The Lawngtlang Zophei verbal complex

SAMSON LOTVEN & ZAI SUNG[1] *Indiana University*

ABSTRACT

Kuki-Chin languages offer complex and innovative agreement systems within Tibeto-Burman which make use of pre- and post-verbal subject and object agreement markers. The choice of verb paradigm often varies based on valency, mood, and polarity, among other factors. Outside of current work at Indiana University, Zophei is undescribed. This research contributes to the literature on Kuki-Chin agreement by offering a description of the verbal complex of Lawngtlang Zophei based on the intuitions of (co-author) Zai Sung, a native speaker. The description includes subject and object agreement paradigms for contexts varying by valency (transitive, intransitive), polarity (negative, affirmative), and mood (declarative, interrogative, imperative). In addition, the plural subject/object marker, directional, future, negative, and question markers are discussed along with the order of morphemes within the verbal complex.

1 Introduction

Zophei (or Zyphe) is a Tibeto-Burman language from the Maraic group of Kuki-Chin (Van Bik 2009) spoken in southern Thantlang Township of Chin State, Myanmar. According to a 1994 estimate, there were 20,000 speakers worldwide, with 17,000 in Chin State (Eberhard, Simons, and Fennig, 2020). Since then, many ethnic Zophei have left Chin state and according to a community estimate, there are currently 4,000 ethnic Zophei in Indiana (B. Cung, personal communication, July 24, 2019). Lawngtlang Zophei (LTZ) is a particularly innovative variety of Zophei (Lotven and Berkson, 2019) spoken, according to a community leader for the village, by 1185 people worldwide with 360 speakers in Lawngtlang and 390 in the US (H. Zo, personal communication, July 19, 2019).

As is typical of Kuki-Chin languages (DeLancey 2010, 2011a, 2011b, 2013), verb agreement in Zophei is both suffixal (Tibeto-Burman retentions) and prefixal (innovations in Kuki-Chin). Descriptions of Kuki-Chin agreement systems include, among others, Lai, Cho, and Mizo (Bedell 1997, 2000, 2004), Hyow (Zakaria 2017), Daai (So-Hartmann 2009), and Senthang (Ngun Tin Par 2016). These and other resources have revealed the importance of valency (transitive, intransitive), polarity (affirmative, negative), and mood (declarative, interrogative, imperative) in investigating Kuki-Chin agreement paradigms. This paper makes a modest contribution to the study of Kuki-Chin verb agreement by offering description of person and number agreement in §2, plural subject and object marking in §3, and other verbal markers (directional, future, negative, question) in §4. §5 offers a summary, addressing the order of the morphemes described here. All LTZ data are based on the intuitions of (co-author) Zai Sung, a 23-year-old native speaker from Lawngtlang village.[2]

2 Person & number agreement

Person and number agreement paradigms in LTZ are sensitive to valency, polarity, and mood. §2.1 presents subject and object agreement on transitive verbs and §2.2 presents subject agreement on intransitive verbs (unergative, unaccusative, reflexive/reciprocal), paying particular attention to mood (declarative, interrogative) and polarity (affirmative, negative). All agreement markers are unspecified for gender.

2.1 Transitive verb agreement

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[1] Samson Lotven: slotven@iu.edu, Zai Sung: zhsung@iu.edu
[2] LTZ has four surface pitch patterns: (H)igh <x́/x́x́>, (M)id <x/xx> , (L)ow <x̀/x̀x̀>, and Falling <x́x>, which may be phonetically HM or ML depending on context. For more information on tone in LTZ, see Lotven (2021). The following abbreviations are used in this paper: 1=1st person, 2=2nd person, 3=3rd person, DIR=directional, FUT=future, NEG=negative, PL=plural, PNEG-preverbal negative, PO=plural object, PS=plural subject, PROH=prohibative, SO=singular object, SS=singular subject, Q=question

Transitive subjects are marked with pre- or post-verbal morphology in LTZ, while objects may additionally have both pre- and post-verbal marking. Agreement morphology varies according to person (1, 2, 3), number (plural, singular), polarity (affirmative), and mood (declarative, interrogative). The post-verbal *-héé* marks plurality for both subjects and objects, sometimes entirely and sometimes redundantly, further discussed in §3. Examples of declarative (1-2), interrogative (3-4), affirmative (1, 3), and negative (2, 4) contexts are provided below.

