

Exploring the Verb Agreement System in the Lohorung Language

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Abstract

This article analyzes the verb agreement system in Lohorung, a Kirat Rai language belonging to the Tibeto-Burman family. Using elicitation methods with a native speaker and textual analysis, we find that Lohorung verbs exhibit simultaneous agreement with both subject and object pronouns, marked by <-η>, <-na>, <-u>, <-sti>, <-i> and <-ka>. The key findings reveal that: (a) present tense verbs with unmarked ergative subjects show single agreement, (b) clusivity is marked exclusively (inclusive forms remain unmarked), and (c) agreement undergoes assimilation (e.g., portmanteau<-u> for third person singular past. Notably, the system does not show gender or honorific distinctions. These results demonstrate Lohorung's complex yet rule-governed agreement morphology, contributing to Tibeto-Burman typology and endangered language documentation.

Keywords: Lohorung verb agreement, clusivity, pronominalization, Morphosyntax

Introduction

Lohorung is a Kirat Rai language that belongs to the East Himalayish subgroup of the Tibeto-Burman language family (Eppelle et al., 2012). The Lohorung language is closely related to Yamphu [ybi], Southern Yamphu [lrr], Eastern Mewahang [emg], Western Mewahang [raf], and Yakkha [ybi] (Rutgers, 1998). According to (Hanßon, 1991, p. 62), the little-known 'Biksit', spoken in a small region near the upper Sabhakhola, is identified as a dialect of Lohorung. While it may exhibit distinct characteristics, the available data are insufficient to draw definitive conclusions (Hanßon, 1991, p. 62). The Lohorung Rai Society, however, asserts that there are no dialects within Lohorung. Lexical similarity measurements indicate that Pangma and Dhupu share 90% similarity, Pangma and Angla share 88%, and Dhupu and Angla also share 88% (Mitchell & Hilty, 2012, p. 21).

There has been limited research on the Lohorung people, culture, and language, although some studies have focused on the language itself. Hardman (2001) conducted an ethnographic study of the Lohorung, transcribing ritual texts without linguistic analysis. Rai (2015) examined verb morphology in Lohorung, analyzing the morphological structure of Lohorung verbs, including person and number markers as affixes. Regmi (2015 [2072 B.S.]) addressed Lohorung phonology and word classes, while Rai and Rai (2019 [2076 B.S.]) investigated the history of the Lohorung language, uncovering its connections to land and environment. Rai (2021) discussed the morphosyntax of Lohorung from a functional typological perspective. However, none of the aforementioned studies have explored the verb agreement system in the language, which this study aims to investigate. Additionally, this research seeks to engage in typological discussion while systematically addressing the verb agreement system in Lohorung.

The word *Lohorung* is considered a modified form of *lolo-lun*, meaning ‘round stone’ (Rai, 2015; Rai, 2025). It appears to be derived from *lolo-lung*, a trisyllabic term where the consonant [l] in the coda position of the second and third syllables is replaced by [h] and [r], respectively (Rai & Rai, 2019 [2076 B.S.], p. 22).

