such as $n\bar{\imath}$ nàrì (two / hour) 'for two hours': thus, *?á ?èphlé (many / fast) is unacceptable. However, the verb complex ?á thán has the characteristics of an active verb as a whole, so it can co-occur with such adverbs, as seen in ?á thán ?èphlé (many / up / fast) 'increase fast'. It is only in the case of Inchoative 2 that such an active-stative-shifting phenomenon is observed. In the other uses of thán and làn, verbs are active verbs (except for Group I, where the specification of a/s is unknown), and the verb complexes obtained by postposing thán or làn to them also have the characteristics of active verbs.

The reason I subgroup the Inchoative use into Inchoative 1 and Inchoative 2 is that there is a subtle difference in meaning that can be observed between the two. The use of Inchoative 2 involves the implicature that the state expressed by the verb existed before, but with a lower degree, i.e., that the state of "less V" existed before. For example, (45) implies that there was a state of "less many" before and (46) implies that there was a state of "less few" before. However, no such implicature occurs in when using Inchoative 1. Rather, as noted in example (30), in the use of Inchoative 1, there tends to be an implicature that the action was not performed at all in the preceding phase. Further, there is another reason to distinguish between the uses of Inchoative 1 and Inchoative 2. The paraphrase by the verb cà 'start, begin' [246] shown in (31) is not possible in Inchoative 2, that is, cà thán cannot co-occur with a stative verb. Therefore, (47) below is ungrammatical.

(47) *phlòun cà thán ?á
person start up many
Intended meaning: 'The number of people increased.'

Given these differences, the use of Inchoative 2 might be viewed as independent of the use of Inchoative 1 and should be labeled, for example, as the use of "change of state". Or possibly Inchoative 1 should be labeled "Ingressive", and Inchoative 2 should be labeled simply "Inchoative" without number, because the linguistic term "inchoative" tends to be used for the starting of a state (Dahl 2009). However, in this article, I tentatively regard Inchoative 1 and Inchoative 2 as subgroups of the same Inchoative use, because I suspect that the differences between these two uses shown above could be attributed to difference in meaning between active and stative verbs.

In the research available to date, any stative verb can co-occur with $th\acute{a}n$ or $l\grave{a}n$ in the use of Inchoative 2, with the exception of the two stative verbs discussed in 3.11. Within the verbs listed in Table 1, 86 stative verbs can only co-occur with $th\acute{a}n$, 13 with $l\grave{a}n$, and 5 with both $th\acute{a}n$ and $l\grave{a}n$. There are far more verbs that can only co-occur with $th\acute{a}n$ than with $l\grave{a}n$. This suggests that $th\acute{a}n$ may be more unmarked than $l\grave{a}n$ in Inchoative 2 usage. However, only the possibility is mentioned here as this requires deeper study.

Interestingly, there is at least one antonym for a stative verb that co-occurs only with $l \dot{a} N$, and the antonym co-occurs only with $t h \dot{a} N$. Table 2 shows pairs of such antonyms. The left column shows the 13 verbs that co-occur only with $l \dot{a} N$, and the right column shows their antonyms. Note that $x w \bar{\epsilon}$ 'thin, skinny' [228] has two antonyms.

Table 2: Stative verbs that co-occur only with *làn* and their antonyms

làn	thán
bá 'cheap' [218]	khà 'expensive' [154]
khléin 'cold' [219]	khō 'hot' [170]
εώ 'cool' [220]	lèn 'warm' [213]
khài 'dark' [221]	phàn 'light, bright' [177]
çà 'few' [222]	?á 'many' [181]
xwî 'light' [223]	xôn 'heavy' [168]
?éin 'narrow' [224]	1ε̄ 'wide' [216]
gán 'poor' [225]	dóςā 'rich' [191]
phí 'short, low' [226]	thô 'long, high' [179]
p <u>î</u> 'small' [227]	dΰ 'big' [140]
xwē 'thin, skinny' [228]	bón 'fat' [157], máin 'plump' [187]
bàn 'thin' [229]	tán 'thick' [209]
θàbán 'young' [230]	θàcā 'old (animate)' [185]

As exemplified by the fact that $\varepsilon \hat{a}$ 'few' [222] co-occurs with $l \hat{a} N$ and $l \hat{a}$ 'many' [181] co-occurs with $l \hat{a} N$, in the pairs shown in Table 2, verbs semantically associated with small quantities appear to co-occur with $l \hat{a} N$ to indicate a decrease, while verbs associated with large quantities appear to co-occur with $l \hat{a} N$ to indicate an increase. However, it is difficult to discuss the relationship between any given

concept and quantity. This is evident in the fact that although $\theta \dot{a}b\dot{a}n$ 'young' [230] and $\theta \hat{a} c \bar{a}$ 'old (animate)' [185] co-occur respectively with $l \hat{a} n$ and $t h \hat{a} n$, both $\theta \hat{a} n$ 'new' [184] and $l \hat{a} N l \hat{i}$ 'old' (inanimate) [186] co-occur with thán. The verbs $\theta \hat{a} b \hat{a} N \hat{i}$ 'young' [230] and $\theta \hat{a} N$ 'new' [184] have a semantic property in common in that they represent a small amount of time since some entity began to exist in the world. However, the former co-occurs with *làn* and the latter with *thán*. From this it can be said that it is difficult to predict whether thán or làn can co-occur with any given stative verb.