(1) kaa-ca-baa-héé
1PS-2PO-feed-PL
'We fed y'all

(2) ca-baa-mà-píh
2PO-feed-NEG-1PS
'We didn't feed y'all.'

(3) kaa-ca-baa-héé=máá?
1PS-2PO-feed-PL=Q
'Did we feed y'all?'

(4) ca-baa-mà-píh=máa
2PO-feed-NEG-1PS=Q
Didn't we feed y'all?

While the affirmative sentences in (1, 3) mark the subject preverbally and the object with both pre- and post-verbal morphology (SOVO), the negative sentences in (2, 4) mark the subject post-verbally and the object preverbally (OVS). Table 1 provides agreement paradigms for subjects of transitive verbs, while Table 2 provides agreement paradigms for objects of transitive verbs.

	Subject Pronouns			
	Affirmative		Negative	
	Declarative	Interrogative	Declarative	Interrogative
1SS	ka-		-nih	-nih/-níh[3]
2SS	na-		-cih	-cih/cíh[3]
3SS	a-		Ø	
1PS	kaa-		-píh	
2PS	naa-		-cíh	
3PS	aa-		-héé	

Table 1: Transitive Subject paradigms

	Object Pronouns			
	Affirmative		Negative	
	Declarative	Interrogative	Declarative	Interrogative
1SO	pa-			
2SO	ca-			
3SO	Ø			
1PO	ma-			
2PO	cá-…-héé			
3PO	-héé			

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[3] Markers indicating 1SS *-nih* and 2SS *-cih* in negative interrogative sentences show up with H tone if there is a plural object. Plural H tone is further discussed in §3.

Table 2: Transitive object paradigms

Some similarities exist between object marking and negative subject marking. Tone also plays a necessary role in agreement, with H tone marking the difference between some plural and singular subjects and objects, and differing based on sentence mood. There are some links between pre-verbal and post-verbal marking within the paradigm. The 2nd person marker is realized *-cih/-cíh* in a strong prosodic position (phrase-finally or before the question clitic), and is reduced to *ca-/cá-* in a weak prosodic position (before the verb). It is also possible that there is such a connection between the morphemes 1SS *-nih/-níh* and 2SS *na-/ná-*, and between 1PS *-pih/-píh* and 1SO *pa-/pá-*.[4] The preverbal 1PO *ma-* has no such post-verbal counterpart and, unlike 2nd and 3rd person objects, does not employ the post-verbal plural marker *-héé*. Intransitive verb paradigms discussed in §2.2 employ morphology similar to that seen in both transitive subjects and objects above and make use of pre-verbal and post-verbal marking as well as tone.

2.2 Intransitive verb agreement

Transitive subjects and objects in LTZ are marked with pre- and/or post-verbal morphology, the realization of which depends on person (1, 2, 3), number (plural, singular), polarity (affirmative), and mood (declarative, interrogative). The post-verbal *-héé* shows up in marking both subjects and objects, in some cases entirely and in some cases redundantly; it is further discussed in §3. Examples of declarative (1-2), interrogative (3-4), affirmative (1, 3), and negative (2, 4) are provided below.

Like object marking in the transitive paradigm, intransitive subjects are marked with pre- and/or post-verbal morphology. In the affirmative examples in (5-6), different intransitive verbs in (5) and reflexive/reciprocal verbs take identical vocabulary. In the negative examples in (7-9), verbs differ in their agreement morphology. In (7), no special preverbal marking is required, which is also the case for *phah* 'to arrive' and *tee* 'to be sharp'. In (8-9), some verbs require a preverbal *a-* in the negative glossed here tentatively as a preverbal negative marker.[5]

(5) naa-chùh/dee/seeng-héé-cíh
    2PS-leave/be.quiet/run-PL-2PS
    'Y'all left/were quiet/ran.'

(6) naa-baa/mììng-héé-cíh
    2PS-feed/watch-PL-2PS
    'Y'all fed/watched yourselves (or each other).'

(7) sééng-ba-cíh
    run-NEG-2PS
    'Y'all didn't run.'

