Arakawa Shintaro and Ikeda Takumi (eds.) 2022
Grammatical Phenomena of Sino-Tibetan Languages 3: 237–258.
*Function of Directional Prefixes.* Kyoto University

**Appendix I**

# Directional verb affixes found in Tibeto-Burman languages in China

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**Summary**

This paper is a pioneering work on directional affixes in Tibeto-Burman languages spoken in China. Nishi Yoshio 西義郎 (1934–2019), a Japanese scholar of Tibeto-Burman linguistics, and a professor emeritus at Kobe City University of Foreign Studies 神戸市外国語大学 had authored it. He made notable contributions to typological/historical studies, especially in Burman and Himalayan languages. The original paper in Japanese appeared in 1985 under the title「中国国内のチベット・ビルマ系の言語にみられる方向指示の動詞接辞」in Nishida Tatsuo 西田龍雄 (ed.)『チベット・ビルマ諸語の言語類型学的研究』昭和59年度科学研究費補助金研究成果報告書 [Outcome Report for the Grant-in-Aid for Scientific Research for the academic year of Showa 59 (1984)] pp. 26–45. However, this report was a restricted publication distributed to limited scholars, and was not easy to access. In 1990, Nishi's article was translated into Chinese and published as 中国境内的藏缅语指示方向的动词附加成分.（郑贻青译、陈鹏校）中国社会科学院民族研究所语言室编《民族语文研究情报资料集》第十三集, 104–116, 103頁. It was fortunate that this translation was widely read among Chinese scholars as well as those American/European scholars who read Chinese. When we started our research project on directional affixes in Tibeto-Burman languages, including Tangut, Nishi's work was extensively read by all research members involved to better understand the basic knowledge and methodology of the analysis of directional affixes. We share the belief that this paper was a great and important work, and thus, the editors decided to provide a new English translation[†] of Prof. Nishi's article in this volume for easy reference in honor of this expert linguist. (Editors)

**Key words**: directional affix, Tibeto-Burman, typology, classification, geographical distribution

关键词：方向词缀、藏缅语、类型学、分类，地理分布

[†]The English translation of this paper was supported by professionals at Editage, a division of Cactus Communications, and supervised by IKEDA Takumi.

**0.** A language lacking nouns or adverbs indicating direction or orientation such as north, south, east and west, up and down, left and right, or in and out is hard to imagine. In addition to the above directional words, many Tibeto-Burman languages also have directional affixes (directionals) attached to the verb stem to indicate the direction of the action or behavior. Geographically, these languages are largely found in the hilly country running from the west part of Sichuan Province 四川省, the southeast part of the Tibet Autonomous Region 西藏自治区 (including the disputed area between India and China), and from the western part of Yunnan Province 云南省, through the north part of Burma and Assam in India, and down south to the hilly country straddling the border between Bangladesh and Burma. The affiliations of these languages, however, have not always been identified, but they include Tibetic languages, Bodo-Naga languages, and Kuki-Chin languages. According to DeLancey (1980), if we add the affixes indicating 'proximal' and 'distal' as directionals, and take the languages having one or both of these directional into account, then we must also include representative Lolo-Burmese languages such as Burmese.[1] If we consider them from the perspective of diversity, the most complex system of directionals is found in the Ch'iangic languages in western Sichuan, which stands out in how it intersects with other verb affix systems such as aspect-marking or mood-marking affixes.

DeLancey's (1980) research comprehensively addressed directionals in Tibeto-Burman languages, discussing not only directionals (directives) as narrowly defined here, but also recognizing directionality in the relationships between the so-called 'pronominal affixes' indicating the agents and patients of motion verbs and transitive verbs in terms of viewpoint and attention flow. Sun (1981b) researched directionals in Tibeto-Burman languages in China, comparing directionals in the rGyarong 嘉戎 and Pumi 普米 languages to those in the Ch'iang 羌 language, and discussing their respective systems, origins and characteristics. Moreover, Nagano (1984b) described the directionals in the rGyarong 嘉戎 language (lCog-rtse 卓克基 dialect) with a comparative linguistic approach with comments to his analysis by Hashimoto Mantaro 橋本萬太郎 and Nishida Tatsuo 西田龍雄. Nishida further presented his opinions on the issues and origins of directionals in his comments on the paper.

Here, we compare directionals in the Tibeto-Burman languages in China reported by Chinese linguists, and attempt to make an elementary typological classification referring to the above studies in which collected data is reliable but lacking in many details.

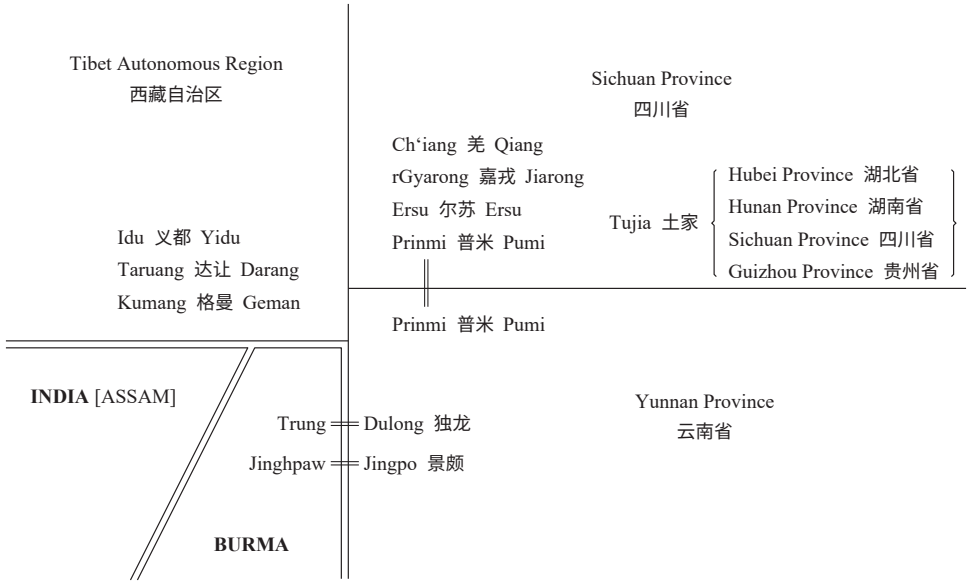
**01.** In Sun (1981b: 39), Sun Hongkai 孙宏开 lists the Tibeto-Burman languages in China having verb affixes indicating directional categories as being the Ch'iang/Qiang 羌[2] language, as well as the Pumi 普米,[3] rGyarong/Jiarong 嘉戎,[4] Jinghpaw/Jingpo 景颇,[5] Trung/Dulong 独龙,[6] and Deng 僜 languages, and he pointed out that the directional affixes (= directionals) in the Pumi 普米 and rGyarong 嘉戎 languages resemble those in the Ch'iang 羌 language in form and meaning, while those in the three remaining languages not only differ, but belong to a different type and are not synonymous in origin. Although

he listed six language, what is known as the Deng 僜 language reportedly is actually two languages, the Taruang 达让[7] and Kumang 格曼[8], which thus should not be considered as the same language; both have been found to have directionals. Ultimately, directionals are found in seven languages in Sun (1981b).[9] Directionals have recently been reported in three Tibeto-Burman languages in China: Ersu 尔苏,[10] Idu-lhopa 义都珞巴,[11] and Tujia 土家,[12] so there is a total of ten languages known to have directionals so far.