In addition, Kato (2013) notes that in the usage of inchoativity in the Western Pwo Karen verb particles, verbs expressing a positive meaning tend to co-occur with the verb particle thàn 'up' (corresponding to thán in EPK), while verbs expressing a negative meaning tend to co-occur with the verb particle lán 'down' (corresponding to làn in EPK). The same is pointed out in the neighboring language, Thai, by Iwasaki and Ingkaphirom (2005: 169). As evidence, Kato (2013) points to the fact that kàidò 'rich', yé 'good', xîlà 'beautiful', shèin 'clean', and 2wì 'delicious' cooccur with thàn 'up' and me? blàu 'blind', $n \hat{\partial} \hat{\partial} \hat{u}$ 'smell bad', and $b \hat{\partial} \theta a \hat{\partial} \hat{u}$ 'dirty' cooccur with lán 'down'. He then considers 26 'bad', the antonym of yé 'good', which co-occurs with thàn, to be an exception. This phenomenon reminds us of the metaphor "GOOD IS UP; BAD IS DOWN" pointed out by Lakoff and Johnson (1980: 16). In EPK, however, the semantic counterparts of these Western Pwo Karen words, $d\acute{\upsilon}e\ddot{a}$ 'rich' [191], $\gamma \dot{l}$ 'good' [162], $\chi \hat{l}l\dot{a}$ 'beautiful' [137], chêin 'clean' [146], ?wí 'delicious' [149], mé bló 'blind' [142], nôncí 'stink' [204], cîcá 'dirty' [150], ?òn 'bad' [134] all co-occur with thán. Therefore, it is unlikely that EPK has such a semantic association. There may also be room for reconsideration regarding the semantic association in Western Pwo Karen, given that 26 'bad' co-occurs with thàn 'up'. Differences between EPK and Western Pwo Karen are also discussed in Section 4.

It has thus far been found that 99 of the 104 stative verbs can only co-occur with either thán or làn. The remaining five [231–235] can co-occur with both thán and làn. In the case of blà 'lightly seasoned' [232], there is no semantic difference between using thán and làn. For the other verbs, there are semantic differences between using thán and làn. θ à xwî (heart / light) 'glad' [231] usually co-occurs with thán, but when làn is used, it takes on the nuance of 'feel relieved'. For bào 'near' [233], thán indicates that a place is getting closer and $l \dot{a} n$ indicates that a person is approaching; see, for example, tho Pàn bàu thán (Hpa-an / near / up) 'Hpa-an is getting closer' and Pawê bàu làn (3SG / near / down) 'He came closer'. In the case of Pwi 'slow' [234], thán indicates that a vehicle, such as an automobile, slows down, while *làn* indicates that actions such as talking, walking, and running become slower. For pháo 'soft' [235], thán denotes a situation in which food becomes soft due to cooking, and làn denotes a situation in which a tire or something becomes soft due to the air being released.

Note that bá 'right' [192] and bá 'cheap' [218] are both verbs derived from bá 'hit' [270]. In this article, these three are considered homonyms. bá 'right' co-occurs with thán, bá 'cheap' with làn, and bá 'hit' does not co-occur with either. That is, the co-occurability of the three verbs with thán and làn, which have the same origin, is different. This makes it clear that the co-occurability of these three verbs with thán and $lan \dot{a} v$ is not determined by their etymology.

3.8 (H) <Restrictive>

All the verbs in this group ([236]–[241]) are active verbs that have two meanings. One meaning is some physical action, and the other is maintaining the result brought about by that physical action. For example, the verb $\theta \dot{o}$ 'wear' [241] can denote two actions. One is an action that involves the movement of an entity, i.e., putting on clothes. The other is the action of keeping the moved entity in its position, i.e., keeping it on the body. Thus, (48) can express two meanings: (a) 'He put on a shirt a while ago' and (b) 'He was wearing a shirt a while ago'.

(48) ?əwê θò châin mōkhó =(14)
 3SG wear shirt a.while.ago
 'He put on a shirt a while ago. / He was wearing a shirt a while ago.'