(8) a-chùh/dée-bà-cíh
    PNEG-leave/be.quiet-NEG-2PS
    'Y'all didn't leave/weren't quiet.

(9) a-báa-bà-cíh
    PNEG-feed-NEG-2PS

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[4] Syllable shapes in LTZ include long syllables (CVV or CVVN) and short syllables (Ca minor syllables and CVh short major syllables ending in a phonetic glottal stop), see (Lotven et. al. 2019) for an overview of Kuki-Chin syllable shapes. Ca minor syllables are pronounced with the raised vowel [ə]. For the purposes of transparency in tone marking, all long syllables are represented with 2 vowels and extra-long vowels are presented with 3 vowels.

[5] More research is required to understand the distribution and purpose of this marker, though it may also be related to middle voice markers found in other Kuki-Chin languages, as described for Hakha Lai (Smith 1998) and Hyow (Zakaria 2017).

'Y'all did not feed each other.'

Intransitive subjects in affirmative sentences like (5-6) mark singular subjects preverbally (SV) and plural subjects with both pre- and post-verbal morphology (SVS). In negative contexts like (7-9), subjects are marked post-verbally (VS) and an additional pre-verbal PNEG marker appears for some verbs. Table 3 provides agreement paradigms for the subjects of intransitive verbs.

	Subject Pronouns			
	Affirmative		Negative	
	Declarative	Interrogative	Declarative	Interrogative
1SS	kaa-		(a-…)-nih	
2SS	naa-		(a-…)-cih	
3SS	aa-		(a-…)-∅	
1PS	kaa-…-héé píh		(a-…)-píh	
2PS	naa-…-héé cíh		(a-…)-cíh	
3PS	aa-…- héé		(a-…)-héé	

Table 3: Intransitive subject paradigms

Although the LTZ agreement does not neatly fit into descriptions of Nominative-Accusative or Ergative-Absolutive systems, there are several similarities between the paradigms. Transitive and intransitive subjects are marked identically in negative contexts. Intransitive singular subjects and transitive plural subjects are marked identically and can be disambiguated by the presence of a segmental object marker or by tone (on the verb or post-verbal marking). In addition, the post-verbal plural marker *-héé* appears in the marking of both subjects and objects, further discussed in §3.

3 Plural subject and object marking

Plurality is indicated through segmental and auto-segmental means, including pre- and post-verbal marking in subjects (transitive and intransitive) and objects, vowel length, and tone. First person plural is marked through suppletive forms in pre-verbal objects (1SS *pa-/pá-*, 1PS *ma-*) and post-verbal subjects (1SS *-nih*, 1PS *-píh*). The plural marker *-héé* occurs in many cells in these paradigms, with other markers or alone. It appears with the 2nd person preverbal object marker (*cá-…-héé*) in the transitive paradigm, as well as with both pre- and post-verbal marking (1PS *kaa-…-héé píh* and 2PS *naa-…-héé cíh*) in the intransitive paradigm. In addition, *-héé* alone marks 3rd person plural objects and 3rd person plural subjects in negative contexts, leading to ambiguities as in (11) where *-héé* marks that either or both argument as plural. In (10), both arguments are singular and no plural marker occurs.

(10) báá-beh
     feed-NEG
     'She didn't feed her.'

(11) báá-ba-héé
     feed-NEG-PL
     'She did not feed them.
     'They did not feed her.
     'They did not feed them.'

H tone is also employed in marking plurality, most clearly in differentiating 2nd person post-verbal subjects, with similar ambiguity as noted in (10-11). In (12), both arguments are singular and the 2nd person marker surfaces with M tone, while in (13) either or both arguments are plural and the 2nd person marker surfaces with H tone.

(12) báá-ba-cih
feed-NEG-2SS
'You didn't feed her.'

(13) báá-ba-cíh
feed-NEG-2SS.PL
'You did not feed them.
'Y'all didn't feed her.
'Y'all did not feed them.'

Vowel length marks plurality in the affirmative subject paradigm with singular subjects showing up as short vowels *ka-/na-/a-* and the plural subjects showing up as long vowels *kaa-/naa-/aa-*. In imperatives with plural addressees, plural H tone involves mora augmentation, lengthening short vowels to long vowels and long vowels to extra-long vowels. Such mora augmentation is realized on the verb stem in the affirmative in (14) and on the prohibitive marker *kheh* in the negative in (15).