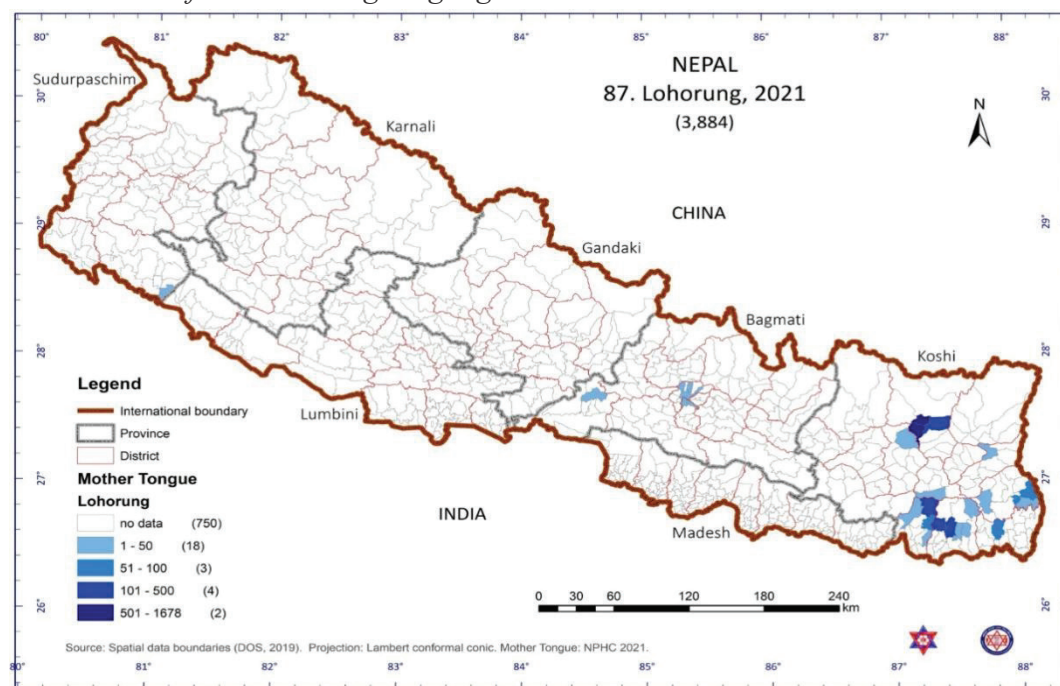
The Lohorung people primarily reside in the Sankhuwasabha district, particularly in the upper Arun Valley and Khandbari, situated at an elevation of approximately 1,200 meters (Hardman, 2000, p. 1; Lohorung Rai Society, 2012 [2069 B.S.]). This region is historically located within Pallo Kirat (Rai, 2015, p. 1). The Lohorung community has its own distinct language, culture, history, and traditions (Lohorung Yakkhaba Yuyong, 2007).

According to oral traditions, the Lohorung ancestor, Dechapa, originated in the mountain regions, and his descendants gradually dispersed throughout the Asian continent. Eventually, a small group settled in Khayuma Khaisuma, a location in the Terai region of Nepal. As the community grew, one family migrated from that area and followed the Arun River to the Arun Valley. It is believed that the Lohorung, Mewahang, and Yamphu languages all originated in this valley (Rai, 2023 [2080 B.S.]). Today, Lohorung people are dispersed across nine districts of Nepal and in communities abroad. Figure 1 presents the linguistic origin of the Lohorung language.

According to the Central Bureau of Statistics (CBS, 2012), the Lohorung population was recorded as 1,153. However, Lohorung Yakkhaba Yuyong (2007) estimated the population to be between 100,000 and 150,000, while Rai (2015, p. 3) reported the number to be over 50,000. Most members of the Lohorung community traditionally rely on subsistence agriculture. Since 2060 B.S. (approximately 2003–2004 C.E.), at least one member from nearly every household has migrated abroad for employment, including service in the British Army, the Singapore Police, various labor sectors, and a few in professional or academic roles.

Figure 1

Distribution of the Lohorung language



Source: Gurung et al. (2025)

According to the National Statistics Office (NSO, 2023), based on caste and ethnicity, the Lohorung population is 2,598. The number of Lohorung language

speakers is 3,884, while 622 individuals speak Lohorung as a second language. Additionally, 4,925 individuals have identified Lohorung as their ancestral language.

Research Methods

This study employed a mixed-methods approach to analyze verb agreement patterns in Lohorung, combining primary data collection through structured elicitation sessions with a 71-year-old native speaker from Gairipangma, Sankhuwasabha, with the researcher's metalinguistic intuition as a secondary verification tool. The research design focused on systematically testing verb paradigms across key variables including person (1st/2nd/3rd), number (singular/dual/plural), clusivity (inclusive/exclusive), tense (past/non-past), and ergative marking. Data analysis involved morphological segmentation of agreement markers, examination of portmanteau morphemes, and typological comparison with related Kirati languages, with particular attention to phonological assimilation patterns. Findings were validated through triangulation of elicited data with naturalistic examples and consultation of existing Lohorung grammatical descriptions, ensuring both empirical rigor and theoretical relevance to Tibeto-Burman language studies. This methodology effectively balances traditional linguistic fieldwork with contemporary typological analysis, making a significant contribution to the documentation of this endangered language's complex agreement system.

Results and Discussion

This section discusses the agreement patterns in Lohorung verbs, focusing on pronouns, person, number, and clusivity. In some cases, verb agreement also reflects the syntactic roles of the arguments.

Noun and Pronoun Agreement Pattern in Lohorung

In the Lohorung language, transitive verbs simultaneously agree with both the subject and the object, whether they are nouns or pronouns. This is illustrated in example (1a) below.