In such a case, $th\acute{a}N$ can be used to limit the meaning to the first physical action. This is the Restrictive use. This use is not found in $l\grave{a}N$. In example (48), using $th\acute{a}N$, as in (49), can fix the meaning to (a) 'He put on a shirt a while ago'.

(49) ?əwê θò thán châin mōkhó =(15)
 3SG wear up shirt a.while.ago
 'He put on a shirt a while ago.'

Conversely, to fix the meaning to (b), the verb particle $th\acute{a}$ (may be pronounced $d\acute{a}$) is used to express the retention of the result, as in (50).

(50) ?əwê θὸ thá châin mōkhó 3SG wear THA shirt a.while.ago 'He was wearing a shirt a while ago.'

In this survey, six verbs that can be used with thán falling under Restrictive use were found. Let us look at the other verbs. phú 'carry ~ on one's back' [236] can denote two actions: taking up of a load on the back and keeping of that load on the back. With thán, the meaning can be limited to the action of taking up a load on one's back. béin mé 'close eyes' [237] can denote two actions: closing the eyes and keeping the eyes closed. With thán, the meaning can be limited to the action of closing the eyes. tháu 'ride' [238] can denote two meanings: the action of getting on a vehicle and keeping of being on a vehicle. With thán, the meaning can be limited to the action of getting on. chîthôwn 'stand' [239] can denote two actions: standing up and maintaining the standing position. With thán, the meaning can be limited to the action of standing. The difference between the last verb $k \delta n$ 'wear' [240] and $\theta \delta$ 'wear' [241] in (48)–(50) is that $\theta \hat{o}$ denotes an action of wearing something on the upper body, whereas $k \partial N$ denotes an action of wearing something on the lower body. Just like $\theta \hat{o}$, $k \hat{o} N$ can also denote two actions: the action of putting on clothes, and that of keeping it on the body. With thán, the meaning can be limited to the action of putting it on.

3.9 (I) <Integrated>

The verbs in this group ([242]–[253]) are special in that they always appear with thán or làn. In that sense, the verb and verb particle are integrated. Verbs in the other uses can appear on their own without thán and làn; however, the verbs in Group (I) do not appear on their own. Thus, the meaning attached to each verb in the table is the one expressed by "verb + $th\dot{a}N/l\dot{a}N$ " as a whole. Moreover, for the same reason, it is not possible to determine whether they are inherently active or stative verbs. This is why, for these verbs, the mark '-' is shown in the a/s column in Table 1. The verb complex "verb + $th\dot{a}n/l\dot{a}n$ " as a whole has the characteristics of an active verb, which is true for all the verbs in EPK. The particles thán and làn in the Integrated use do not have a generalizable meaning or function.

Take phà 'born' [242] as an example of a verb that always appears with thán. This verb always appears in the form phà thán, with thán following the verb. An example is given in (51).

(51) nə phΰ phà thán jào кâ PFV 2SG child born up Q 'Has your child been born yet?'

The following (52) is an example of $n\dot{a}v$ 'enter' [248], which always appears with $l \dot{a} N$. Since $n \dot{a} \sigma$ always appears with $l \dot{a} N$, (52) can be used whether the movement toward the village is upward or downward. There is no combination of náu thán.

?əwê náσ (52)1à_N 1á təwân phèn enter down LOC 3SG village inside 'He entered the village.'

Note that Kato (2004: 299) considered làn to have a use for inward movement, and regarded its co-occurrence with náv as an example of this use. However, làn cooccurring with náv should be considered an example of Integrated use. Several other examples that Kato (ibid.) considered to indicate inward movement can also be interpreted as Directional or Intensive use.

All the verbs listed [242] to [247] in Table 1 always appear with thán, and all the verbs listed in [248] to [253] always appear with lan. Thus, these verbs could constitute a single compound verb in the form of "verb + $th\acute{a}n/l\grave{a}n$ ". However, these verbs may appear without thán or làn in compound words. The compound noun mūnάυ 'west' consisting of mū 'sun' and nάυ 'enter' is such an example. Thus, we cannot easily conclude that "verb + $th\dot{a}N/l\dot{a}N$ " as a whole constitutes a single verb.

3.10 (J) <Special>

The verbs in this group ([254]-[258]) show an idiomatic meaning when cooccurring with thán or làn. In the Special use, the meaning of the verb complex "verb + $th\dot{a}N/l\dot{a}N$ " as a whole cannot be predicted from the meaning of the verb and $th\dot{a}N/l\dot{a}N$. In this respect, these verbs are special. The verb cáin 'walk' [7], given as an example of the Special use in (17) and (18), is regarded as belonging to Group (A) because co-occurring thán and làn basically exhibit the use of Directional 1. In this survey,

no verbs were found where co-occurring $th\acute{a}N$ or $l\grave{a}N$ can exhibit both Special and another use, with the exception of $c\acute{a}iN$.

