

TOWARDS A RECONSTRUCTION OF THE PROTO WEST HIMALAYISH AGREEMENT SYSTEM

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1. INTRODUCTION¹

West Himalayish (WH) languages display a range of verb agreement systems. Patterns range from the subject agreement system to remnants of a person-based split-ergative agreement system and a no-agreement system. The purpose of this paper is to present a description of the verb agreement systems in six WH languages (Kinnauri, PaTani, Tinani, Gahri, Darmiya and Rangpa). This description, it is hoped, will show the regularity in the verb agreement systems in WH languages, suggesting the possibility that verb agreement could be reconstructed for Proto West Himalayish (PWH). It will also suggest that the no-agreement system and the subject (and the object) agreement system are recent developments in the languages which have them, and that the split-ergative system (similar to the one reconstructed for Proto Tibeto-Burman (DeLancey 1989)) is older, probably reconstructable for PWH.

2. BACKGROUND

2.1 WH LANGUAGES: THEIR GENETIC AND GEOGRAPHICAL SITUATION

The WH group of languages belongs to the Tibeto-Burman (TB) language family. There have been several attempts to classify the TB languages, for example Shafer (1955, 1966), Benedict (1972), Thurgood (1985), and Nishi (1990). Classification of TB languages is still uncertain. Table 1 gives the classification of the WH subgroup based on our current knowledge. The postulation of Tibeto-Kinnauri as a separate branch is based on Benedict (1972), and the classification of WH is from Nishi (1990). The parenthesised languages under West Himalayish are my additions (see Saxena 1992 for details).

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TABLE 1: CLASSIFICATION OF THE WEST HIMALAYISH SUBGROUP

Tibeto-Burman
Bodic
Tibeto-Kinnauri
Tibetan: Western, Central, Khams, Southern, Amdo, Monpa
West Himalayish:
(a) Kinnauri-PaTani, (Tinani)
(b) Thebor-Gahri, Rangpa, Chaudangsi, (Darmiya)

WH languages considered in this paper are PaTani, Tinani, Gahri, Darmiya, Rangpa and standard Kinnauri (referred to here simply as Kinnauri). Kinnauri, PaTani, Tinani, and Gahri are spoken in Himachal Pradesh in India, and Darmiya and Rangpa are spoken in Uttar Pradesh in India.

2.2 DATA

While there is a number of individual Bodic languages for which documentation is lacking, the WH subbranch remains the most seriously underdocumented genetic unit within Bodic.

The available materials on Kinnauri are Bailey (1909), Joshi and Rose (1909), Neethivanan (1971), and D.D. Sharma (1988). Of the remaining languages of this group, we have only Konow (1909), Francke (1909), Zoller (1983), S.R. Sharma (1987), and D.D. Sharma (1989a,b). They are good attempts to describe some WH languages. However, with the exception of Zoller (1983), they miss some very important phonological and grammatical facts, and lack the kind of detailed information needed to do comparative and historical work.

For the present study, descriptions of Kinnauri and PaTani are based on the data which I collected during a fieldtrip to India in 1989-90. The description of Rangpa is from Zoller (1983). Descriptions of Tinani and Darmiya are based on the data provided in Sharma (1989a,b). And the description of Gahri is based on the data given in Sharma (1989a) and Francke (1909). The interpretation of the data from Sharma (1989a,b) and Francke (1909) is mine, except where mentioned. The morpheme and word boundaries in the examples below describe the analysis presented here. In some cases I have revised the free translations. The original transcription of the data is, however, retained.²

2.3 LITERATURE SURVEY

There has been some discussion concerning the development of verb agreement in TB (Konow 1909, Maspero 1947, Egerod 1973, Bauman 1975, Caughley 1982, DeLancey 1989). Konow (1909), Maspero (1947), Egerod (1973) and Caugley (1982) suggest that verb agreement in TB languages is a secondary development, whereas Bauman (1975) and DeLancey (1989) argue in favour of reconstructing verb agreement for PTB.

² The following is an exception. Sharma (1989a,b) uses two symbols each to represent velar nasal, and palato-alveolar voiceless affricate. For the sake of clarity, I will use the symbol η for velar nasal, and tʃ for palato-alveolar voiceless affricate.

Konow (1909) claimed that verb agreement in TB is due to the influence of the Munda languages. TB and Munda languages show some resemblances in their verb agreement systems.

Maspero (1947) and Egerod (1973) rejected the Munda hypothesis, and argued that verb agreement in TB is due to the Indic influence.

In the same vein, Caughley (1982) suggested that Tibeto-Burman languages with verb agreement systems have developed these "through innovation or areal influence". He based his suggestion on the observation that TB languages display a wide range of verb agreement patterns.

Bauman (1975) and DeLancey (1989), on the other hand, argue in favour of reconstructing verb agreement for PTB. To quote DeLancey (1989:317),

There is in fact one paradigm, definable both by morphological form and paradigmatic structure, which is attested in at least one representative of almost every branch of the family, and that this paradigm, at least, must therefore be reconstructed for their common ancestor, PTB.

DeLancey (1989:316) reconstructed a person-based split-ergative agreement system for PTB: "...in which agreement in a transitive clause is associated with person rather than function, so that the verb agrees with 1 or 2p. subjects or objects". Table 2 presents the PTB verb agreement schema reconstructed by DeLancey. It illustrates only the agreement suffixes. The agreement markers are listed in this table, depending on the persons of the subject and the object. The horizontal lines indicate the person of the object, and the vertical lines indicate the person of the subject.