The geographical distribution of these ten languages is roughly as follows: First, the Ch'iang 羌 language is distributed in the northern part of Sichuan Province 四川省, followed by the rGyarong 嘉戎 language, which is distributed in the northern part of Sichuan Province 四川省 partially overlapping with the Ch'iang 羌 language region. The Pumi 普米 language is distributed across a region straight south, stretching from the southwestern part of Sichuan Province 四川省 to the northwestern part of Yunnan Province 云南省. The Ersu 尔苏 language is also distributed from the southwestern part of Sichuan Province 四川省 to the eastern end of Tibet Autonomous Region 西藏自治区. The Tujia 土家 language has the largest population of speakers among these ten languages, distributed across a broad region encompassing the four provinces of Hubei 湖北, Hunan 湖南, Sichuan 四川 and Guizhou 贵州, though located some distance from the remaining nine languages. The Jinghpaw 景颇 language is spoken from the western part of Yunnan Province 云南省 to northern Burma and Northeast India, and the Trung 独龙 language (which also includes the Nung/Nu 怒 language) is distributed from the northwest corner of Yunnan Province 云南省 to the southeast corner of Tibet Autonomous Region 西藏自治区. Finally, the Idu 义都, Taruang 达让, and Kumang 格曼 languages are all located in a narrow region in the southeastern corner of Tibet Autonomous Region 西藏自治区; the areas where the Idu 义都 and Taruang 达让 languages are spoken touch each other. The figure below shows the central part of the regions of distribution of these ten languages to graphically present the language distributions.

**02.** Thus, most of the ten languages are widely spread apart regionally and divided into multiple dialects, although detailed descriptions of all dialects have not yet been reported. While many places where the dialects of each language are spoken have been reported, in actuality, they represent only one or a few dialect locations, and not much more than in general outline. This means that, for example, even if a directional affix is said to be found in the Ch'iang 羌 language, this does not mean that all dialects of the Ch'iang 羌 language have the same affix in form, meaning, and function. Therefore, we need to mention the dialects to which the direction affixes addressed here belong in order to avoid misunderstanding.

1. Ch'iang 羌 language: Mawo 麻窩 dialect (northern dialect) (Sun 1981b) and Taoping 桃坪 dialect (southern dialect) (Sun 1981a).
2. Pumi 普米 language: Qinghua 箐花 dialect (southern dialect?) (Lu 1980).




Distribution diagram of the ten languages having directional affixes

3. Ersu 尔苏 language: Ganluo County in Liangshan Yi Autonomous Prefecture, Sichuan 四川省凉山彝族自治州甘洛县 dialect (Western dialect = Western Ersu dialect) (Sun 1982b).
4. rGyarong 嘉戎 language: lCog-rtse 卓克基 dialect (Qu 1984) and So-mang 梭磨 dialect (Jin 1958) (all eastern dialects).
5. Trung 独龙 language: Gongshan Derung and Nu Autonomous County 贡山独龙族怒族自治县 dialect (Trung dialect) (Sun 1982a).
6. Jinghpaw 景颇 language: Enkun 恩昆 dialect (Academy for Research on Chinese Ethnic Minority Languages 1959; Liu 1984).

In the case of the three languages of Idu 义都 (Sun 1983), Taruang 达让 (Sun et al. 1980), and Kuman 格曼 (Sun et al. 1980), no dialects have been noted, and there is no mention of dialects for the Tujia 土家 language (Chen et al. 1983) either.

**1.** The directionals in these ten languages can be classified into several types in terms of form, meaning and function.

First, they can be divided into prefix and suffix types based on their positional relationship to the stem (root). The directionals in the Ch'iang 羌, rGyarong 嘉戎, Ersu 尔苏, and Pumi 普米 languages are prefix type, while the directionals in the remaining six languages are suffix type. Tibeto-Burman languages have a so-called OV type (object + verb type) word

order: The affixes added to verb stems (roots) are overwhelmingly suffixes rather than prefixes. rGyarong 嘉戎 is the only language especially abundant with prefixes among prefix-type directional languages. Trung 独龙 is a language of directional suffix-type but has a relatively high number of verb prefixes. Consequently, no correlation was observed at this point.

The directions indicated by the directionals in each language include not only the common directions of up and down, left and right, and in and out, but special directions spoken in a particular language (dialect), or attributed to the topographical features of the region where it is spoken, especially mountains and rivers as the basis. We may classify the meanings of the directionals in these languages in consideration of meaning categories as follows:

I. Paired semantic classifications
- (1) Indicates the speaker's point of view.
  - a. Proximal: Indicates the direction of a motion towards the speaker (first person) or their location, where a motion verb 'come' directs.
  - b. Distal: Indicates the direction of a motion in the opposite direction of a speaker or their location, where the motion verb 'go' directs.
- (2) Related to the general direction
  - 1a. Upward
  - b. Downward
  - 2a. Inward
  - b. Outward
  - 3a. Rightward
  - b. Leftward
  - 4a. Toward unknown direction
  - b. From unknown direction
- (3) Indicates directions based on regional topographical features.
  - 1a. Upstream
  - b. Downstream
  - 2a. Mountainward
  - b. Riverward
  - 3a. Higher elevation (ridge side or upstream) to lower elevation (foot side or downstream) with reference to mountains or rivers
  - b. Lower elevation (foot side or downstream) to higher elevation (ridge side or upstream) with reference to mountains or rivers
  - 4a. Level surface
  - b. Sloping surface
  - 5a. Sunriseward
  - b. Sunsetward

The above directions labeled a. and b. belonging to the same number are those that are semantically paired with each other and appear as pairs regardless of the language.