Let us look at the verbs belonging to this group one by one. $c\'{a}inphl\'{o}$ 'run away' [254] denotes that a person who must be in a certain place runs away from there. It is used, for example, when a prisoner escapes from prison. This verb followed by $th\'{a}n$, $c\'{a}inphl\'{o}$ $th\'{a}n$, means 'the escape succeeds'. $c\'{a}iny\'{a}$ 'run away' [255] denotes running away from danger, etc. This verb followed by $th\'{a}n$, $c\'{a}iny\~{a}$ $th\'{a}n$, means 'run away from one's own village forever'. $l\~{o}n$ 'follow' [256] followed by $th\'{a}n$ means 'take someone's side, stand by someone'. $l\~{a}nn\~{a}n$ 'distribute' [257], followed by $l\~{a}n$, means 'give something to the less fortunate' in charity work, etc. The last verb $\theta\'{a}$ 'breathe' [258] means 'breathe in' when followed by $th\'{a}n$, and 'breathe out' when followed by $ta\'{a}n$.

3.11 (K) <No use>

The verbs in this group ([259]–[281]) cannot co-occur with either $th\acute{a}N$ or $l\grave{a}N$ in any context.

Why do these verbs not co-occur with either thán or làn?

For example, it is relatively easy to understand why $\theta \hat{\imath}$ 'die' [266] does not cooccur with any of them. The event of death is not compatible with the Directional use because it has no direction; It is not compatible with the Inchoative use because it is a momentary phenomenon; Since the Intensive use is often found in verbs that are closely related to a downward direction, it is easy to understand why the verb that expresses the event "to die", which is not directly related to a downward direction, is not observed in this use; The Restrictive use is for verbs with two meanings, and $\theta \hat{\imath}$ is not used in this category because it does not fit that condition; The Integrated and Special uses are only found in certain verbs and have nothing to do with $\theta \hat{\imath}$.

As for the two stative verbs $\theta \hat{a}$ thán (heart / ascend) 'angry' [280] and $\theta \hat{a}$ làn (heart / descend) 'sad' [281], they do not co-occur with thán or làn probably because these verbs are idioms containing the verbs thán and làn.

In this way, some verbs can be explained as to why they cannot co-occur with either thán or làn. However, for many verbs, it is difficult to explain why they cannot co-occur with either thán or làn. For example, the action of crawling denoted by the verb khwè 'crawl' [262] involves a movement. Nevertheless, whether the movement is upward or downward, khwè cannot co-occur with thán or làn. This is all the more strange given that the Western Pwo Karen verb swá 'crawl' can co-occur with both thàn 'up' and lán 'down', indicating direction (see Kato 2013), as will be discussed in 4. Furthermore, d\u00fc 'strike' [277] cannot co-occur with th\u00e1n or l\u00ean, even if the striking motion is upward or downward. mànī 'take' [278] also cannot co-occur with thán or làn, even in situations where the referent of the object moves upward or downward. Again, the verbs dò meaning 'strike' and mánê meaning 'take' in Western Pwo Karen can co-occur with either thàn 'up' or lán 'down' indicating direction (Kato 2013). Given this fact, it is difficult to understand why the verbs $d\dot{\phi}$ 'strike' and mànī 'take' cannot co-occur with either of the verb particles. As for khwè 'crawl', it seems to be compatible with inchoativity, because crawling is an action that is continuable. Thus, it is not surprising if thán, exhibiting the use of Inchoative 1, co-occurs with this yerb. However, this use of thán also does not co-occur with

khw $\hat{\epsilon}$. It seems very difficult to give a reasonable explanation for the fact that these verbs do not co-occur with either thán or làn.

4. Differences with Western Pwo Karen

Kato (2013) discusses the Western Pwo Karen verb particles thàn 'up' and lán 'down'. These correspond etymologically to the EPK verb particles thán and làn, respectively. Various differences can be seen between Western Pwo Karen and EPK, with the most striking difference being the pitch of the tones. This is also true for the pitch of these verb particles, that is, the pitch has an inverse relationship: Eastern /thán/ [high-level] vs. Western /thàn/ [low-level]; Eastern /làn/ [low-level] vs. Western /lán/ [high-level].

Kato (2013) recognized three uses of than and lan in Western Pwo Karen: uses for direction, inchoativity, and emphasis. These are semantically equivalent to the Directional, Inchoative, and Intensive uses in this article, respectively. However, there is a major difference. That is, the use of inchoativity in Western Pwo corresponds only to the use of Inchoative 2 in this article and not to Inchoative 1. In the use of Inchoative 1 in EPK, thán follows the active verbs. In Kato (2013), the use of than following an active verb in Western Pwo was considered to be for the use of emphasis, except when it indicates direction. I now believe that the use of than following an active verb in Western Pwo may be given the same labeling as the use of Inchoative 1 in the present article. However, a re-examination of Western Pwo is needed to draw any conclusions. Furthermore, in Kato (2013), the Restrictive, Integrated, and Special uses were not recognized, but perhaps these three uses are also likely to exist in Western Pwo. Again, this requires a re-examination.