(14) miing/miiíng
watch/watch.PL
'Watch him'/'Watch them.'

(15) miing-kheh/miing-kheéh
watch-PROH/watch-PROH.PL
'Don't watch him.'/'Don't watch them.'

Plural morphology in LTZ is diverse, including pre-verbal and post-verbal marking, suppletion, tonal morphology, and mora augmentation. Other pre- and post-verbal verbal morphology investigated in this study is discussed in §4.

4 Other markers

Four other morphemes in the verbal complex are described in this section, the directional marker *za-/zá-* in §4.1, the future marker *-aa/-àà/-áa* (or L tone) in §4.2, the negative marker *-bèh/-beh/-ba/-bà/-ma/-mà* in §4.3, and the question clitic *=maa/=máá/=máa* in §4.4.

4.1 Direction

Kuki-Chin languages often have pre-verbal marking to indicate direction in relation a deictic center, towards or away, upwards or downwards, as in Daai (Hartmann-So 1989) and Hakha Lai, which has as many as 10 particles (Peterson 2003, VanBik and Tluangneh 2017). The general directional marker *za-* is the only preverbal morpheme not marking agreement that was identified in this survey, but subsequent work suggests a *va-* directional marker is also in use in LTZ. It can refer to motion towards or away from the speaker, appearing immediately before the verb in (16) and intervening the preverbal subject and object agreement markers in (17).

(16) aa-za-baa-héé
3PS-DIR-feed-PL
'They came to feed each other.'

(17) a-zá-cá-báá-héé
3SS-DIR-2PO-feed-PL
'She came to feed y'all.'

The DIR marker borrows tone from the following morpheme, M (or no tone) from the verb in (16) and H from the 2PO marker in (17). Though directional marking appears limited in LTZ, future research may reveal

additional directional morphemes.

4.2 Future

The future marker *-àà* has L tone, but in some cases has no segmental exponence. [6] The segmental morphology *-aa* appears immediately following the verb stem, as in (18-19), before PL in (21) and before Q in (22).

(18) a-ma-baa/miing-àà
3SS-1PO-feed/watch-FUT
'She is going to feed/watch us.'

(19) aa-hmuh-áa
3SS-see-FUT
'She is going to see herself'

(20) a-báá/mííng-aa
3SS-feed/watch-FUT
'She is going to feed/watch him.'

(21) a-cá-báá/mííng-aa-hee
3SS-2PO-feed/watch-FUT-PL
'She is going to feed/watch y'all.'

Following a verb with M, FUT is realized with L as in (18) or HM as in (19), depending on the vowel length of the verb stem. Following a verb with H tone, as in (20-21), it is realized with M tone as a more general avoidance of HL sequences. In (21), the L tone from FUT spreads rightward lowering the H tone PL marker to M. In examples (22-23), FUT is optionally marked only through L tone on the right edge of the verb stem, lowering H to a HM fall in (23), which nonetheless spreads to the following Q marker, lowering it to M.

(22) a-pa-mííng-aa=maa
3SS-1SO-watch-FUT=Q
'Is she going to watch me?'

(23) a-pa-míing=maa
3SS-1SO-watch.FUT=Q
'Is she going to watch me?'

The segmental and tonal realization of FUT merits further research, as does its grammatical function.

4.3 Negative

In addition to differences to agreement morphology, negative declarative and interrogative sentences make use of the negative marker *-bèh*. In strong prosodic positions, it appears with no prosodic reduction, as in (24-25). Example (24) shows the phrase-final prosodic position to be strong, and example (25) reveals that addition of the question clitic does not change the prosodic environment for reduction. In addition, (25, 27) show that L tone is raised to M following H, as part of a more general avoidance of HL sequences (note that LH sequences are permitted, as in (28)). When in a weak prosodic position, preceding post-verbal agreement morphology, NEG is reduced to *-bà* in (26), *-ba* in (27) following a H tone, and *-mà/-ma* when there is a 1st person subject in (28-29).

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[6] We use 'future' pre-theoretically here and further study may find terms like 'irrealis' or 'potential' are more appropriate.