(1) *kaŋaε k^ho rɔːguŋ*

Past tense	kaŋa-ε	k ^h o	rɔːg-u-ŋ
	1SG-ERG	3SG	beat-3SG.PST-1SG
	'I beat him.'		

In example (1), the verb *rɔːg* ‘beat’ agrees with the first person singular subject *kaŋa* ‘I’ and the third person singular object *kʰo* ‘he’. In the verb form *rɔːg-u-ŋ*, the marker *-u* indicates both past tense and third person singular object, while *-ŋ* marks the first person singular subject. Although *-u* functions as a third person marker, it also expresses past tense, forming a portmanteau morpheme that encodes both features simultaneously. In Lohorung, the dedicated past tense marker is *a*, which becomes assimilated into the third person marker *-u* in such constructions.

(2) *kaŋaε kʰoː rɔːkkuŋ*

Non	<i>kaŋa-ε</i>	<i>kʰoː</i>	<i>rɔːk-k-u-ŋ</i>
past	1SG-ERG	3SG	beat-NPST-3SG-1SG

‘I beat him.’

In example (2), the verb *rɔːg* ‘beat’ shows simultaneous agreement with both the subject *kaŋa* ‘I’ and the object *kʰo* ‘he/she’. In the verb form *rɔːk-k-u-ŋ*, the marker *-u* indicates the third person singular object, while *-ŋ* marks the first person singular subject. The marker *-k-* functions as a non-past tense marker. Thus, the verb form encodes subject, object, and tense features through a combination of affixes.

(3) *kʰoσεε kʰo rɔːgu*

past	<i>kʰoσεε-ε</i>	<i>kʰo</i>	<i>rɔːg-u</i>
	3SG	3SG	beat-3SG.PST.3S,

‘He beat him.’

In example (3), the verb *rɔːg* ‘beat’ agrees with both the third person singular subject *kʰo* ‘he’ and the third person singular object *kʰo* ‘he’. In the verb form *rɔːg-u*, the suffix *-u* functions as a portmanteau morpheme, simultaneously marking past tense and third person singular for both subject and object. In Lohorung, the past tense marker is *-a* and the third person marker is *-u*. These two markers undergo assimilation, where the back low vowel *-a* (past tense) is raised to the back high vowel *-u* (third person), resulting in a single, fused marker. Therefore, in this instance, the marker *-u* encodes both grammatical features—past tense and third person singular—for both arguments. This demonstrates that the marker *-u* can function as a portmanteau in Lohorung verb morphology.

(4) *kaŋaε ana rɔ:gana*

Non past	kaŋa-ε	ana-ø	rɔ:g-a-na
	1SG-ERG	2SG-Ø	beat-PST.1SG.2SG

'He beat you.'

In example (4) the verb *rɔ:g* 'beat' agrees with both the first person singular subject *kaŋa* 'I' and the second person singular object *ana* 'you'. In this case, the first person singular marker *-ŋ* is assimilated with the second person singular marker *-n*, resulting in the combined form *-na*. Thus, the marker *-na* simultaneously encodes agreement with both the first person singular subject and the second person singular object. This form illustrates a case of morphological fusion in Lohorung verb agreement, where person markers merge to reflect dual participant features.

According to examples (5a.) and (5b.) when the subject is not marked with an ergative marker, the Lohorung verb agrees only with the subject. In these examples, the verb *paqʰalli:ma* 'to read' agrees exclusively with the subjects *kaŋa* 'I' and *kho* 'he/she', respectively. The verb does not show agreement with the object *kitapa* 'book'. This suggests that, in the absence of ergative marking, verb agreement in Lohorung is restricted to the subject, and the object remains unmarked in the verb morphology.

(5) a. *kaŋa kitapa paqʰali:kŋa*

Non past	<i>kaŋa</i>	<i>kitapa</i>	<i>paqʰa-li:-k-ŋa</i>
	1SG	book	read-play-PRES-1SG

'I read a book.'

past *kaŋa kitapa paqʰali:siŋ*

<i>kaŋa</i>	<i>kitapa</i>	<i>paqʰa-li:-s-i-ŋ</i>
1SG	book	read-play-INS-PST-1SG

'I read a book.'

(6) *kʰo-ø kitapa paqʰali:k*

Non past	<i>kʰo-ø</i>	<i>kitapa</i>	<i>paqʰa-li:-k</i>
	3SG	book	read-play-PRE.3SG

'He reads a book.'