TABLE 2: PROTO TIBETO-BURMAN VERB AGREEMENT SCHEMA

SUBJECT	OBJECT		
	1	2	3
1		-n	-ŋ
2	-ŋ		-n
3	-ŋ	-n	-u

2.4 ORGANISATION OF THE PAPER

The purpose of this paper, as mentioned above, is to present data which suggest that verb agreement could be reconstructed for PWH. Data from Gahri, Darmiya and Kinnauri indicate that the person-based split-ergative agreement system is older than other prevalent agreement systems in WH languages, and could perhaps be reconstructed for PWH.

The organisation of the paper is as follows. Section 3 presents a typology of the finite verb morphology in WH, concentrating on agreement morphology. Section 4 presents a preliminary schema of the PWH verb agreement system. In this section, first, PWH verb agreement schema for intransitive verbs is presented. Next, for transitive verbs, data are

presented which suggest the antiquity of the person-based split-ergative system. And, finally, development of the subject agreement markers in WH will be considered.

While describing the finite verb morphology in these languages, the terms 'subject', 'object', 'split-ergative agreement system', 'subject agreement system', 'no-agreement system' and 'auxiliary' will be used. The term 'subject' refers to the only core argument of intransitive verb, and the agentive argument of a transitive verb. The term 'object' refers to the patient argument of a transitive verb. The term 'split-ergative agreement system' refers to the person-based split-ergative agreement system, where (DeLancey 1989:318) "the agreement is sometimes with object, i.e. in an ergative pattern and sometimes with subject, with the choice determined by the person of the two arguments". In the 'subject agreement system' on the other hand, the agreement is with the subject of the clause, regardless of the person of the two arguments. 'No-agreement system' indicates that there is no agreement morphology on the verb. And, the term 'auxiliary' is used here to refer to copulas when they occur in non-copula constructions, and to a set of morphemes which occurs at the end in non-copula constructions in some WH languages. Morphemes belonging to the latter group have the status of independent morphemes, but they do not function as verbs in these languages.

3. TYPOLOGY OF THE FINITE VERB MORPHOLOGY IN WH

WH languages are clause-chaining languages, where the verb of the final clause has tense, aspect and agreement morphology. In this section I will present a brief description of the finite verb morphology in Kinnauri, PaTani, Tinani, Darmiya, Gahri and Rangpa, concentrating on their agreement morphology. Since in many TB languages the agreement morphology is a reanalysis of the pronominals used in those languages, a table describing the pronominals of that language will follow the table showing the agreement morphology.

3.1 KINNAURI

A final verb in Kinnauri consists of a verb stem, a tense marker and a subject agreement marker. In some cases markers of aspect, object agreement and honorificity are also suffixed to the verb. The final verb in Kinnauri has the structure

V-(OBJ)-TNS-SUB or V-(OBJ)-ASP AUX-TNS-SUB.³

Tables 3 and 4 describe the Kinnauri subject agreement markers and the pronominal paradigm, respectively. A blank in a slot in tables indicates that there is no overt agreement marker in the language for that category, and ---- indicates that the form is not available.

The subject agreement markers are the same in copula and non-copula constructions. There is, however, some variation among Kinnauri speakers concerning the third person singular non-honorific subject agreement marker in non-copula constructions. None of my Kinnauri informants, except one, use overt agreement marker for third person non-honorific

³ The descriptions of the abbreviations used in this study are as follows. ACC = accusative, AGR = agreement, ASP = aspect, AUX = auxiliary, COP = copula, DAT = dative, DEF = definite, DU = dual, ERG = ergative, EXC = exclusive, GEN = genitive, HON = honorific, IMPF = imperfective, INC = inclusive, INST = instrumental, LOC = locative, NOM = nominaliser, OBJ = object agreement, ORD = ordinary (-honorific), PERF = perfective, PL = plural, PROG = progressive, PST = past, SG = singular, SUB = subject agreement, TNS = tense, and V = verb.

singular subject agreement marker. But in one informant's speech⁴, there is an alternation between Ø and *-t/d*, for example *khyā*, *khyā-d* '(he/she) saw', and *dza*, *dza-d* '(he/she) ate'. Such an alternation is restricted to a few verbs in the past tense, even in this informant's speech.

TABLE 3: KINNAURI SUBJECT AGREEMENT MARKERS

Person	Singular	Dual	Plural
1	- <i>k</i>	- <i>č</i>	- <i>me</i>
2	- <i>n</i>	- <i>n</i>	- <i>n(o)</i>
2 (HON)	- <i>ñ</i>	- <i>č</i>	- <i>č</i>
3	(- <i>d</i>)		
3 (HON)	- <i>š</i>	- <i>š</i>	- <i>š</i>

TABLE 4: KINNAURI PRONOMINAL PARADIGM

Person	Singular	Dual	Plural
1	<i>gə</i>	<i>niši</i> (EXC) <i>kišaŋ</i> (INC)	<i>kišaŋ</i>
2	<i>kə</i>	<i>kəniš</i>	<i>kano</i>
2 (HON)	<i>ki</i>	<i>kiši</i>	<i>kino</i>
3	<i>do</i> / <i>hodo</i>	----	<i>dogo</i> / <i>hodogo</i>
3 (HON)	<i>honogo</i>	----	<i>honogo</i>

Kinnauri marks object agreement on the verb, if the object is a first or a second person pronoun. The object agreement marker is *-č* (except for the verb 'give', see below for details). It is suffixed to the main verb. It occurs in all tenses and aspects. Clauses involving object agreement can have any person as their subject. Examples (1) and (2) illustrate the object agreement marker. Example (3) shows that the object agreement marker does not occur with third person objects.