II. Unpaired
1. Backward (or returning)
2. Toward starting point
3. From starting point
4. From riverside

Categories I and II are related to direction or terrain, while the semantics of directionals are as follows:

III. Unrelated to direction[13]
1a. By speaker themself
b. Not by speaker themself
2. Incidentally

Not everything under this semantic classification is expressed by separate individual forms (directionals). One directional may express several directions depending on the context and circumstances, or always express multiple direction categories in a complex manner.

**2.** When we consider the features of the directionals in each language based upon the above semantic categories unveiled by them, the following points become evident.

(1) I.3, that is, the most highly developed directionals indicating direction based upon regional topographic features are found mainly in the Ch'iang 羌, Pumi 普米, Ersu 尔苏, and rGyarong 嘉戎 languages. Several are found in Kumang 格曼, Idu 义都, Taruang 达让, and Trung 独龙.
(2) I.1, that is, the languages having proximal-distal directionals as basis, further combined with yet other meanings, are the Idu 义都, Taruang 达让 and Kumang 格曼 languages.
(3) The languages mainly classified by I.1, in addition to the above three languages, are the Trung 独龙, Jinghpaw 景颇, and Tujia 土家 languages. Furthermore, although the Ch'iang 羌 and Pumi 普米 languages, as well as the lCog-rtse 卓克基 dialect of the rGyarong 嘉戎 language, also have proximal and distal directionals, they are reportedly found only in the imperative form of the So-mang 梭磨 dialect of the rGyarong 嘉戎 language, and are not recorded in the Ersu 尔苏 language.

**3.** Next, when we compare the phonological forms of the directionals in each language, the following points become evident.

(1) The Ch'iang 羌, Pumi 普米, Ersu 尔苏, and rGyarong 嘉戎 languages include several directionals that may be inferred to be cognates (in which case, inferring and exactly reconstructing the prototype or base form is difficult, as affixes often present irregular correspondences, and there is a strong tendency for syllable rimes to weaken overall). Several forms that could be recognized as cognates are also found in the Idu 义都 and Taruang 达让 languages as well. The only directionals the Taruang 达让 and Kumang 格曼 languages have that appear to be cognates are ones pointing 'toward the starting point'.[14]

(2) The proximal directionals in the Trung 独龙 and Jinghpaw 景颇 languages are considered cognates. -ź- in the Jinghpaw 景颇 language seems to be derived from *-r-. However, this can be inferred to be a weakened and grammaticalized form of the Proto-Tibeto-Burman form *ra (temporarily reconstructed) 'come'.[15] Furthermore, a parallel instance is the -s- in the Jinghpaw 景颇 language, which is considered to be an affix grammaticalized from *sa 'go'.[16] On the other hand, as Sun indicates, the di$^{31}$- expressing 'distal' in the Trung 独龙 language probably was the grammaticalization of the verb di$^{53}$ 'go/walk' (Sun 1982a: 115). If that is the case, then the 'distal' directionals in the Jinghpaw 景颇 and Trung 独龙 languages are not cognate but parallel in origin.

In light of the similarities in the meaning and form of the directionals described above, the ten languages addressed here may be categorized as follows:

A. Languages having directional prefixes:
   Ch'iang 羌, Pumi 普米, Ersu 尔苏, rGyarong 嘉戎
B. Languages having directional suffixes:
   a. Trung 独龙, Jinghpaw 景颇, Tujia 土家
   b. Idu 义都, Taruang 达让, Kumang 格曼

The directionals in each of these languages may then be organized into a table based on the above categories as follows:[17]

**Table 1** A. Directional prefixes in the Ch'iang 羌, Pumi 普米, Ersu 尔苏, and rGyarong 嘉戎 languages

| Language | Ch'iang 羌语 | | Pumi 普米语 | Ersu 尔苏语 | rGyarong 嘉戎语 | | | |
|---|---|---|---|---|---|---|---|---|
| Dialect | Mawo 麻窝方言 | Taoping 桃坪方言 | Qinghua 箐花方言 | Ersu 尔苏方言 | lCog-rtse 卓克基方言 | | So-mang 梭磨方言 | |
| | | | | | A Future/ Present | B Past/ Imperative | A Future/ Progressive | B Past/ Imperative |
| Proximal | dzə- | (zǐ$^{31}$-) | də$^{13}$- | | | (ko-) | | |
| Distal | tha- | (dɑ$^{31}$-) | thə$^{13}$- | | | (nə-) | | |
| Upward | tə- | tə$^{31}$- | tə$^{55}$- | dɛ$^{55}$- | to- | to- | to- | to- |
| Downward | a- | ə$^{r31}$- | nə$^{13}$- | nɛ$^{55}$- | na- | nə- | na- | na- |
| Upstream | ńu- | u$^{55}$- | | khɛ$^{55}$- | ku- | ko- | ko- | ko- |
| Downstream | sə- | sǐ$^{31}$- | | ŋɛ$^{55}$- | di- | nə- | di- | nə- |
| Mountainward | kuə- | zǐ$^{31}$- | | khua$^{r33}$- | ro- | ro- | ro- | ro- |
| Riverward | thiu- | da$^{31}$- | | ŋua$^{r33}$- | rɛ- | rə- | ri- | rə- |
| Sunriseward | | | khə$^{13}$- | | | | | |
| Sunsetward | | | xə$^{13}$- | | | | | |
| Inward | | (u$^{55}$-) | (xə$^{13}$-) | (khɛ$^{55}$-) | | | | |
| Outward | | xɑ$^{31}$- | (khə$^{13}$-) | (ŋɛ$^{55}$-) | | | | |
| Rightward | | | (khə$^{13}$-) | (ŋua$^{r33}$-) | | | | |
| Leftward | | | (xə$^{13}$-) | (khua$^{r33}$-) | | | | |
| Backward | rgə- | xgə$^{31}$- | | ńu$^{55}$- | | | | |

**Table 2a** B. a. Directional suffixes in the Trung 独龙, Jinghpaw 景颇, and Tujia 土家 languages

| Language | Trung<br>独龙语 | Jinghpaw<br>普米语 | Tujia<br>土家语 |
|---|---|---|---|
| Dialect | Trung<br>独龙（江）方言 | Nkhum<br>恩昆方言 | |
| Proximal | -ra$^{53}$ / -răi$^{53}$ / -rat$^{55}$ | -ź- ( < *-r- ) | -a$^{55}$tiu$^{55}$ [+perfect] |
| Distal | -di$^{31}$ | -s- | -a$^{55}$lu$^{21}$ [+perfect] |
| Higher to Lower | -dzăʔ$^{55}$ | | |
| Lower to Higher | -luŋ$^{31}$ / -luŋ$^{55}$ | | |