Example (6) also exhibits the same pattern as examples (5a.) and (5b.), where the verb agrees only with the subject in the absence of an ergative marker. However, in this case, the third person marker is not overtly realized; it is deleted and understood from the context.

- (7) *k^ho ha:buk*
 Non past *k^ho* *ha:b-u-k*
 3SG cry-3SG-PRES
 'He reads a book.'

In the example (7) intransitive verbs in Lohorung agree only with the subject, as there is no object, and the subject is unmarked by an ergative marker (Rai, 2021). Interestingly, when the subject of a transitive verb is also unmarked by an ergative marker, the verb behaves like that of an intransitive clause, showing agreement only with the subject. This pattern is illustrated in examples (5a.), (5b.), and (6.).

Number Agreement Pattern in Lohorung

Number systems vary across languages. Most Kirati languages spoken in Nepal, including Lohorung, exhibit a three-way number distinction: singular, dual, and plural. Accordingly, Lohorung verbs show agreement with the subject and/or object based on these three number categories.

- (8) *kaŋaε, ana rɔ:gana*
kaŋa-ε ana-ø rɔ:g-a-na
 Past 1SG-ERG 2SG-Ø beat-3SG.PST-1SG.2SG
 'I beat you.'

In example (8), the subject *kaŋa* 'I' and the object *ana* 'you' are both singular in number, representing first person singular and second person singular, respectively. The Lohorung verb *rɔ:g* 'beat' agrees with both the first person singular subject and the second person singular object through the marker *-na*. This occurs because the first person singular marker *-η* assimilates with the nasal sound *[n]* of the second person singular marker *-na*, resulting in the combined form *-na*.

- (9) *kaŋaε antsina rɔ:gastina*
 kaŋa-ε antsina-∅ rɔ:g-a-sti-na
 Past 1SG-ERG 2DL-∅ beat-PST-DL-2SG.1SG

‘I beat you (two).’

In example (9), the verb *rɔ:g* ‘beat’ agrees with the first person singular subject *kaŋa* ‘I’ and the second person dual object *antsina* ‘you two’. In the verb form *rɔ:g-a-sti-na*, the suffix *-a* marks past tense, *-sti-* indicates dual number, and *-na* functions as a portmanteau marker simultaneously encoding both first and second person features.

- (10) *kaŋaε, anna rɔ:gani*
 Past kaŋa-ε anna-∅ rɔ:g-a-n-i
 1SG-ERG 2PL-∅ beat-PST-2-PL
 ‘I beat you.’

In example (10), the verb *rɔ:g* ‘beat’ agrees with the first person singular subject *kaŋa* ‘I’ and the second person plural object *anna* ‘you (plural)’. The verb form *rɔ:g-a-ni* (‘I beat you’) consists of the past tense marker *-a-*, the combined first-, and second-person marker *-n-* resulting from the assimilation of the first-person marker *-ŋ* with the second person marker *-n-* and the plural marker *-i*.

Regarding animacy, Lohorung maintains a number distinction primarily for animate nouns, whereas non-animate nouns do not consistently show number marking. Typically, Lohorung follows a subject–object–verb (SOV) word order. However, when this canonical order changes, inanimate plural nouns used as subjects still trigger verb agreement. Interestingly, these nouns do not take plural inflections themselves but are instead accompanied by plural demonstrative pronouns, as shown in example (11).

- 11) *ig^halɪŋkɔ:wa kaŋaε, kɔ:kduŋa*
 ig^halɪŋkɔ:wa kaŋa-ε kɔ:k-d-u-ŋ-a
 these stones 1SG-ERG throw-INS-3-1SG-PFV.PRS.PL

‘These stones I have thrown.’

In example (11), the noun *liŋkɔ:wa* ‘stone’ is not marked with a plural suffix, yet it functions as a plural noun through the plural demonstrative pronoun *ig^ha* ‘these’,

which identifies the noun phrase as plural. Thus, the inanimate noun phrase *igha liŋkɔ:wa* ‘these stones’ is topicalized. In this context, the verb agrees with the plural number of the inanimate noun phrase. The breathy marker *-a-* attached to the verb indicates plurality, although the recognized plural marker in the language is *-i*.