- (1) *Ram-əs əŋ-u taŋ-č-e-š.*
 Ram-ERG self-ACC see-OBJ-PST-3HON
 Ram saw me.
- (2) *Gə ki-nu taŋ-č-o du-k.*
 I you.HON-ACC see-OBJ-PROG be-1SG
 I am watching you.

⁴ This informant (Arjun Negi) is from the Kalpa region in Kinnaur. According to my Kinnauri informants, *-t/d* is a peculiarity of the Kinnauri spoken in the Kalpa region.

- (3) *Ram-əs tshəʔshats-(u) taŋ-e-ʃ.*
 Ram-ERG girl-ACC see-PST-3HON
 Ram saw the girl.

The verb 'give' in Kinnauri has two forms, *ker* and *ran*. Their occurrence depends on the person affected. The verb form *ker* 'give' occurs with first and second persons, and the verb form *ran* 'give' occurs with third person arguments. In such cases the object agreement marker -č does not occur.

- (4) *Arjun-əs goldi-pəŋ kitab ran-o-ʃ.*
 Arjun-ERG Goldi-DAT book give-PST-3HON
 Arjun gave a book to Goldi.
- (5) *əma-s əŋ-u za-mu ker-o-ʃ.*
 mother-ERG self-DAT eat-NOM give.OBJ-PST-3HON
 Mother gave me food to eat.

3.2 PATANI⁵

A final verb in PaTani involves a verb stem, a tense marker, a subject agreement marker, and, optionally, an aspect marker.

Tables 5 and 6 describe the PaTani subject agreement markers and the pronominal paradigm, respectively. As Table 5 shows, there are two allomorphs of each of the agreement markers. These allomorphs are in free variation.⁶

TABLE 5: PATANI SUBJECT AGREEMENT MARKERS

Person	Singular	Dual	Plural
1	-g(à)	-š(î)	-ñ(î)
2 (+/- HON)	-n(à)	-š(î)	-ñ(î)
3 (+/-HON)		-k(û)	-r(è)

⁵ The first syllable of a stem in PaTani has phonemic accent (high or low), and the accent on the subsequent syllables is predictable: if the first syllable has high tone, the following syllable will have a slightly less high tone, and if the first syllable has low tone, the following syllable will have a slightly higher tone. Suffixes in PaTani usually have low tone when they occur in the word-final position. In nonfinal positions they have the same tonal pattern as non-initial syllable in a stem. For further details, see Saxena (1991).

⁶ It is possible that these agreement markers were originally clitics, and are now on their way to becoming suffixes. This may account for the variation.

TABLE 6: PATANI PRONOMINAL PARADIGM

Person	Singular	Dual	Plural
1	<i>gè</i>	<i>nè-kù</i> (EXC) <i>héŋ-gù</i> (INC)	<i>nè-rè</i> (EXC) <i>hénə-rè</i> (INC)
2 (-HON)	<i>kà</i>	<i>kè-kù</i>	<i>kè-rè</i>
2 (HON)	<i>kè-nà</i>	<i>kèŋ-gù</i>	<i>kènə-rè</i> <i>kèn-dè</i>
3 (+/-HON)	<i>dù</i>	<i>dò-kù</i>	<i>dò-rè</i>

Unlike Kinnauri, PaTani does not mark object agreement.

- (6) *Ràm-è gi-bì táŋ-à thù.*
 Ram-ERG I-ACC see-PERF AUX.3SG
 Ram saw me.
- (7) *Ràm-è kátu-bì táŋ-à thù.*
 Ram-ERG child-ACC see-PERF AUX.3SG
 Ram saw the child.

3.3 TINANI

A final verb in Tinani involves a verb stem, a tense marker, a subject agreement marker, and optionally an aspect marker. The copula construction has the structure COP-TNS-SUB, and the non-copula construction has the structure V-ASP AUX-SUB or V-TNS-SUB.

The subject agreement markers are regularly suffixed to the verb (except when the tense marker is *-min*; see below for details). Tables 7 and 8 describe the Tinani subject agreement markers and the pronominal paradigm, respectively. The pronominal paradigm is from Sharma (1989a:145-146). As in PaTani, in Tinani, each of the agreement markers has two allomorphs.

TABLE 7: TINANI SUBJECT AGREEMENT MARKERS

Person	Singular	Dual	Plural
1	<i>-k / -g(a)</i>	<i>-ṣ(i)</i>	<i>-ñ(i)</i>
2	<i>-n(a)</i>	<i>-č(i)</i>	<i>-č(i)</i>
3		<i>-k(u)</i>	<i>-r(e)</i>

TABLE 8: TINANI PRONOMINAL PARADIGM

Person	Singular	Dual	Plural
1	<i>gye</i>	<i>iša</i> (EXC) <i>ñiši</i> (INC)	<i>ena</i> (EXC) <i>ñena</i> (INC)
2 (ORD)	<i>kə</i>	<i>kəncə</i>	----
2 (HON)	<i>kenə</i>	<i>kenci</i>	<i>kena</i>
3 (+/-HON)	<i>du/do</i>	<i>do-ku</i>	<i>do-re</i>

The suffix *-min/men* in WH languages functions as a nominaliser. Examples of *-min* as a nominaliser follow. (The examples are the same in Kinnauri, PaTani and Tinani).

- (8) *za eat : za-min food/eating*
tuŋ drink : tuŋ-min drinking

An important characteristic of the Tinani finite verb system is the use of the nominaliser *-min* as a tense marker. It occurs in copula as well as in non-copula constructions. In such constructions it is not followed by a copula. According to Sharma (1989a), it has a past tense interpretation.