Comparing verbs expressing the same meaning in EPK and Western Pwo, the co-occurability of thán/thàn and làn/lán is common in many cases, however, there are also quite a few cases where the two languages differ. I would like to point out here such cases. For example, EPK phón 'catch' [261], khwè 'crawl' [262], dó 'strike' [277], and màn₁ 'take' [278] cannot co-occur with either thán or làn, but the semantically corresponding Western Pwo Karen verbs phàun 'catch', swá 'crawl', dò 'strike', and mánê 'take' can co-occur with both thàn and lán (Western Pwo swá 'crawl', dò 'strike', and mánê 'take' have already been mentioned in 3.11). EPK mé bló 'blind' [142], jó 'deep' [148], cîcá 'dirty' [150], lànlài 'dull, blunt' [152], and nânci 'stink' [204] co-occur with thán of Inchoative 2, but the semantically corresponding Western Pwo verbs me? blàu 'blind', jo? 'deep', bàθa?lò 'dirty', lánlei? 'dull, blunt', and ná?ù 'smell bad' co-occur with lán to the contrary (Western Pwo me? $6l\dot{a}u$ 'blind' and $6\dot{a}\theta a?l\dot{o}$ 'dirty' have already been mentioned in 3.7). EPK pwài 'tired' [211] and 2wà 'white' [215] co-occur only with the thán of Inchoative 2, but the semantically corresponding Western Pwo verbs pwi 'tired' and bwa 'white' can co-occur with both thàn and lán; however, the difference between the use of thàn and lán is uncertain. EPK ?éin 'narrow' [224] co-occurs only with làn of Inchoative 2, but the semantically corresponding Western Pwo verb ?àin 'narrow' can co-occur with both than and lán; however, the difference between the use of than and lán is uncertain. EPK ?wì 'slow' [234] can co-occur with the thán and làn of Inchoative 2, but the semantically corresponding Western Pwo verb sâu 'slow' can co-occur only with lán. Thus, there are quite a few cases where the co-occurability of thán/thàn and làn/lán differs between Eastern and Western Pwo Karen.

5. Concluding remarks

Let us summarize what has been discussed above.

Six basic uses of the Eastern Pwo Karen verb particles *thán* and *làn* can be set up based on the meanings they exhibit: Directional, Inchoative, Intensive, Restrictive, Integrated, and Special. Of these, the Directional use can be further divided into three categories, and Inchoative into two. Namely, there are nine uses of *thán* and *làn* altogether: Directional 1, Directional 2, Directional 3, Inchoative 1, Inchoative 2, Intensive, Restrictive, Integrated, and Special. Which of these uses *thán* and *làn* exhibit is fixed by the co-occurring verb, and some verbs do not co-occur with either *thán* or *làn*. Based on this viewpoint, all the verbs in EPK can be divided into 11 groups: (A) <Directional 1>; (B) <Directional 2>; (C) <Directional 3>; (D) <Inchoative 1>; (E) <Intensive>; (F) <Inchoative 1 & Intensive>; (G) <Inchoative 2>; (H) <Restrictive>; (I) <Integrated>; (J) <Special>; and (K) <No use>. Table 3 shows the relationship between each group and the uses of *thán* and *làn*.

Table 3: Groups of the verbs and the uses of *thán/làn*

•	Examples	a/s	thán	làn
(A) <directional 1=""></directional>	l <u>ì</u> 'go'	a	Up	Down
(B) < Directional 2>	jū 'look'	a	Up	Down
(C) <directional 3=""></directional>	chó 'lift'	a	Up	Down
(D) <inchoative 1=""></inchoative>	?án 'eat'	a	Incho	-
(E) <intensive></intensive>	kú 'peel'	a	-	Inten
(F) < Inchoative 1 &	ná 'count'	a	Incho	Inten
Intensive>				
(G) <inchoative 2=""></inchoative>	?á 'many'	S	Incho	-
	çà 'few'	S	-	Incho
	pháυ 'soft'	S	Incho	Incho
(H) <restrictive></restrictive>	θò 'wear'	a	Restr	-
(I) <integrated></integrated>	pàu 'open (vt)'	-	Integ	-
	náυ 'enter'	-	-	Integ
(J) <special></special>	lòn 'follow'	a	Spec	-
	?ánnàn 'distribute'	a	-	Spec
	θá 'breathe'	a	Spec	Spec
(K) <no use=""></no>	θî 'die'	a	-	-
	θà thán 'angry'	S	-	-

All the verbs belonging to Groups (A), (B), and (C) can co-occur both with $th\acute{a}N$ and $l\grave{a}N$ of the Directional use. Verbs belonging to the other groups cannot co-occur with both $th\acute{a}N$ and $l\grave{a}N$ of the same use, except for a few verbs in Group (G) and Group (J). In other words, with respect to the co-occurrence with $th\acute{a}N$ and $l\grave{a}N$ of the same use, the verbs in Groups (A), (B), and (C) show symmetry, while the verbs in the other groups do not.