(24) a-dée-béeh
    3SS-quiet-NEG
    'She wasn't quiet.'

(25) a-baa-bèh=maa
    3SS-feed-NEG=Q
    'Didn't she feed herself?'

(26) hmuh-bà-cih
    see-NEG-2SS
    'You did not see him.'

(27) a-baa-bà-héé=máá
    2SS-feed-NEG-PL=Q
    'Didn't they feed each other?

(28) hmuh-mà-píh
    see-NEG-1PS.PL
    'We did not see him (or them).'

(29) báá-ma-píh
    feed-NEG-1PS.PL
    'We did not feed him (or them).'

Negative marking in LTZ is realized variably depending on sentence subject, as well as prosodic and tonal environments. Additionally, in imperative negative sentences mentioned in §3, the prohibitive marker -*kheh/-khee* occurs instead of -*bèh/-beh/-ba/-bà/-ma/-mà*.

4.4 Question

The question clitic =*máá/=maa/=máa* appears at the end of the verbal complex in affirmative and negative questions. In the affirmative questions in (30-31), the verb's lexical tone—H in (30) and M (or toneless) in (31)—is marked on the question marker with H in the former and HM in the latter. Lexical tone appears on the verb root in the negative interrogative context in (32). Only polar interrogatives (yes/no questions) are discussed here.

(30) a-báá=máá
    3SS-feed=Q
    'Did she feed him?'

(31) a-mííng=máa
    3SS-watch=Q
    'Did she watch him?'

(32) báá/miing-beh=maa
    feed/watch-NEG=Q
    'Didn't she feed/watch him?'

When preceded by the L tone NEG in transitive sentences like (32), the question marker surfaces with M tone, through rightward spreading of the L tone from NEG. Despite NEG and Q being in the same domain for the purposes of tone spreading, as noted above, the negative marker appears in its full form -*beh/-bèh* rather than the reduced -*ba/-bà*, suggesting that there is a boundary (morphological, syntactic, etc.) between NEG and Q for the purposes of prosodic foot construction. As such, Q is glossed as a clitic here.

5 Summary and Order of Morphemes

The data presented in this overview offer evidence of the position of subject and object agreement morphology as well as directional, future, negative, plural, and question marking. Subject agreement is pre- or post- verbal and object agreement is pre-verbal. The post-verbal plural marker may correspond to subject or object agreement—or both, leading to ambiguities. The future marker may be realized through tonal exponence only and various other tonal processes such as spreading and HL avoidance have also been noted here. The order of morphemes is given in (33) where the
three locations in which subject and object agreement appear are marked with A, B, and C (the PL marker is separated from the C agreement position).

    (33) (A_{subj})-DIR-(B_{obj})-VERB-FUT-NEG-PL$_{subj/obj}$-(C_{subj})=Q

The examples that follow are provided as justification for the ordering in (33). Example (34) evinces the preverbal sequence of (A_{subj})-DIR-(B_{obj})-VERB, as well as establishing the post-verbal order of FUT-Q.

    (34) naa-za-ma-mííng-áa=maa?
        2PS-DIR-1PO-watch-FUT=Q
        'Are you all going/coming to watch us?'

In order to further articulate the post-verbal morpheme order, (35) offers evidence of the sequence FUT-NEG-C_{subj}=Q. To situate PL within the complex, (36) shows PL follows NEG and (37) shows PL precedes C_{subj}.

    (35) za-mà-miing-aa-bà-cíh=máa?
        DIR-1PO-watch-FUT-NEG-2PS=Q
        'Are you all not going/coming to watch us?'

    (36) miing-ba-héé=máá?
        watch-NEG-PL=Q
        'Didn't she watch them?'

    (37) naa-za-íí-áá-hee-cíh=máa?
        2PS-DIR-sleep-FUT-PL-2PS=Q
        'Are you all going/coming to sleep?'

This brief overview of the LTZ verbal complex is by no means comprehensive, yet it reveals rich morpho-phonological, morpho-syntactic, tonal, and prosodic puzzles for future research. Continued study of LTZ morphology is valuable to our understanding of similar phenomena in other Kuki-Chin languages, Tibeto-Burman languages more broadly, and the typology of such phenomena in the world's languages.

Acknowledgements

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