- (9) *Gye ica seu za-min.*⁷
 I one apple eat-NOM/TNS
 I ate an apple.

The suffix *-min* as a tense marker in Tinani occurs with all persons and numbers, but unlike other tense markers, it does not take agreement markers.

- (10) *Gye ri-riŋ ica khoro hə-min.*
 I sister-DAT one cap take-NOM/TNS
 I brought a cap for (my) sister.
- (11) *Kə khyəŋ i-min?*
 you where go-NOM/TNS
 Where had you gone?
- (12) *Do-i gye-riŋ bəgət rə-min.*
 he-ERG I-DAT food give-NOM/TNS
 He gave me food.
- (13) *Do-re eki ə-min.*
 he-PL yesterday come-NOM/TNS
 They came here yesterday.

3.4 DARMİYA

A final verb in Darmiya involves a verb stem and a tense marker. It optionally takes an aspect marker. The subject agreement markers occur in certain restricted environments.

⁷ Sharma (1989a,b) does not provide interlinear glossing. The glosses, provided here, are my additions.

The finite verb system in Darmiya is different from the systems found in Kinnauri, PaTani and Tinani in a number of ways. First, unlike these languages, Darmiya makes a two-way number distinction on nominals as well as on verbs. Second, Darmiya shows only traces of the subject agreement system. The agreement marker occurs with first person plural and second person (singular and plural) subjects. In the copula construction the agreement morphology occurs only in the past tense, but in the non-copula construction it occurs in all tenses. In the past tense the agreement marker is *-n*, and in the present and future tenses the agreement markers are *-n* and *-ni*. While *-n* occurs with first person plural and second person singular subjects, *-ni* occurs with second person plural subjects. Further, the agreement marker precedes the past tense marker, but follows the tense marker in present and future tenses. The verb paradigm, given below, is illustrative (*ga* 'do').

(14)		1SG	2SG	3SG
	Present	<i>ga-di</i>	<i>ga-də-<u>n</u></i>	<i>ga-da</i>
	Future	<i>ga-ŋdi</i>	<i>ga-ŋdə-<u>n</u></i>	<i>ga-ŋda</i>
	Past	<i>ga-su</i>	<i>ga-<u>n</u>-su</i>	<i>ga-su</i>

The agreement markers are regularly suffixed to the verb in such constructions, except when the verb ends in a nasal. In that case there is no agreement marker (see example (17)).

- (15) *Ge-su dilli khərju ji daŋsu khə rhe-n-su?*
 you-ERG Delhi from I to what bring-SUB-PST
 What have you brought for me from Delhi?

- (16) *Niŋ əphi=lən=əphina ga-ŋdā-n*
 we ourselves do-FUT-SUB
 We will do the work by ourselves.

- (17) *Ge-su ge udi taŋ-su?*
 you-ERG where clothes put-PST
 Where have you put the clothes?

Tables 9 and 10 describe the Darmiya subject agreement system and the pronominal paradigm, respectively. The pronominal paradigm is from Sharma (1989b:56-57).

TABLE 9: DARMIYA SUBJECT AGREEMENT SYSTEM

	1PL, 2SG, 2PL	1PL, 2SG, 2PL
Copula	V- <i>n</i> -TNS (past tense)	
Non-copula (transitive)		V-TNS- <i>n/ni</i> (present, future) V- <i>n</i> -TNS (past tense)

TABLE 10: DARMIYA PRONOMINAL PARADIGM

Person	Singular	Plural
1	<i>ji</i>	<i>niŋ</i>
2	<i>ge / gæe</i>	<i>gəni</i>
3	<i>o / u</i>	<i>usi</i>

3.5 GAHRI

The final verb system in Gahri is interesting for a number of reasons. First, it shows traces of three cycles of agreement morphology. These are the (1) split-ergative agreement system, (2) subject agreement system, and (3) no-agreement system. Second, a three-way number distinction is made on nominals, but a two-way number distinction is made on verbs in most cases. Third, the nominaliser *-men* functions as a tense marker in Gahri too, but unlike Tinani, in the Gahri data provided in Francke (1909), it takes subject agreement markers.

The suffix *-min/-men* in Gahri, as in other WH languages, functions as a nominaliser (example (18)). As in Tinani, in Gahri, it functions as a tense marker with all persons (example (19)).

- (18) *za* : *za-men*
 eat *eat-NOM*
 eat *eating/food*

- (19) *Gi-zi khai khyu-ti thaŋ-men.*
 I-ERG black dog-DEF see-NOM/TNS -
 I saw a black dog.

There is one major difference between the copula paradigms given in Francke (1909) and Sharma (1989a). Unlike Francke's paradigms, Sharma's paradigms almost completely lack agreement markers. For example, in Sharma (1989a:240) the agreement marker does not follow the tense marker *-men*.

- (20) *Gi-zi lig-men.*
 I-ERG do-NOM/TNS
 I did (it).

But, in the data provided in Francke (1909) *-men* takes the subject agreement markers.

- (21) *Lig-men-gya.*
 do-PST-1SG
 (I) did (it).

Further, in Sharma (1989a) the present tense copula paradigm of *yen/hen* has one invariant form *hen*, for all persons and numbers (see Table 11). Similarly, the copula *ni* in the past tense is shown as having one invariant form *ni-n-za* for all singular subjects, which is not the case in Francke (1909). For the purpose of comparison, the copula paradigms from Sharma (1989a) and Francke (1909) are given below. Tables 11 to 14 describe the copula paradigms provided in Sharma (1989a).