- (12) *igɔ liŋkɔ:wa* *kaŋaε*, *kɔ:kduŋε*
igɔ liŋkɔ:wa *kaŋa-ε* *kɔ:k-d-u-ŋ-ε*
 this stone 1SG-ERG throw-INS-3-1SG-PFV.PRS.SG

In example (12), the noun *liŋkɔ:wa* ‘stone’ is singular and is identified as such by the singular demonstrative pronoun *igɔ* ‘this’. Thus, the inanimate noun phrase *igɔ liŋkɔ:wa* ‘this stone’ is topicalized as singular. In this context, the verb agrees with the singular number of the inanimate noun. The marker *-ε* attached to the verb indicates singularity.

From these two examples, it is evident that when the object is topicalized, Lohorung verbs agree with the number (singular or plural) of the inanimate object, even though the noun phrase itself does not carry an explicit plural marker.

Person Agreement Pattern in Lohorung

Lohorung verbs also exhibit agreement with person (first, second, and third), as illustrated in example (3).

- (13) *kanaε* *k^ho:* *rɔ:guŋ*
 past *kana-ε* *k^ho:* *rɔ:g-u-ŋ*
 1SG-ERG 3SG beat-PST.3SG-1SG
 ‘I beat him.’

In example (13), the Lohorung verb *rɔ:guŋ* ‘beat’ agrees with the first person singular subject *kana* ‘I’ and the third person singular object *k^ho:* ‘he’. The markers *-u* and *-ŋ*, indicating third person and first person respectively, occur with the verb root *rɔg* ‘beat’. Thus, the Lohorung verb clearly demonstrates a person agreement pattern.

- (14) *anaε* *k^ho* *rɔguna*
 past *ana-ε* *k^ho* *rɔg-u-na*
 2SG-ERG 3SG beat-PST.3SG-2SG
 ‘I beat him.’

In example (14), the second person subject *ana* ‘you’ and the third person object *k^ho* ‘he’ are reflected in the verb *rɔ:g* by the markers *-na* and *-u-*, indicating second person and third person respectively.

In example (15), the verb *rɔ:g* ‘beat’ agrees with both the third person singular subject *k^ho* ‘he’ and the third person singular object *k^ho:* ‘he’. The marker *-u* attached to the verb simultaneously represents agreement with the third person subject and object.

(15)	<i>k^hosεε</i>	<i>k^ho:</i>	<i>rɔ:gu</i>
past	<i>k^ho-s-ε-ε</i>	<i>k^ho:</i>	<i>rɔ:g-u</i>
	3SG-INS-INS-ERG	3SG	beat-3SG.PST
	‘He beat him.’		

Clusivity Pattern in Lohorung

The Lohorung language distinguishes clusivity in the first person plural and dual pronouns, differentiating between inclusive and exclusive forms. The verb agreement system in Lohorung reflects this clusivity distinction as well.

(16)	a.	<i>kaniε</i>	<i>k^ho</i>	<i>rɔ:gi</i>
past		<i>kani-ε</i>	<i>k^ho</i>	<i>rɔ:g-i</i>
		1PL.INC-EGR	3SG	beat-1PL.3SG.INC.PST
		‘We beat him.’		

	b.	<i>kaŋkaε</i>	<i>k^ho</i>	<i>rɔ:guŋka</i>
past		<i>kaŋka-ε</i>	<i>k^ho</i>	<i>rɔ:g-u-ŋka</i>
		1PL.EXC-ERG	3SG	beat-3SG.PST - 1PL.EXC
		‘We beat him.’		

In example (16a.), the subject *kani* ‘we’ is inclusive, while in example (16b.), the subject *kaŋka* ‘we’ is exclusive. The Lohorung verb agrees with both inclusive and exclusive subjects. In example (4a), the marker *-i* attached to the verb *rɔ:g* ‘beat’ indicates first person plural and past tense; however, it is not specifically an inclusive marker, as inclusivity in Lohorung is unmarked. In example (4b), the suffix *-ŋka* added

to the verb *rɔːg* ‘beat’ marks first person plural exclusive. Thus, exclusiveness in Lohorung is explicitly marked by *-ŋka*, and the verb agrees accordingly with the exclusive subject.

(17)	<i>kastiε</i>	<i>k^ho</i>	<i>rɔːgastu</i>
Past	kasti-ε	k ^h o	rɔːg-a-st-u
	1DL.INCL-ERG	3SG	beat-PST-2PL.EXC.3SG
	‘We (two) beat him.’		