There are two significant differences between active and stative verbs: (i) All stative verbs except the two stative verbs in Group (K) can co-occur with $th\acute{a}n$ or $l\grave{a}n$, while some of the active verbs cannot co-occur with either $th\acute{a}n$ or $l\grave{a}n$; (ii) When

stative verbs co-occur with thán and làn, both thán and làn exhibit the Inchoative use only; On the other hand, when active verbs co-occur with thán or làn, the uses that thán and làn exhibit are not limited to one use; that is, one of the following five uses: Directional, Inchoative, Intensive, Restrictive, and Special.

Restrictive usage is only exhibited by thán, while Intensive usage is only exhibited by làn. Furthermore, when only active verbs are taken into account, Inchoative usage is only exhibited by thán.

These are summaries of what we have discussed so far.

A major issue in the description of thán and lan is whether the co-occurability of thán or làn with any given verb is predictable or unpredictable. As noted above, stative verbs belong to Group (G), except for two verbs. That is, they can co-occur with either or both thán and làn. However, as discussed in 3.7, it is difficult to predict whether thán or làn can co-occur with any given stative verb. For active verbs, predicting co-occurability seems to be even more difficult than for stative verbs. As discussed in 3.11, it is difficult to reasonably explain why khwè 'crawl' [262], dớ 'strike' [277], and mànį 'take' [278] cannot co-occur with thán or làn in the Directional use. In Western Pwo Karen, the semantically corresponding verbs to these three verbs can co-occur with any of the verb particles corresponding to thán and làn in the use of direction. Taking Western Pwo Karen into account, it becomes even more difficult to explain why these verbs do not fall into groups (A), (B), and (C). In 3.4, 3.5, and 3.6, I also noted that with respect to the groups (D), (E), and (F), it is difficult to find semantic commonalities among the verbs in each group. Given these facts, at this point the question of whether it is predictable or unpredictable that thán or làn can follow any given verb can only be answered as impossible. If this is the case, then it would seem that the co-occurrence of a verb with $th\acute{a}N/l\grave{a}N$ is only to be considered as a fixed combination.

There are further issues that need to be considered. One question is why làn cooccurring with an active verb does not exhibit the Inchoative use while thán cooccurring with an active verb can exhibit this use. Given that làn exhibits the Inchoative use when co-occurring with a stative verb, it is difficult to explain why it does not exhibit this use when co-occurring with an active verb. Conversely, there is also the question of why thán never exhibits the Intensive use while làn co-occurring with an active verb can exhibit the Intensive use. The explanation of such differences between thán and làn in the directions of semantic change is left for future research.

Finally, I would like to mention three similar phenomena in some genealogically related or neighboring languages.

The first is about other Karenic languages. As noted in Kato (2013), forms that correspond etymologically to the verbs thán 'ascend' and làn 'descend' and indicate upward and downward directions, are found in other Karenic languages: Sgaw Karen particles thô 'upwards' and lō 'downwards' (Kato 1993); Kayah Li bound directionals pathe 'upwards' and tālē 'downwards' (Solnit 1997: 136–137); Kayan directional suffixes $-t^h \hat{a}n$ 'upwards' and $-l \hat{a}n$ 'downwards' (Manson 2010: 142–145); and Bwe Karen verbal suffixes -tha 'up' (Henderson 1997:336-337) and -la 'down' (Henderson 1997: 204–205). All of these are forms that originate from the verbs that mean 'ascend' and 'descend'. However, it is likely that there will be a variety of differences in the uses of these morphemes from language to language.

The second is about the neighboring languages. In some neighboring Tibeto-Burman languages of Karen, it is well known that the verbs meaning 'go' or 'come' express inchoativity, e.g., twá 'go' and là 'come' in Burmese (Okell 1969: 438–439, 328–329), and qay 'go' in Lahu (Matisoff 1973: 223, 240; Matisoff 1991: 407). The EPK verbs meaning 'go' and 'come' do not have this use; instead, thán indicates inchoativity (As noted in Section 1, the verbs for going and coming have not been grammaticalized in EPK). In neighboring Thai and Lao, however, the verbs meaning 'ascend' and 'descend' express inchoativity (For Thai, see Noss [1964: 189–190] and Iwasaki & Ingkaphirom [2005: 168–170]; for Lao, see Enfield [2007: 259–260] and Suzuki [2009]). In this respect, EPK resembles Thai and Lao.