TABLE 11: *Hen* (PRESENT TENSE)

Person	Singular	Plural
1	<i>hen</i>	<i>hen</i>
2	<i>hen</i>	<i>hen</i>
3	<i>hen</i>	<i>hen</i>

TABLE 12: *Ni/go* (PRESENT TENSE)

Person	Singular	Plural
1	<i>na</i>	<i>goig</i>
2	<i>ni</i>	<i>gwag</i>
3	<i>ni</i>	<i>gwag</i>

TABLE 13: *Ni/go* (PAST TENSE)

Person	Singular	Plural
1	<i>ni-n-za</i>	<i>go-i-ča</i>
2	<i>ni-n-za</i>	<i>gwa-n-ča</i>
3	<i>ni-n-za</i>	<i>gwa-n-ča</i>

TABLE 14: *Kya/hen* (FUTURE TENSE)

Person	Singular	Dual	Plural
1	<i>kya-ni / hen-ge-ni</i>	<i>kya-kheg</i>	<i>kya-kheg / heŋ-kheg</i>
2	<i>kya-ni / hen-ge-ni</i>	<i>khag</i>	<i>kya-khag / heŋ-khyag</i>
3	<i>kya-ni / hen-ge-ni</i>	<i>khag</i>	<i>kya-khag / heŋ-khyag</i>

Francke's copula paradigms are given in Tables 15 to 18.

TABLE 15: *Yen* (PRESENT TENSE)

Person	Singular	Dual and Plural
1	<i>yen-gya</i>	<i>yen-ni</i>
2	<i>yen-na</i>	<i>yen-ni</i>
3	<i>yen</i>	<i>yen</i>

TABLE 16: *Ni/goag* (PRESENT TENSE)

Person	Singular	Dual and Plural
1	<i>ni-a</i>	<i>goa-i-(g)</i>
2	<i>ni-na</i>	<i>goag-ni</i>
3	<i>ni</i>	<i>goa(g)</i>

TABLE 17: *Ni/goag* (PAST TENSE)

Person	Singular	Dual and Plural
1	<i>ni-za</i>	<i>goa-i-thsa</i>
2	<i>ni-za-na</i> <i>ni-n-za-na</i>	<i>goa-n-thsa-ni</i>
3	<i>ni-za, ni-n-za</i>	<i>goa-n-thsa</i>

According to Francke (1909), *ded* 'be' occurs in the "incomplete present tense".

TABLE 18: *Ded* (PRESENT TENSE)

Person	Singular	Plural
1		
2	<i>de-na</i>	<i>ded-ni</i>
3	<i>de</i>	<i>de(d)</i>

Based on the data provided in Sharma (1989a) and Francke (1909), the possible finite verb endings in the past tense non-copula constructions in Gahri are given in Table 19. These inflectional markers are suffixed to the verb. The verb endings are listed in the table, depending on the persons of the subject and the object. The horizontal lines indicate the person of the object, and the vertical lines indicate the person of the subject. For example,

*-ki-za*⁸ in the second column indicates that it occurs when the subject is a first person pronoun and the object is a second person pronoun. And *-ku-za* in the third row indicates that it occurs with third person subject and first person object arguments.

TABLE 19: GAHRI NON-COPULA VERB INFLECTIONAL ENDINGS (PAST TENSE)

SUBJECT	OBJECT		
	1	2	3
1		<i>-ki-za</i>	<i>-d</i> <i>-ki-za</i> <i>-men-(gya)</i> <i>-i tha-i-(g)</i> <i>-ki ta (sa)</i>
2	<i>-za</i>		<i>-za</i> <i>-ta (na)</i> <i>-taḍ (ni)</i> <i>-(n)-za-na</i> <i>-men-na</i> <i>-(n)-ča-ni</i> <i>-men-ni</i>
3	<i>-(ku)-za</i>	<i>-za</i>	<i>-ta</i> <i>-men</i> <i>-(n)-za</i>

Among the various verb endings, *-ča*, *-men*, *-d* and *-za* function as the past tense markers. As seen earlier, *-ča* and *-za* function as the past tense markers in the copula constructions too. *Ta* and *tha* are “versatile” verbs (Matisoff 1969). Examples of *ta* as a lexical verb and as an auxiliary follow.

- (22) *Gi-i iṣring ti ta.*
I-GEN sister one have
I have a sister.

- (23) *Gi ingi-i lən ingi-zi lik-a ta.*
I self-GEN work self-INST make-? AUX
I myself do my work.

As Table 19 shows, two agreement markers can be affixed to one verb in Gahri (for example with second person subject and third person object-*n* and *-na/ni* in the final verb structure *V-n-TNS-na/ni*), which is not the case in any other WH language that we have examined so far.

Further, Gahri displays signs of at least three verb agreement cycles: (1) the split-ergative agreement system, (2) the subject agreement system, and (3) the no-agreement system. The split-ergative system is represented here by *-ki* and *-ku*. The subject agreement system is represented here by *-gya* and *-g* (first person) and *-na*, *-ni* (second person). Of the two

⁸ In Francke (1909) *-i* is an allomorph of *-ki*.

second person markers, *-na* occurs with second person singular subjects, and *-ni* occurs with second person plural subjects. As seen earlier, they also occur in copula constructions. Verbs involving *-men* in Sharma’s data display the no-agreement system. Since the alternation of the various agreement markers is found in almost all cases, their choice is not a syntactic decision.

Table 20 provides the Gahri pronominal paradigm (Sharma 1989a:221).