**Table 2b** B. b. Directional suffixes in the Idu 义都, Taruang 达让, Kumang 格曼 languages

| Language | Idu<br>义都语 | Taruang<br>达让语 | Kuman<br>格曼语 |
|---|---|---|---|
| **Proximal** | | | |
| Higher to Lower | -a$^{55}$dza$^{53}$ | -dza$^{31}$ | -pu$^{55}$ |
| Lower to Higher | -a$^{55}$tiu$^{55}$ | -tiu$^{55}$ | -jau$^{35}$ |
| Level Surface | | -bi$^{33}$ | |
| Inward | | | -lit$^{55}$ / -li$^{55}$ |
| From Riverside | -a$^{55}$bi$^{35}$ | | |
| Toward Starting Point | | -na$^{55}$ | -na$^{55}$ |
| From Unknown Direction | -mu$^{35}$ | -boŋ$^{35}$ | |
| **Distal** | | | |
| Mountainward/Riverward + Level Surface | | | -wit$^{55}$ |
| Mountainward/Riverward + Sloping Surface | | | -tśi$^{55}$ |
| Toward Unknown Direction | -na$^{55}$ge$^{55}$ | | -lo$^{55}$ |
| by Speaker himself | -ga$^{55}$ba$^{53}$ | -bo$^{53}$n$^{55}$ | |
| not by Speaker himself | -ge$^{55}$ | -gie$^{53}$ | |
| Incidentally | -dźi$^{55}$ge$^{55}$ | -dɯ$^{55}$ga$^{35}$ | |

‘Lower to higher’ and ‘Higher to lower’ in Table 1 do not just mean regular ‘up and down’ in both dialects of the Ch’iang 羌 language and the So-mang 梭磨 dialect of the rGyarong 嘉戎 language (and likely the same in the lCog-rtse 卓克基 dialect), but ‘ridgeward’ and ‘footward’ in contrast to ‘upstream’ and ‘downstream’ below. Therefore, both

dialect forms listed in the ‘upward’ and ‘downward’ sections might actually be placed in a different direction category of I.3.

Nagano (1984a: 39–40; 1984b: 25–26) mentions a pair of prefixes ku- and ni- (~ di-) that express ‘toward the seat of honor’ and ‘toward the lower seat’ in the lCog-rtse 卓克基 dialect in the case of the rGyarong 嘉戎 language. Nagano (1984b: 31) compares this to ko-, di- in the So-mang 梭磨 as described by Jin (1958), stating that ‘seat of honor/lower seat’ opposition in GC [the lCog-rtse 卓克基 dialect (as described by Nagano)] is shifted to above/below rivers in the GM [So-mang 梭磨 dialect]. Beside the problem of which opposition is original in meaning, in the lCog-rtse 卓克基 dialect described by Qu (1984) and the So-mang 梭磨 dialect described by Jin (1958), affixes have no meanings indicating oppositions of ‘seat of honor/lower seat’. However, ‘seat of honor/lower seat’ directions are indicated in direction nouns (ones like demonstrative pronouns, which distinguish proximal, mesioproximal, and distal pronouns), which are believed to have been the source of directionals in both dialects.

In the So-mang 梭磨 dialect, as well as the lCog-rtse 卓克基 dialect described by Qu (1984), directionals are divided into two systems (type A and type B) according to differences in the tense, aspect and mood of verbs, but no such distinctions are found in the lCog-rtse 卓克基 dialect described by Nagano (1984a, 1984b). The affix form expressing ‘toward the lower seat’ according to Nagano shows free variations between ni- to di-, and the corresponding direction noun is hani. The ni- to di- affix forms may correspond to the other dialect forms of type B nə- and type A di-, but this is unclear. This distinction ‘seat of honor/lower seat’ simultaneously expresses the meanings ‘The side where to burn firewood on the hearth (lower seat)/the opposite side (seat of honor)’.

Naturally, this is limited to direction nouns. However, there are words meaning ‘seat of honor/lower seat’ and ‘side where to burn firewood on the hearth/opposite side’ in the

**Table 3** Directional affixes and direction nouns in the rGyarong 嘉戎 dialects

| Dialect | lCog-rtse (Qu) 卓克基方言（瞿） | | So-mang (Jin) 梭磨方言（金） | | | lCog-rtse (Nagano) 卓克基方言（長野） |
|---|---|---|---|---|---|---|
| **Prefix form** | | | | | | |
| To Upstream | A ku- | B ko- | A ko- | B ko- | To Higher seat | ku- |
| To Downstream | A di- | B nə- | A di- | B nə- | To Lower seat | ni- (~ di-) |
| **Directional noun** (Proximal) | | | | | | |
| Upstream / Higher seat | a-ku | | ʔa-ku | | Higher seat | haku |
| Downstream / Lower seat | a-di | | ʔa-də | | Lower seat | hani |

Taoping 桃坪 dialect of the Ch'iang 羌 language. However, this is different from the rGyarong 嘉戎 language. This pair of meanings is carried by a pair of direction nouns meaning 'mountainward/riverward' and 'towards upstream/towards downstream', though there are not listed actual corresponding independent words (Sun 1981a: 76).

As mentioned above, in the rGyarong language, the directional prefix of type A or type B is attached depending on the difference in the tense, aspect, and mood of a verb. In addition, the type A directionals may be used with an overlap when emphasizing the direction of motion as follows:

… – type AA/type B – … – verb stem –…

The directionals indicating 'proximal' and 'distal' in the Jinghpaw 景颇 language are ź- and -s-, respectively, as per DeLancey's analysis; however, the explanations of 'proximal' and 'distal' are greatly simplified to match those in the materials from China. DeLancey uses the example of the Prang Hkadung dialect of the Jinghpaw 景颇 language to analyze verb complexes like V(erb) Aux(iliary verb) X M(ood), wherein X consists of mă- (plural) and CVC-type syllables, and this -CVC- is analyzed into C- (viewpoint marker) and -VC (person/aspect marker). In the materials from China, the -Aux X M parts are treated as one sentence-final particle. The M part is shown to be more or less separate from the Aux X part by Liu (1984), but the Aux X part has not been analyzed further.[18] As for the morphemes appearing in the C- part of this X, DeLancey considers that -r- shows a viewpoint at the endpoint, and -s- shows a viewpoint at the onset point. Furthermore, the -ź- in the Enkun 恩昆 dialect corresponds to this -r-. There are several morphemes appearing at the C-position other than -r- and -s- (DeLancey 1980: 22–30, etc.).