The third is about the Qiangic group of Tibeto-Burman. Shirai and Nagano (2022), dealing with nDrapa and rGyalrong, present a model in which directional affixes in these languages come to express telicity in the final phase of semantic change. Telicity is a concept related to the endpoint of an action. On the other hand, EPK thán expresses inchoativity of an action but not completion, as discussed in detail in 3.4. That is, *thán* is related to the starting point, not the endpoint of an action. It is interesting that the morphemes representing movement are oriented toward the endpoint in Qiangic and toward the starting point in EPK. This fact probably implies that the endpoint and starting point, while appearing to be oppositely related, are in fact closely related. The endpoint of some situation is also the starting point of the next new situation. For example, in the situation represented by the verb thán 'ascend', an entity moves from a lower to a higher position. In this situation, the upward movement is both the endpoint of a situation in which the entity is in a lower position and the starting point of a situation in which it is in a higher position. Therefore, it is not surprising that morphemes denoting a direction could indicate the endpoint of a situation in one language and the starting point in another.

Abbreviations

Down = downward; Incho = inchoative; Integ = integrated; Inten = intensive; Lit = literally; LOC = the particle $l\dot{\sigma}$ indicating source, location, and goal; PFV = perfective; PL = plural; Q = question marker; Restr = restrictive; SG = singular; Spec = special; THA = the verb particle indicating retention of a result; Up = upward; V = verb; vi = intransitive verb; vt = transitive verb; 1 = first person; 2 = second person; 3 = third person.

Sounds and transcription

The transcription used in this study is phonemic. Consonant phonemes are /p, θ [$\theta \sim \underline{t}\theta \sim \underline{t}$], t, c [te], k, ?, ph [ph], th [th], ch [teh], kh [kh], b [δ], d [$d \sim d$], ε , x, h, γ , x, m, n, p, (n), n, w, j, l, (r [$r \sim [\sim 1]$)/. The bracketed consonants mainly occur in loan words. Rhymes are /i [($\check{\delta}$)i], i, w [($\check{\delta}$)w], i [1], v, e, ə, o, ε , a, ɔ, ai, av, ən [$\delta \sim \delta$], an [$\delta \sim \delta$], on [$\delta \sim \delta$], ein [ein $\sim \epsilon$ i], əwn [$\delta \sim \delta$ wn, on [$\delta \sim \delta$], ein [ein $\sim \epsilon$ i], əwn [$\delta \sim \delta$ wn, on [$\delta \sim \delta$ wn, ain [ain $\sim \delta$ wn]/. There are four tones: high-level / δ /[55], mid-level / δ /[33 $\sim \delta$ 34], low-level / δ /[11], and falling / δ /[51]. Pwo Karen has atonic syllables, which can occur in all positions except utterance final. The only rhyme that can occur in atonic syllables is / δ /, and atonic syllables are transcribed with no tone marking.

I formerly transcribed the vowel phoneme $\frac{1}{2}$ [I] as $\frac{1}{2}$. However, the symbol $\frac{1}{2}$ is difficult to distinguish from $\frac{1}{2}$ when they are written with a tone sign. Compare,

for example, /i/ and /i/. Moreover, /i/ and /i/ are hard to distinguish from each other in some IPA fonts in italics. Therefore, I presently use /i/ instead of /u/.

Acknowledgments

I would like to thank Norihiko Hayashi and Yoshihisa Taguchi for reading the the draft and making a number of valuable comments and criticisms. I am also deeply grateful to my Karen friends, Mr. Saw Khin Maung Aye and Ms. Naw Snow Paw, who dedicated a lot of time to this survey. They have been helping my research in Eastern Pwo Karen with patience as native speakers since 2019.