TABLE 20: GAHRI PRONOMINAL PARADIGM

Person	Singular	Dual	Plural
1	<i>gi</i>	<i>hiŋ</i> (EXC) <i>eraŋ</i> (INC)	<i>hiŋ-ži</i> (EXC) <i>eraŋ-ži</i> (INC)
2 (ORD)	<i>hən</i>	<i>hən</i> (INC) <i>nispi</i> (INC)	<i>hən-ži</i> (INC)
2 (HON)	<i>ini</i>		
3	<i>təl</i>	<i>təl</i> (EXC) <i>nispi</i> (EXC)	<i>təl-ži</i> (EXC)

3.6 RANGPA

Rangpa has a two-way number distinction on nominals as well as on verbs. The subject agreement marker is regularly suffixed to the verb.

The WH languages which we have considered so far have *-k/ga* as the first person singular marker. Rangpa is unique in this respect. It has *-ŋ* as the first person singular agreement marker in the “general present tense” (Zoller 1983). The agreement markers in the various tenses are given in Tables 21 to 24. In the past and future tenses the third person subject agreement also involves change in the stem final vowel.

TABLE 21: RANGPA SUBJECT AGREEMENT MARKERS (DEFINITE PRESENT)

Person	Singular	Plural
1	<i>-ki</i>	<i>-ni</i>
2	<i>-n(i)</i>	<i>-ni</i>
3	<i>-ni</i>	<i>-ni</i>

TABLE 22: RANGPA SUBJECT AGREEMENT MARKERS (GENERAL PRESENT)

Person	Singular	Plural
1	<i>-ŋ</i>	<i>-ni</i>
2	<i>-n</i>	<i>-ni</i>
3	<i>-n</i>	<i>-ni</i>

TABLE 23: RANGPA SUBJECT AGREEMENT MARKERS (PAST TENSE)

Person	Singular	Plural
1	<i>-ki</i>	<i>-n</i>
2	<i>-n</i>	<i>-n</i>
3	<i>(-n)</i>	<i>(-n)</i>

TABLE 23: RANGPA SUBJECT AGREEMENT MARKERS (FUTURE TENSE)

Person	Singular	Plural
1		<i>-n</i>
2	<i>-n</i>	<i>-n</i>
3		<i>-n</i>

4. PRELIMINARY SCHEMA OF PWH VERB AGREEMENT SYSTEM

4.1 PWH VERB AGREEMENT SCHEMA (INTRANSITIVE)

The above description shows that verb agreement occurs regularly in WH languages.

Kinnauri, PaTani, Tinani, and Rangpa have the same set of agreement markers in the copula constructions, and in the non-copula constructions involving transitive and intransitive verbs. We do not have sufficient data of Gahri and Darmiya intransitive verbs to say whether or not the agreement markers in the non-copula constructions involving intransitive verbs are the same as in the copula construction. Table 25 summarises the WH agreement morphology in copula constructions.

TABLE 25: WH SUBJECT AGREEMENT MARKERS

	Kin	PaT	Tin	Dar	Gah (pres)	Gah (past)	Rang
1SG	<i>-k</i>	<i>-g(à)</i>	<i>-k / -g(a)</i>		<i>-gy(a)</i>		<i>(-ki)/(-ŋ)</i>
1DU	<i>-č</i>	<i>-š(i)</i>	<i>-ş(i)</i>				
1PL	<i>-me</i>	<i>-ñ(i)</i>	<i>-ñ(i)</i>	<i>-n-TNS</i>	<i>-ni</i>		<i>-n(i)</i>
2SG	<i>-n</i>	<i>-n(à)</i>	<i>-n(a)</i>	<i>-n-TNS</i>	<i>-na</i>	<i>-(n)-TNS-na</i>	<i>-n(i)</i>
HON	<i>-ñ</i>						
2DU	<i>-n</i>	<i>-s(i)</i>	<i>-c(i)</i>				
HON	<i>-č</i>						
2PL	<i>-n(o)</i>	<i>-ñ(i)</i>	<i>-č(i)</i>	<i>-n-TNS</i>	<i>-ni</i>	<i>-n-TNS-ni</i>	<i>-n(i)</i>
HON	<i>-č</i>						

3SG HON	(-d) -š					(n)-TNS	(-n(i))
3DU HON	-š	-k(ù)	-k(u)				
3PL HON	-š	-r(è)	-r(e)			-n-TNS	(n(i))

In this table Kin, PaT, Tin, Dar, Gah and Rang refer to Kinnauri, PaTani, Tinani, Darmiya, Gahri and Rangpa, respectively. A blank in a slot indicates that there is no overt agreement marker in the language for that category. Kinnauri, PaTani, Tinani and Darmiya⁹ have one set of agreement markers for all tenses. Gahri has separate sets of agreement markers for the past and the present tenses.¹⁰ Rangpa is like Gahri to some extent. It has two first person singular markers *-ŋ* and *-ki*. The marker *-ŋ* occurs in the “general present tense”, and *-ki* occurs in the past and “definite present tense” (Zoller 1983).

The table shows that verb agreement occurs regularly in these languages, and that the agreement markers are also similar. Such regularities in the agreement systems suggest that verb agreement has not developed individually in these languages. In fact, the agreement markers and their patterns are similar to the agreement markers found in TB languages outside WH, and, in some cases, to the agreement markers reconstructed for PTB.

Benedict (1972) and Bauman (1975) have reconstructed **ŋa* and **naŋ* as the first and second person singular pronouns, respectively, for PTB. There are, however, some TB languages (such as Bahing, Vayu and Mishmi), which have a voiced velar stop for first person singular (for example, Bahing and Vayu *go*), and a voiceless velar stop for second person singular, instead of a nasal. WH languages belong to the latter group. Examples of WH first person singular pronouns starting with a voiced velar stop, are *gə* (Kinnauri), *gye* (PaTani, Tinani) and *gi* (Gahri), and an example of a voiceless velar stop for second person singular is *kə* in Kinnauri, PaTani and Tinani.