In all type A languages where the directionals are prefix type (which should probably include the Ersu 尔苏 language), despite no record of anything [Editor's note: Sun (1982b) surely has no description on directionals], verbs that are able to combine with all kinds of directional are restricted mainly to motion verbs typically exemplified as 'go' and 'come'. Other categories of verbs can only take one or a few directionals; moreover, many verbs that seem to follow the direction concept became weaker and idiomatically take a specific direction in their combination. As for languages other than type A, there is nothing mentioned on this point; however, similar restrictions are, naturally, expected to be observed.

It is stated that if the conversing parties know the direction in which an action will proceed from the meaning of words and the situation, then directionals can be omitted unless the direction is being emphasized in the Kumang 格曼 language. Similar situations can be expected in other type B.b. languages, but it is generally suspected that directionals do not play as functional a role as in type A languages.

**4.** According to Sun (1981b: 36), the meanings of directionals and direction nouns (of which there are distinctions for general, proximal, medial, and distal) in the Ch'iang 羌 language basically match, and he recognized that they have consistent corresponding relationships in phonological form. He considered that over a long course of historical development, direction nouns preceding verbs have become compressed, affixed, and come to express direction concepts. Qu (1984: 77) also considered that the directionals in the rGyarong 嘉戎 language are derived from direction nouns or direction verbs (expressing meanings such as direction + 'go'). Next, we shall present a comparison and contrast of directionals and direction nouns (general) in the Ch'iang 羌 language, and directionals, direction nouns (proximal), and direction verbs in the rGyarong 嘉戎 language.

**5.** The imperative form of verbs in type A languages will take one of the directionals functioning as a command (imperative) affix, but which directional would be taken depends upon the situation or convention. In the case of the Ersu 尔苏 language, there are five imperative prefixes, four of which are said to each have the same phonological form as directionals. However, the remaining prefix, compared to the directionals in the Ch'iang 羌 and Pumi 普米 languages, also seem to have originated from a directional.

If we assume thɛ$^{55}$- is derived from a directional, it is possible that directionals expressing 'proximal' versus 'distal' once existed in Ersu 尔苏 language.

If the imperative affix indicates any specific direction, then it can be replaced with the directional affix indicating the direction in the Ch'iang 羌 and rGyarong 嘉戎 languages, though this is unknown in the case of the Pumi 普米 and Ersu 尔苏 languages.

**Table 4** Directional affixes, direction nouns, and direction verbs in the Ch'iang 羌 and rGyarong 嘉戎 languages

| Language | Ch'iang 羌语 | | rGyarong 嘉戎语 | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Dialect | Mawo 麻窝方言 | | lCog-rtse 卓克基方言 | | | | So-mang 梭磨方言 | | | |
| Directional | Prefix | Noun | Prefix A | Prefix B | Noun | Verb | Prefix A | Prefix B | Noun | Verb |
| Upward | tə- | tiːq | to- | to- | a-ta | ka-tho | to- | to- | ʔa-ta | ka-tho |
| Downward | a- | qəli | na- | nə- | a-na | ka-jə | na- | na- | ʔa-na | ka-ji |
| Upstream | ńu- | ńutśha | ku- | ko- | a-ku | ka-go | ko- | ko- | ʔa-ku | ka-go |
| Downstream | sə- | khṣətśha | di- | nə- | a-di | ka-də | di- | nə- | ʔa-də | ka-də |
| Mountainward | kuə- | kuətśha | ro- | ro- | a-to | ka-ro | ro- | ro- | ʔa-to | ka-ro |
| Riverward | thiu- | thiutśha | rɛ- | rə- | a-rə | ka-rɛ | ri- | rə- | ʔa-rə | ka-rə |

**Table 5** Directional affixes and imperative affixes in the Ersu 尔苏 language

| | Directional Prefix | Imperative Prefix | Verb Examples |
|---|---|---|---|
| Upward | dɛ$^{55}$- | dɛ$^{55}$- | count, kick, winnow |
| Downward | nɛ$^{55}$- | nɛ$^{55}$- | cut, comb, cut/trim (with scissors) |
| Upstream | khɛ$^{55}$- | khɛ$^{55}$- | catch/grasp, pack, shoot |
| Downstream | ŋɛ$^{55}$- | ŋɛ$^{55}$- | throw, vomit, pull |
| Distal | tha- (Ch'iang)<br>thə- (Pumi) | thɛ$^{55}$- | move, conceal, rub/wipe |

As described in Section 4 above, since the number of directionals a verb can take is restricted, the verbs that can take different directionals (command affixes) with the imperative form are also limited.

Although unclear in the case of the Ersu 尔苏 and Pumi 普米 languages due to the lack of examples, except for some dialects of the Ch'iang 羌 language, generally directionals also serve the function of indicating past tense.[19] In the case of the Ch'iang 羌 language, it seems that the past affix was lost from the directional + past affix combination, and the directional functions as a past affix. However, Tibeto-Burman languages are considered a suffix-type language family, so this may be thought of as a manifestation of a tendency to reduce the number of prefixes before the verb stem.

**6.** Previously, we divided the ten languages addressed here into three language groups A, B.a, and B.b in Section 3. However, the Tujia 土家 language in the B.a group should probably be typed differently from the Trung 独龙 and Jinghpaw 景颇 languages. In the B.b group, the Kumang 格曼 language shows noticeable differences from both the Idu 义都 and Taruang 达让 languages, but they share common features, so there should be no problem in including it in this language group. When we compare this classification with the geographical distribution map of the ten languages shown in Section 01, we note that except for the Tujia 土家 language, each language group almost exactly matches the geographical distribution. From the perspective of the genealogical connections among Tibeto-Burman languages, there are similarities in the directional systems of languages that can be classified into the same sub-groups, such as the Ch'iang 羌 and Pumi 普米 languages, Trung 独龙 and Jinghpaw 景颇 languages, and Idu 义都 and Taruang 达让 languages. Moreover, in the case of the Trung 独龙 and Jinghpaw 景颇 languages, they only share the 'proximal' directional as a cognate; the other two pairs of languages share many directionals whose forms are possibly cognate and whose origins are traceable back to the stage of their individual common proto-language. The Ersu 尔苏 and rGyarong 嘉戎 languages also have several directionals that appear to have cognates in the Ch'iang 羌 and Pumi 普米 lan-

guages. The Ersu 尔苏 language in particular, taking into account transitions in the meanings of directionals, may have as many as it has sub-language groups. This may provide some hints for the sub-classification of this language.

In any case, similarities in the directional systems of each region indicate that we must assume the existence of areal features. In addition, the characteristic direction categories (I.3) of the type A and type B.b language groups, that is, categories indicating directions based on regional topographical features, may differ by prefix and suffix types, but it is notable that the categories are mostly used in the languages of this region. To the best of our understanding, in languages with directionals other than those addressed here, the directionals have all been suffixes and appear to be limited to those indicating 'proximal/distal' or some additional general direction category (see DeLancey 1980; Nagano 1984a, 1984b).