References

- Dahl, Östen. 2009. Ingressives. In Keith Allan (ed.), Concise Encyclopedia of Semantics, 432. Oxford: Elsevier.
- Enfield, N. J. 2007. A Grammar of Lao. Berlin & New York: Mouton de Gruyter.
- Hattori, Shiro [服部四郎] (ed.). 1957. Kisogoi Chōsahyō 「基礎語彙調査票 (Questionnaire for Basic Vocabulary) | Tokyo: Department of Linguistics, University of Tokyo. (In Japanese)
- Heine, Bernd & Tania Kuteva. 2002. World Lexicon of Grammaticalization. Cambridge: Cambridge University Press.
- Henderson, Eugénie J. A. 1997. Bwe Karen Dictionary, with Texts and English-Karen Word List. (2 Vols.) London: School of Oriental and African Studies, University of London.
- Iwasaki, Shoichi & Preeya Ingkaphirom. 2005. A Reference Grammar of Thai. Cambridge: Cambridge University Press.
- Kato, Atsuhiko [加藤昌彦]. 1993. Sugō Karen-go no dōshi renzoku. 「スゴー・カ レン語の動詞連続(Verb serialization in Sgaw Karen)」『アジア・ア フリカ言語文化研究(Journal of Asian and African Studies)』 45: 177-204. (In Japanese)
- ------[加藤昌彦]. 2004. Pō Karen-go Bunpō. 「ポー・カレン語文法(A Pwo Karen Gramar) Ph.D. dissertation, University of Tokyo. (In Japanese)
- -----[加藤昌彦]. 2008. Pō Karen-go ni keiyōshi to iu hanchū wa hitsuyō ka? 「ポー・カレン語に形容詞という範疇は必要か?(Is the category adjective necessary in Pwo Karen?)」『アジア・アフリカの言語と 言語学(Asian and African Languages and Linguistics)』 3: 77-95. (In Japanese)
- ----- 2009. A basic vocabulary of Htoklibang Pwo Karen with Hpa-an, Kyonbyaw, and Proto-Pwo Karen forms. Asian and African Languages and Linguistics 4: 169–218.
- ----- 2013. Verb particles indicating 'up' and 'down' in Western Pwo Karen. Tokyo University Linguistic Papers (Festschrift for Professor Hiroshi KUMAMOTO) 33: 99-117.
- ----- 2017. Pwo Karen. In Graham Thurgood & Randy LaPolla (eds.), The Sino-Tibetan Languages, 2nd Edition, 942–958. London & New York: Routledge.

- ----- 2019a. The middle marker in Pwo Karen. *Reports of the Keio Institute of Cultural and Linguistic Studies* 50: 21–62.
- ----- 2019b. Pwo Karen. In Alice Vittrant & Justin Watkins (eds.), *The Mainland Southeast Asia Linguistic Area*, 131–175. Berlin & Boston: Mouton de Gruyter.
- ----- 2021. Typological profile of Karenic languages. In Mathias Jenny & Paul Sidwell (eds.), *The Languages and Linguistics of Mainland Southeast Asia: A Comprehensive Guide*. Berlin & Boston: Mouton de Gruyter.
- ------ 2022. Negation and polarity-reversing effect of an interrogative marker in Pwo Karen. In Hayashi Norihiko & Ikeda Takumi (eds.), *Grammatical Phenomena of Sino-Tibetan Languages 5: Diversity of Negation*, 183–202. Kyoto: Institute for Research in Humanities, Kyoto University.
- Lakoff, George & Mark Johnson. 1980. *Metaphors We Live By*. Chicago & London: University of Chicago Press.
- Manson, Ken. 2010. A grammar of Kayan, a Tibeto-Burman language. Ph.D. dissertation, La Trobe University.
- Matisoff, James A. 1973. *The Grammar of Lahu*. University of California Publications in Linguistics, #75. Reprinted 1982. Berkeley, Los Angeles & London: University of California Press.
- ------ 1991. Areal and universal dimensions of grammatization in Lahu. In Elizabeth Closs Traugott & Bernd Heine (eds.), *Approaches to Grammaticalization Vol. II*, 383–453. Amsterdam & Philadelphia: John Benjamins.
- ----- 2003. *Handbook of Proto-Tibeto-Burman*. Berkeley, Los Angeles & London: University of California Press.
- Noss, Richard B. 1964. *Thai Reference Grammar*. Washington D.C.: Foreign Service Institute.
- Okell, John. 1969. *A Reference Grammar of Colloquial Burmese*. London: Oxford University Press.
- Phillips, Audra. 2018. West-Central Thailand Pwo Karen phonology. *Journal of the Southeast Asian Linguistics Society*, 11.1: 47–62.
- Shirai, Satoko & Nagano Yasuhiko. 2022. Functional developments of directional prefixes in nDrapa and rGyalrong. In Arakawa Shintaro & Ikeda Takumi (eds.), *Grammatical Phenomena of Sino-Tibetan Languages 3: Function of Directional Prefixes*, 81–96. Kyoto: Institute for Research in Humanities, Kyoto University.
- Solnit, David. 1997. Eastern Kayah Li: Grammar, Texts, Glossary. Honolulu: University of Hawai`i Press.
- Suzuki, Reiko [鈴木玲子]. 2009. Rao-go no 'khùn' to 'lóŋ' ni tsuite. 「ラオ語の 'khùn' と 'lóŋ'について('khùn' and 'lóŋ' in Lao)」『東京外大 東南アジア学(Southeast Asian Studies, Tokyo University of Foreign Studies)』14: 123–139. (In Japanese)
- Tsujimura, Natsuko. 2014. *An Introduction to Japanese Linguistics (3rd Edition)*. Chichester: Wiley Blackwell.