The second person singular agreement marker in all the WH languages considered here is *-n/na*, suggesting the possibility of reconstructing **-na* as the second person singular agreement marker for PWH.

Concerning the first person singular agreement marker, there are two markers that could each be potentially reconstructed for PWH: (1) *-k/ga*, which functions as first person singular agreement marker in all WH languages, and (2) *-ŋ*, the first person singular agreement marker in “general present tense” in Rangpa. DeLancey (1989) reconstructs **-ŋ* as the first person singular agreement marker for PTB. It is plausible that *-ŋ* in Rangpa is a cognate of the PTB agreement marker, though the majority rule argues in favour of reconstructing *-k/ga* as the first person singular marker. Cognacy of *-ŋ* with the PTB first person singular marker is taken here to suggest **-ŋ* as the PWH first person singular agreement marker, though *-ga* could equally well be reconstructed.

⁹ The agreement markers in the copula construction in Darmiya occur only in the past tense.

¹⁰ This description is based on Francke (1909).

Of the six WH languages considered here, Kinnauri, PaTani and Tinani make a three-way number distinction on nominal arguments as well as on verbs. Darmiya and Rangpa make a two-way number distinction – both on nominals and on verbs. Gahri, on the other hand, has a three-way number distinction on nominals, but mostly a two-way distinction on verbs.¹¹ The following pieces of evidence suggest reconstructing a three-way number distinction for PWH.

First, WH languages which make a three-way number distinction have cognate forms for first person singular, first person dual and first person plural agreement markers, suggesting their common origin (see Table 25). The first person singular has a *-k/ga*, the dual marker has an affricate (*-č-* or *-š-*), and first person plural has a nasal.

Second, voiceless affricate as a dual marker is also attested in TB languages outside WH. For example, *-chi* functions as first and second person dual markers in Vayu, and *tayhca* as the first person dual marker in Chepang. Lushai has *-ce* as the second person dual marker, and Thulung has *-ci* as the first and second person dual marker.

The frequent occurrence of *-č* as a dual marker suggests the possibility of reconstructing **-č* as the dual marker – at least for Proto Bodic. Bauman (1975:103) goes a step further, and states that

The dual marker can fairly easily be traced back to some sibilant plus high front vowel (*#shi*) [in PTB]. Such an element is present in all of the affix forms and some of the free pronoun forms.

Based on the observations made above, a preliminary schema of the PWH intransitive agreement morphology is given in Table 26.

TABLE 26: PWH AGREEMENT MORPHOLOGY (INTRANSITIVE)

Person	Singular	Dual	Plural
1	*-ŋ	*-č <i>i</i>	*-ñ <i>i</i>
2	*-na	*-č <i>i</i>	*-ñ <i>i</i>
3		*-č <i>i</i>	*-ñ <i>i</i>

WH languages which have a three-way number distinction, differ regarding their dual and plural markers in non-first persons (see Table 25). For example, PaTani has the same agreement marker for first and second persons, and maintains a three-way number distinction (*-š*i** for first or second person dual and *-ñ*i** for first or second person plural), but in Tinani and Kinnauri the distinction between dual and plural is lost in the second person (*-č*i** is second person dual and second person plural marker in Tinani, and *-č* is second person dual (honorific), second person plural (honorific) and first person dual marker in Kinnauri). It is suggested here that separate dual and plural markers for various persons, and the honorificity marker in Kinnauri, are secondary developments in these languages. The agreement markers, which are not cognates of the agreement markers reconstructed for WH, are cognates of the number and the honorific markers on nominals in these languages. For example, the third person honorific marker *-š* is also the honorific marker on nominals in Kinnauri. Similarly,

¹¹ This statement is true of the copula constructions in Gahri. It is not clear whether a two-way or a three-way number distinction is made in the noncopula constructions in Gahri.

the third person dual and third person plural agreement markers in PaTani and Tinani, *-ku* and *-re*, respectively, are also the third person dual and third person plural markers on nominals in PaTani. In Tinani, unlike PaTani, they occur as agreement markers, and not as number markers on nominal arguments. It is possible that Tinani has borrowed them as verbal affixes from PaTani.

Development of separate dual and plural markers in some WH languages could be an effort to avoid ambiguity. TB languages are zero anaphora languages, where verb agreements carry information concerning core arguments. The same-number markers for all persons were bound to create ambiguity in reference. The incorporation of person information in the verb agreement system avoided this ambiguity.

4.2 PWH VERB AGREEMENT SCHEMA (TRANSITIVE)

All the WH languages considered in this study have the subject agreement system, either as the sole verb agreement system in the language, or as one possible agreement system. Beside the subject agreement markers, Gahri and Darmiya also have agreement markers which represent signs of the split-ergative system, and the no-agreement system. In this section I will present data which suggest that the split-ergative system is older, and could perhaps be reconstructed for PWH. Gahri, Darmiya and Kinnauri provide crucial data in this regard.

The description of the WH verb agreement morphology is presented in §3. Here I will present only the set of data which is essential to explicate the problem. I will begin with Gahri. Table 27 shows the distribution of the two agreement markers *-ki/ku* and *-n* in Gahri.