Historically speaking, the only directionals that presently are clear in origin are the type I.3 directionals of the Ch'iang 羌 (including Pumi 普米?) and rGyarong 嘉戎 languages, and the type I.1 directionals of the Trung 独龙 and Jinghpaw 景颇 languages. This may be due in part to the fact that the descriptive data of these languages are far from sufficient. For example, commonalities in both form and meaning are found in the 'proximal' (Mawo 麻窩 dialect) dʐə- and (Taoping 桃坪 dialect) zï- (< ?*dzï-) of the Ch'iang 羌 language; the 'higher to lower elevation' -dzǎʔ$^{55}$ of the Trung 独龙 language; and the 'proximal higher to lower elevation' -a$^{55}$dza$^{55}$ of the Idu 义都 language and -dza$^{31}$ of the Taruang 达让 language, but at the present stage, it is uncertain whether they are cognates.[20] However, this issue will be clarified as more materials become available.

As seen above, directionals are important elements in the predicate construction, together with (first, second, or third) person affixes, and tense or aspect affixes, but until recently they have largely been ignored. They ought to be described and studied with even greater care in the future, including the relationship between directionals and other affixes, as seen in type A languages.

## Annotations

*This paper was presented at the 3rd workshop on the "Typological Study of the Tibeto-Burman Languages" [headed by Professor Nishida Tatsuo (Kyoto University)], a general research project through the academic year of 1984 supported by the Ministry of Education Grant-in-Aid for Scientific Research.

[1] Consequently, if we classify Tibeto-Burman languages into four language groups as in Nishida (1970), directionals are found in all of them. However, as described in this paper, languages with directional affixes are limited mainly to Tibeto-Burman languages distributed in the central area, with few exceptions.

The modern Burman language auxiliary verbs (which we will broadly consider as verb affixes) /lai?/ (Written Burmese: *liuk*) and /khè/ (WB: *khai*) demonstrate various uses depending on the meaning of the verb. However, in terms of their original form, they may be interpreted as each having 'distal' and 'proximal' meanings, as indicated by DeLancey (1980), especially when added to a motion verb. -khai corresponds to -khà in the Arakan dialect, and -kha in the orthography of the Myazedi inscription. However, there is still no satisfactory explanation for the -a > -ai > /-e/ change in syllable rime. DeLancey considered this *kha* to originate from *sa-ga > *s-ga. *sa here is seen in the motion verb sa 'go/come' in the Jinghpaw 景颇 language, the *s- in the motion verb *swa* in written Burmese 'go' < *s-wa. *ga is a motion verb in Proto-Tibeto-Burman that means 'come' or 'go' in its derived forms in modern Tibeto-Burman languages (naturally, we must consider the meaning of 'come' to explain the corresponding Burman form). However, the question remains open as to whether all the word forms DeLancey claims to have derived from this *ga in Proto-Tibeto-Burman are cognates (DeLancey 1980: 220–227).

[2] The Ch'iang 羌 language (Qiang in Chinese) is spoken mainly in MaoWen Qiang Autonomous County 茂汶羌族自治县 and Ngawa Tibetan Autonomous Prefecture 阿坝藏族自治州, northern Sichuan 四川. According to Sun (1981a), the Ch'iang language is broadly divided into the northern dialect (approximately 70 thousand speakers) and southern dialect (approximately 50 thousand speakers), which may further be divided into five dialects.

The Ch'iang people 羌族 call themselves rma, ʐme, xmɑ, mɑ (variations in pronunciation reflect differences in the dialects).

According to Nishida (1970), the Ch'iang 羌 language is an independent subgroup of the Ch'iang branch of Tibetic languages.

Sun (1981b) recognized that the differences between the northern and southern dialects of the Ch'iang 羌 language are relatively large, but the directionals are basically the same.

[3] The Pumi 普米 language (Pumi in Chinese) is distributed from southwestern Sichuan 四川 (approximately 20 thousand speakers) to Yunnan Province 云南省 (approximately 20 thousand speakers), and is divided into two dialects: north and south (Lu 1980). Speakers call themselves phʐə̃$^{55}$mi$^{55}$ (pronounced phʐõ$^{55}$mə$^{54}$ or tshõ$^{55}$mi$^{54}$ depending on the dialect). Lu (1980) considered the Pumi 普米 language relatively close to the Ch'iang 羌 language, and classified it into the Ch'iangic branch 羌语支.

[4] The rGyarong 嘉戎（绒）language (Jiarong in Chinese, former notation Jyarung; rGyarong in written Tibetan) is spoken across a region stretching from the northern

part of Ya'an Area 雅安地区 to the eastern part of Garzê Tibetan Autonomous Prefecture 甘孜藏族自治州, mainly in Ngawa Tibetan Autonomous Prefecture 阿坝藏族自治州 in northern Sichuan 四川. The rGyarong 嘉戎 people, who number around 10 thousand, refer to themselves as kə-ru (So-mang 梭磨 dialect) or kə-rə (Lixian 理县 dialect). Basically, the prevailing theory considers the rGyarong 嘉戎 language a sub-family or a branch of the Tibetic languages, but Nishida (1957, 1960), on the other hand, says it is a link language playing an important role in connecting both the Tibetic languages and Lolo-Burman languages. Nagano (1984b) considers it a link language connecting all four Tibeto-Burman language groups according to Nishida (1970), while asserting a connection between the Bodo-Naga languages and Abor-Miri-Dafla languages based on a comparison of vocabulary (verb stems), and a connection to Tibetic languages based on parallels in its morphological process.

Lin (1983) divided the dialects into the eastern 东部, the Sidaba 四大坝, and the Gangli 岗理 dialects, and Qu (1984) into eastern, northern and western dialects. Looking at the geographical distribution of the dialects listed by Lin, the Sidaba 四大坝 and Gangli 岗理 dialects appear each to correspond to Qu's northern and western dialects. The dialects currently presented in relatively detailed descriptions so far are the So-mang 梭磨 (Suomo in Chinese; So-mang in written Tibetan) dialect (Jin 1957, 1958), and the lCog-rtse 卓克基 (Zhuokeji in Chinese; lCog-rtse in written Tibetan) dialect (Qu 1984; Nagano 1984a, 1984b). Furthermore, although both Qu and Nagano reference the lCog-rtse 卓克基 dialect, it is not the same variety in the two. The former appears to be a more conservative language.