In example (17), *kasti* ‘we two’ is first person dual inclusive form. The verb *rɔːg* ‘beat’ includes the markers *-a-*, *-st-*, and *-u-*, which indicate past tense, dual inclusive, and third person singular, respectively. Thus, the verb *rɔːg* agrees with the first person dual inclusive subject. The marker *-sti-* (indicating first person dual inclusive) changes to *-stu-* due to vowel assimilation, where the vowel /i/ in *-sti-* assimilates to the vowel /u/ in the third person marker *-u-*. However, *-sti-* itself is not an explicit inclusive marker, since inclusivity in Lohorung remains unmarked.

(18)	<i>kastigaε</i>	<i>k^ho</i>	<i>rɔːgastuga</i>
past	katsi-ga-ε	k ^h o	rɔːg-a-st-u-ga
	1DL-EXC-ERG	3SG	beat-PST-1DL-3SG-EXC
	‘We (two) beat him.’		

According to example (18), *kastiga* ‘we two’ is first person dual exclusive. In the subject *kastiga*, *kasti* indicates first person dual, while the suffix *-ga* functions as the exclusive marker. This is reflected in the verb *rɔːg* ‘beat’, where the markers *-a-*, *-st-*, *-u-*, and *-ga* represent past tense, first person dual, third person singular, and exclusivity, respectively.

Examples (19a.) and (19b.) illustrate first-person plural exclusive agreement in Lohorung, without and with the ergative marker, respectively. The marker *-ŋka* functions as the exclusive marker and appears consistently in the verb forms in both cases. Thus, Lohorung verbs demonstrate agreement with clusivity distinctions as well as can be realized in some other Kirati languages, i.e. Chamling, Bantawa, Bayung and Puma (Rai, 2024).

- (19) a. *kaŋka* *tsam* *tsa:kiŋka*
 kaŋka *tsam* *tsa:-k-i-ŋka*
 1PL. 3SG eat-PRES-INS-1PL
 ‘we eat rice.’
- b. *kaŋkaε* *tsam* *tsa:kuŋka*
 kaŋa-ε *tsam* *tsa-u-ŋka*
 1PL-ERG 3SG eat-3SG.PST-1SG
 ‘we ate rice.’

Lohorung Pronominalization

Pronominalization, traditionally defined as the replacement of nouns or noun phrases by pronouns (Khan, 2013), is reconceptualized in this study as a verb agreement phenomenon. This pattern is particularly robust among Kirati languages of Nepal, including Koyee (Rai, 2017) and Lohorung. In Lohorung, pronominalization manifests through the attachment of partial pronominal elements to verbs (Rai, 2021), creating an intricate system of agreement.

The firstperson marker *ka-* (as in *ka-ŋa* ‘I’, *ka-sti* ‘we two [inclusive]’, *ka-sti-ga* ‘we two [exclusive]’, *ka-ni* ‘we [inclusive]’, and *ka-ŋka* ‘we [exclusive]’) remains distinct from verbal morphology, while its suffixed elements (*-ŋa*, *-sti*, *-ga*, *-ni*, *-ŋka*) are incorporated into the verb forms. This bifurcated system demonstrates how Lohorung grammaticalizes person marking by partially transferring pronominal elements into verbal complexes, offering unique insights into Kirati morphosyntax.

- (20) a. *kaŋa tsam tsa:kiŋa*
 Present *kaŋa* *tsam* *tsa:-k-ŋa*
 1SG. 3SG eat-PRES-1SG
 ‘I eat rice.’
- b. *kaŋaε tsam tsa:uŋ*
 Past *kaŋa-ε* *tsam* *tsa:-u-ŋ*
 1SG-ERG 3SG eat-3SG.PST-1SG
 ‘I ate rice.’

In examples (20a) and (20b), a portion *-ŋa* of the first person singular subject *kanya* is attached to the verb, as in *tsa:k-ŋa*, which indexes first person singular in a present tense sentence. In the past tense sentence, the marker *-ŋ* serves a similar function. Thus, pronominalization is evident in the first person singular number through the attachment of pronominal elements to the verb.

(21) a.			
	<i>kani tsam tsa:ki</i>		
	kani	tsam	tsa:-k-i
Non-past	1PL.	3SG	eat-PRES-1PL.INS
	‘We eat rice.’		
b.			
	<i>kanie tsam tsa?i</i>		
	kani-ε	tsam	tsa?-i
past	1PL-ERG	3SG	eat-1PL.PST.INS
	‘we ate rice.’		

In examples (21a) and (21b), a portion *-i* of the first person plural inclusive pronoun (subject) is attached to the verb, demonstrating pronominalization in both past and non-past tenses. Thus, pronominalization is evident in the first person plural inclusive form. Similarly, in example (19a.), a portion *-ŋka* of the first person plural exclusive pronoun (subject) is affixed to the verb in both past and non-past tenses, showing pronominalization in the first person plural exclusive form.

(22) a.	<i>ana tsam tsa:kna</i>		
Present	<i>ana</i>	<i>tsam</i>	<i>tsa:-k-na</i>
	2SG.	3SG	eat-PRES-2SG
	‘You eat rice.’		
Past b.	<i>anaε tsam tsa?una</i>		
	<i>ana-ε</i>	<i>tsam</i>	<i>tsa?-u-na</i>
	2SG-ERG	3SG	eat-3SG.PST-2SG
	‘You ate rice.’		

In examples (22a) and (22b), a portion *-na* of the second person singular pronoun *ana* (subject) is attached to the verb. Thus, in Lohorung, the second person singular is pronominalized through verbal attachment in both past and non-past tenses.

- (23) a. *anstina tsam tsa:kstina*
 Non-past *anstina* *tsam* *tsa:-k-stina*
 2DL. 3SG eat-PRES-2DL
 ‘You (two) eat rice.’
- Past b. *antsinaε tsam tsa?astuna*
 antsina-ε *tsam* *tsa-?a-stuna*
 2PL-ERG 3SG eat-PST-3SG.2DL
 ‘You (two) ate rice.’

In examples (23a.) and (23b.) the portions *-stina* and *-stuna* of the second person dual pronoun *anstina* (subject) are attached to the verb. Thus, in Lohorung, the second person dual is pronominalized through verbal attachment.

- (24) a. *anna tsam tsa:kani*
 Non-past *anna* *tsam* *tsa:-k-an-i*
 2PL. 3SG eat-PRES-2-PL
 ‘You (two) eat rice.’
- Past b. *annaε tsam tsa?amni*
 anna-ε *tsam* *tsa-?a-m-n-i*
 2PL-ERG 3SG eat-PST-3SG-2-PL
 ‘You ate rice.’

In example (24a.) and (24b.) the portion *<-an->* and *<-i>* of the second person and plural pronoun (subject) ‘*anna*’ is attached with the verb. Thus, in the Lohorung language second person plural appears as pronominalization by attaching with a verb.

- (25) a. *k^hotsi tsam tsa:ksti*
 Present *k^hotsi* *tsam* *tsa:-k-sti*
 3DL. 3SG eat-PRES-3DL
 ‘They (two) eat rice.’

Past	b.	<i>Khotsi tsam tsaʔasti</i>		
		khotsi	tsam	tsa-ʔ-a-sti
		3DL.	3SG	eat-INS-PST-3DL
		‘They (two) ate rice.’		

In example (25a. and (25b. the portion <-tsi> of the third person dual pronoun (subject) ‘*kʰotsi*’ in *both* past and non-past tense appears to the verb as pronominalization. Thus, third person dual number appears as pronominalization by attaching with a verb.

In example (26a.) and (26b.), the portion -i of the third person plural pronoun (subject) ‘*kʰotsi*’ in *both* past and non-past tense appears to the verb as pronominalization. Thus, third person plural number appears as pronominalization by attaching with a verb.

(26)	a.	<i>kʰotsi tsam tsa:kmi</i>		
Present		kʰotsi	tsam	tsa:-k-m-i
		3PL.	3SG	eat-PRES-INS-3PL
		‘They eat rice.’		
Past	b.	<i>khotsi tsam tsaʔami</i>		
		khotsi	tsam	tsa-ʔ-a-m-i
		3DL.	3SG	eat-INS-PST-INS-3PL
		‘They ate rice.’		

In examples (27a.) and (27b.), the portion -tsi of the third person plural pronoun *khotsi* (subject) appears attached to the verb in both past and non-past tenses, demonstrating pronominalization. Thus, the third person dual number is marked through pronominal attachment to the verb. However, when the subject is marked with an ergative marker, the pronominal portion -ts- combines with -i to form -tsi. Verb agreement consistently includes these affixes, as shown in the accompanying table.