[5] The Jinghpaw 景颇 language (Jingpo in Chinese; Kachin in Burman) is spoken by approximately 90 thousand people in China, mainly in Dehong Dai and Jingpo Autonomous Prefecture 德宏傣族景颇族自治州 in western Yunnan 云南省, but many Jinghpaw 景颇 people also reside across borders in the west side of Burma and within India. They refer to themselves as the tśiŋ$^{31}$phoʔ$^{31}$. Surrounding minorities, including the Zaiwa 载瓦 (commonly known as the Atsi), Langwo 浪莪 (commonly known as the Maru), and Laqi 勒期 (commonly known as the Lashi), are also referred to as Jinghpaw 景颇 people. However, their languages are different from the Jinghpaw 景颇 language, and all belong to the Burman branch of Lolo-Burman languages. The Jinghpaw 景颇 people are known as the Kachin people on the Burma side, a name which is widely used in other regions as well.

The Jinghpaw 景颇 language in China is divided into the Enkun 恩昆 (n̩$^{31}$khu-m$^{33}$ka$^{31}$), Shizhou 石舟 (śă$^{L}$ tan$^{31}$ka$^{31}$), and Gaori 高日 (kau$^{33}$źi$^{31}$ka$^{31}$) dialects (Liu 1984). Nishida (1970) listed seven dialects in the Kachin language of the Assam in India and in Burma, including the Myitkyina and Bhamo dialects.

Scholars agree that the Jinghpaw 景颇 language is important for the comparative study of Tibeto-Burman languages, but its position among sub-language groups has not been established. Nishida (1970) classified the Jinghpaw 景颇 language with the Nun languages (see next note [6]) into the Kachin branch of the Tibetic languages. Nishida (1960) considers that this language also represents a link language similar to the rGyarong 嘉戎 language. On the other hand, Benedict (1972) states that the Kachin language is one of seven core languages within the Tibeto-Burman language family, and simultaneously holds a central position connecting hyponym groups within it. Shafer (1966) considers it one branch of the Burman languages, which represent one of the four language groups of the Tibeto-Burman language family.

[6] Trung 独龙 (Dulong in Chinese; commonly known as Trung) is the language of the Trung people 独龙族 (who refer to themselves as the tɯ$^{31}$ruŋ$^{53}$; population approximately 4,100), who reside bordering Burma, in the basin of the Trung River 独龙江 in Gongshan Derung and Nu Autonomous County 贡山独龙族怒族自治县 at the northern edge of Nujiang Lisu Autonomous Prefecture 怒江傈僳族自治州 in northwestern Yunnan 云南省. However, the language of the Nung people 怒族 (population approximately 6 thousand) is also said to be Trung 独龙; they reside in this county and the region adjacent to its eastern side, as well as in parts of Zayü County 察隅县 in the southeast corner of Chamdo Area 昌都地区 in the Tibet Autonomous Region 西藏自治区, crossing the provincial border to north from Yunnan 云南. Their languages are respectively referred to as the Trung River 独龙江 dialect and Nung River 怒江 dialect (Sun 1982a). Furthermore, outside of China, the Trung 独龙 language is considered a dialect of Nung 怒. Across the border on Burma's west side, the Nung/Nu 怒 (= Trung 独龙) language is spoken, and several dialect names have been reported, including the Nung and Rawang. The Trung 独龙 language addressed in this paper is the Trung River 独龙江 dialect of Longla Village in Trung River Commune in Gongshan County 贡山县独龙河公社龙拉村 (Sun 1982a). Nishida (1970) classified it with the rGyarong 嘉戎 language into the Kachin branch of Tibetic languages, and considered it to be one of the Nung language group as well as the Kachin language group. Shafter (1966) puts forth a Nung branch among the Burman languages. According to Benedict (1972), the Nung 怒 language is very closely related to Lolo-Burman languages as well as other Hsi-fan languages 西蕃諸語 (see Thomas 1948: 64–110), but still has many points of concern with the Kachin language. According to Sun (1982a), the Trung 独龙 language is relatively close to the Jinghpaw 景颇 and Deng 僜 languages, and may be classified as being of the same branch. However, if we try and compare only vocabulary, it is doubtful that it could be classified within the same branch as the Deng 僜 language (Taruang 达让 and Kumang 格曼 languages).

[7] Taruang 达让 (Darang in Chinese; commonly known as Taraon) is the language spoken by a tribe referring to itself as the ta$^{31}$ruaŋ$^{55}$ (population approximately 700), residing in Zayü County 察隅县 in the southern part of Chamdo Area 昌都地区 of the Tibet Autonomous Region 西藏自治区. As mentioned in this paper above, it is considered, as well as Kumang 格曼 language, to belong to the Deng 僜 language. However, it is difficult to consider them two dialects of the same language. The positions of both the Kumang 格曼 and Taruang 达让 languages among Tibeto-Burman languages are still not fully clear.

[8] Kumang 格曼 (Geman Deng in Chinese) is the language spoken by the people calling themselves the kɯ$^{31}$man$^{35}$ (population approximately 200) in the same region as the Taruang 达让 language.

[9] However Sun (1982b) mentioned in note ⑥ after this paper had been completed that he had conducted a survey of the Muya 木雅／弥药 language in Kangding County 康定县 and Jiulong County 九龙县 in Sichuan Province 四川省. He found that this language and several adjacent minority languages all have directionals; moreover, they are close to the directionals in the Ch'iang 羌 language. If the survey of these languages goes forward, it may discover even more languages having similar types of directional systems in the Ch'iang 羌 language. [Editor's note: Sun (1982b) does not include note ⑥, only notes ① to ⑤ on page 264, which is the last page of the journal. It appears that this note ⑥ was omitted when the volume was published. The author must have seen an offprint from Sun or had personal communication with him, based on which this note [9] was made.]

[10] Ersu 尔苏 (Ersu in Chinese) or Tosu (Duoxu 多续 in Chinese; commonly known as Tosu) is the language of an ethnic group that variously calls themselves ə$^{ɪ55}$su$^{55}$ 尔苏, do$^{55}$ɕu$^{55}$ 多续, li$^{55}$zu$^{55}$ 栗苏 or lu$^{55}$su$^{55}$ 鲁苏 (depending on the region; population approximately 230 thousand), residing in Liangshan Yi Autonomous Prefecture 凉山彝族自治州, the southern part of Ya'an area 雅安地区, and the southeastern part of Garzê Tibetan Autonomous Prefecture 甘孜藏族自治州 in the southwestern part of Sichuan Province 四川省.

This language was named Tosu 多續語 by Nishida (1972, 1973). Nishida recognized that the core words of this language belong to the Lolo-Burman language group, and there is a great resemblance to the Tangut language in word forms.