(27) Non- past	a.	<i>k^hotsiε tsam tsa:kutsi</i>		
		<i>k^hotsi-ε</i>	<i>tsam</i>	<i>tsa:-k-u-tsi</i>
		3PL-ERG	3SG	eat-PRES-3SG-3PL
		'They eat rice.'		
Past	b.	<i>khotsiε tsam tsa^ʔutsi</i>		
		<i>khotsi-ε</i>	<i>tsam</i>	<i>tsa:-^ʔ-u-tsi</i>
		3DL.	3SG	eat-INS-3SG.PST-3PL
		'They ate rice.'		

Table 1 shows that when the subject and object are both third person singular (3SG > 3SG), the third person marker -u can appear in the final position of the verb. However, when other persons act upon the third person, the third person marker -u cannot occur at the final position. In cases where the first person singular acts on third person singular (1SG > 3SG) or vice versa (3SG > 1SG), the first person marker -ŋ can appear in the final position. Otherwise, the first person marker -ŋ does not occur in the final position.

Table 1

Affixes in Lohorung verb agreement system

Marker	Words	Person
<-u>	<i>tsa:-k-u</i>	3SG
<-u->	<i>tsa:-k-u-ŋ</i>	3SG
<-ŋ>	<i>tsa:-k-u-ŋ</i>	1SG
<-ŋ->	<i>tsa:-k-ŋa-na</i>	1SG
<-na>	<i>tsa:-k-ŋa-na</i>	2SG

As presented in the table, the second person singular marker -na consistently appears in the final position. Other features, such as number and clusivity, follow similar patterns.

Do Lohorung Verbs Exhibit Gender and Honorific Agreement?

Cross linguistically many languages deal with gender agreement system. But the Lohorung verbs do not exhibit gender and honorifics agreement patterns.

(28) a. *apaε tsam tsa:k*

apa-ε	tsam	tsa:-k-u
father-ERG	3SG	eat-PRES-3PL

‘Father eats rice.’

b. *amaε tsam tsa:k*

ama-ε	tsam	tsa:-k-u
mother-ERG	3SG	eat-PRES-3PL

‘Mother eats rice.’

Example (28a.) exhibits male subject *apa* ‘father’ and example (28b.) exhibits female subject *ama* ‘mother’. But the verb *tsa:k* ‘eat’ is not changed on the basis of gender agreement. Thus, the Lohorung language doesn’t deal with the gender agreement system.

(29) a. *pappaε tsam tsa:ku*

pappa-ε	tsam	tsa:-k-u
grandfather-ERG	3SG	eat-PRES-3PL

‘Grandfather eats rice.’

b. *jaŋmine tsam tsa:ku*

jaŋmin-ε	tsam	tsa:-k-u
grandson-ERG	3S	eat-PRES-3PL

‘Grandson / granddaughter eats rice.’

Example (29a.) features an honorific subject *pappa* ‘grandfather’, while example (29b.) has a non-honorific subject *jaŋmin* ‘grandson/granddaughter’. However, the verb *tsa:k* ‘eat’ remains unchanged regardless of the honorific status of the subject. This indicates that Lohorung verbs do not exhibit an honorific agreement system.

Conclusion and Implications

This study reveals that Lohorung employs a sophisticated verb agreement system through pronominalization, where verbs simultaneously mark subject and object relations via attached pronominal elements (e.g., -ŋ for first person singular, -na for second person singular, -u for third person singular). The language exhibits a clearclusivity distinction, with exclusive forms marked by -ka/-ga while inclusive forms

remain unmarked, and demonstrates systematic portmanteau morphology (e.g., -u encoding both third person singular and past tense). Notably absent are gender or honorific agreements, distinguishing Lohorung from neighboring languages. These findings advance our understanding of Kirati morphosyntax by documenting: (1) a rare S/O agreement pattern in an endangered language, (2) the grammaticalization of clusivity, and (3) how phonological assimilation shapes agreement markers. The study provides crucial data for both theoretical linguistics and language preservation efforts, highlighting the need for further documentation of Lohorung's dialectal variations to safeguard this unique aspect of Nepal's linguistic heritage.

This research facilitates future studies by providing a foundation for language documentation and preservation. It also contributes to the creation of teaching resources such as textbooks and grammar booklets, and supports language planning and policy (LPP) development within the context of Nepal. Furthermore, it advocates for language inclusion in multilingual countries like Nepal.

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Conflict of Interest

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