Sun (1982b) classifies this language into the Eastern (Ersu 尔苏) dialect (population approximately 13 thousand), Central (Tosu 多续) dialect (population approximately 3 thousand) and Western (Lisu 栗苏) dialect (population approximately 4 thousand).

[11] Idu 义都 (Yidu in Chinese; commonly known as Idu) is called ʔi$^{55}$ɖu$^{55}$, the language of the Lhopa 珞巴 people (population approximately 7 thousand), who reside in Zayü County 察隅县, where the Deng 僜 language is spoken. This region touches the region of the Deng 僜 people who speak the Taruang 达让 language (Sun 1983). This language is relatively close to the adjoining Taruang 达让 language, rather than the Gar-lhopa 嘎尔珞巴 language, which is a so-called Lhopa 珞巴 language. According to Sun, the Idu 义都 language is also relatively close to the Taruang 达让, Kumang 格曼, Trung 独龙, and Jinghpaw 景颇 languages, but its relationship with Taruang 达让 aside, it seems difficult to say anything of other languages, and it probably needs to be studied further.

[12] Tujia 土家 language (Tujia in Chinese) is the language of the Tujia 土家 people (population approximately 770 thousand), who live across the four provinces of Hubei 湖北, Hunan 湖南, Sichuan 四川, and Guizhou 贵州. The Tujia 土家 people call themselves pi$^{13}$tsi$^{55}$kha$^{31}$, pi$^{13}$tɕi$^{55}$kha$^{31}$, mi$^{13}$tsi$^{55}$kha$^{55}$, or mon$^{31}$tsi$^{31}$.

Tian (1982) divided the language into northern and southern dialects, recognizing that the differences between the two dialects are mainly phonological.

The Tujia 土家 language is a Tibeto-Burman language, but its genealogical relationship to other families of languages is still not clear. (Professor Nishida has stated that it has not been conclusively shown whether or not the Tujia 土家 language belongs to Tibeto-Burman languages. However, without a systemic comparative study, we can indicate only limited vocabulary that is supposedly cognate to Tibeto-Burman languages, excluding some numerals, personal pronouns, and a part of basic vocabulary. Even if the Tujia 土家 language belongs to the Tibeto-Burman languages, the coda consonants are almost completely lost, and furthermore, the initial consonants that are supposed to be derived from consonant clusters are highly simplified. Thus, any future comparative study is likely to be difficult. These points aside, here we consider the Tujia 土家 language to be a Tibeto-Burman language).

Chen et al. (1983) has not noted the dialect information of the Tujia 土家 language addressed in this paper. However, it appears to be different from the Tujia 土家 dialect described by Tian (1982), which is spoken in Longshan County in Xiangxi Tujia and Miao Autonomous Prefecture in Hunan Province 湖南省湘西土家族苗族自治州龙山县.

[13] According to Sun (1983), III.1a is defined as a behavior or action performed by a speaker (?) 行为动作亲自进行, 1b is behavior or action done by a third party (?) 行为动作非亲自进行, and 2 is behavior or action done by speaker incidentally (?) 行为动作顺便进行. However, there are few specific examples of each usage, and the precise meanings of these aspects are not well known (p. 71).

[14] The Tujia 土家 language [-a$^{55}$tiu$^{55}$] ‘perfective; proximal’ matches the Idu 义都 [-a$^{55}$tiu$^{55}$] and Taruang 达让 [-tiu$^{55}$] ‘proximal, lower to higher’, but in terms of their geographical relationship, there are no possible cognates (even accounting for possible borrowing) at this time, merely coincidences.

[15] For this *ra, see DeLancey (1980): Chapter 4 and Appendix 1. PTB *ra.

[16] The motion verb sa in the Kachin language may be translated as both ‘go’ and ‘come’ in English, and ‘*iku*’ and ‘*kuru*’ in Japanese. Whether it means ‘go’ (distal) or ‘come’ (proximal) depends upon the directionals (DeLancey 1980: 23–25; 143–144). The directional -s- may be the affixed verb sa, as indicated by DeLancey (1980: 228).

[17] Aspiration is always indicated by -h, and retroflex as in ṣ. ɕ and ʃ are represented by ś, ʑ and ʒ by ź, and ɳ by ń. ɹ- and -$^{ɹ}$ are transcribed as r- and -$^{r}$, respectively. ɿ is transcribed as ï. In languages with no distinction between a and ɑ, ɑ is also written as a.

[18] Liu (1984: 62), considers that the modal particle 语气助词 can be classified into three types according to the three moods 式 of declarative 陈述, imperative/hortative 祈使, and interrogative 疑问. The markers for these moods are declarative [-ai$^{33}$]; imperative/hortative [-ʔ] (this analysis is doubtful); and interrogative [-ni$^{51}$/-t̲a$^{51}$] (p. 62). According to DeLancey’s analysis, the subsequent modal particles 语气助词 in the Enkun 恩昆 dialect may each be analyzed as follows:

| | | | | | |
|---|---|---|---|---|---|
| 1. | (V Aux) | mǎ$^{L}$ | -ź | -it$^{31}$ | -ai$^{33}$ |
| | | pl. | proximal | 2$^{nd}$ PS | declarative |
| 2. | (V Aux) | s | -uʔ | | |
| | | Distal | 2$^{nd}$ PS: perfect: hortative | | |
| 3 | (V Aux) | ź | -it$^{31}$ | -ni$^{31}$ | |
| | | proximal | 2$^{nd}$ PS | interrogative | |

However, in actuality, we still do not know how to analyze every morpheme (approximately 140 elements) that is considered a modal particle 语气助词 in the Enkun dialect 恩昆 (the superscript $^{L}$- in mǎ$^{L}$- indicates low pitch of neutral tone 轻声).

[19] Especially see Sun (1981b: 37–38; 40) for this section. In the case of the rGyarong 嘉戎 language, directionals are applied not only to the past tense, but also to other tenses and moods. See Jin (1958: 98–106) and Qu (1984: 77–79).

[20] In addition, we have the following examples. The Kumang 格曼 language has the locative marker [-lit$^{55}$ ~ -li$^{55}$] ‘in/on/at’ (Sun et al. 1980: 286–287). In terms of word form, it fully matches the directional [-lit$^{55}$ ~ -li$^{55}$] ‘inward’. Furthermore, the Taruang 达让 language has a directional noun [thɯ$^{31}$boŋ$^{35}$] ‘inside’, whose second syllable matches the directional [-boŋ$^{35}$] ‘proximal + from unknown direction’. However, in any case, the semantic relationship is not very clear, and if directionals are derived from these particles and direction nouns, then it is difficult to explain the process by which these changed into verb suffixes.

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