TABLE 27: GAHRI VERB AGREEMENT SCHEMA

SUBJECT	OBJECT		
	1	2	3
1		<i>-ki</i> -TNS	<i>-ki</i> -TNS
2			<i>-(n)</i> -TNS- <i>na</i> <i>-(n)</i> -TNS- <i>ni</i>
3	<i>-(ku)</i> -TNS		<i>-(n)</i> -TNS

The agreement markers *-ki/-ku* and *-n* occur in the past tense. The marker *-ki/-ku* occurs in first becoming second person, third person, and third becoming first person, and *-n* occurs with some non-first person subjects. With second person subjects, two agreement markers can be affixed to one verb (V-*n*-TNS-*na/ni*). The marker *-n* occurs with some non-first person subjects, and *-na* and *-ni* occur with second person singular and second person plural subjects, respectively. The distribution of *-ki/-ku* and *-n* differs from the subject agreement markers (*-na* and *-ni*, here) in terms of the position class in which they occur. The former set of agreement markers precedes the tense marker, whereas the subject agreement markers follow the tense marker. The *-ki* and *-n* forms seem to represent the older paradigm, where *-ki* occurred with first becoming second person, third person and *-n* with second

becoming third person. In modern Gahri, *-n* has lost the split-ergative distribution, and it now occurs with non-first person subjects.

In Darmiya, the agreement marker *-n*, occurs with first person plural, second person singular and second person plural subjects in the copula and the non-copula constructions in the past tense, where it precedes the tense marker. It seems to be a cognate of the agreement marker *-n* in Gahri. Unlike the past tense, in the present and future tenses the agreement marker *-n* occurs with first person plural and second person plural subjects, and *-ni* occurs with second person plural subjects. The distribution and placement of *-ni* in Darmiya is the same as in Gahri. Table 28 shows the distribution of the verb agreement markers in Darmiya.

TABLE 28: DARMIYA VERB AGREEMENT SYSTEM

	1PL, 2SG, 2PL	1PL, 2SG, 2PL
Copula	V- <i>n</i> -TNS (past tense)	
Noncopula (transitive)		V-TNS- <i>n/ni</i> (present, future) V- <i>n</i> -TNS (past tense)

The following inferences can be drawn from the Gahri and Darmiya data, presented here, concerning the PWH agreement system. First, the presence of two agreement markers on one verb in Gahri suggests that one of them could be a later development. Second, the ordering of the split-ergative markers and the subject agreement markers suggests the antiquity of the split-ergative markers. The split-ergative markers are affixed closer to the verb, and they are followed by the tense marker in most cases, whereas the subject agreement markers follow the tense marker. The subject agreement markers are also the final affixes. Third, the split-ergative markers and their distribution in Gahri and Darmiya are cognates of the forms and the agreement system reconstructed for PTB, suggesting the possibility that the split-ergative system could be reconstructed for PWH.

Reconstructing a split-ergative system for PWH not only accounts for the agreement markers, and their distribution in these languages, but also accounts for what may be considered an anomaly in the split-ergative system. As mentioned earlier, *-n* in Darmiya also occurs with first person plural arguments, which in a split-ergative system should have a first person agreement marker. DeLancey (1989:318) notes that "the second person forms are less consistent". Several languages, outside WH too, have *n*- form for the first person becoming the second person verb agreement marker (for example Lohorong Rai (Weidert 1985:918) and Limbu (Weidert and Subba 1985:59-61)). Reconstructing a split-ergative system for PWH will not only explain the regularities in the verb agreement system, but will also account for the "variable marking of particular 2p. forms" (DeLancey 1989:326) in Darmiya.

The object agreement marker *-č* in Kinnauri provides indirect evidence in favour of reconstructing the split-ergative agreement system for PWH. The occurrence of the object agreement marker in Kinnauri is restricted to the first and second persons only. This is especially significant for reconstructing a split-ergative agreement system. The positioning of the object agreement marker (V-OBJ-TNS-SUB, V-OBJ-ASP AUX-TNS-AUX) also shows

that this is not a recent development. It is plausible that the object agreement marker in Kinnauri was originally a first or second person marker which became a third person marker, and later got reanalysed as an object agreement marker as a consequence of the development of the subject agreement system (see below for details).

The above discussion suggests that the split-ergative system is the older system, and could perhaps be reconstructed for PWH. Table 29 presents a preliminary schema of the PWH verb agreement system. It represents the reconstructed consonants of the singular forms only.

TABLE 29: PWH VERB AGREEMENT SCHEMA (TRANSITIVE)

SUBJECT	OBJECT		
	1	2	3
1		*-k / *-n	*-k
2			*-n
3	*-k		

The split-ergative agreement markers in Gahri and Darmiya are cognates, but this is not the case with the Kinnauri object agreement marker (-č). The latter does not resemble the putative PWH agreement marker. There are at least two feasible explanations concerning the development of the modern form in Kinnauri. First, the form is a secondary development in Kinnauri. It is possible that the Kinnauri object marker underwent a change, before it got realigned as an object marker (see below for details). Second, -č is a cognate of the older agreement marker -k, which got realised as -č as a result of palatalisation, and the vowel was lost in the process. At this stage there is no way to prove or disprove either of these alternatives. Data from other dialects of Kinnauri will be decisive in this regard.

The questions that can now be raised are: assuming that PWH had a split-ergative system; how did the split-ergative markers become the non-final suffixes, and what accounts for the regularity with which subject agreement markers occur in the WH languages?

It is possible that the subject agreement system in WH is a consequence of the reanalysis of the older copulas as tense markers. The subject agreement markers, as mentioned earlier, are regularly suffixed to the copulas. Once the language started using copulas as tense markers, copulas (along with the subject agreement markers) started occurring at the end of a finite verb, giving rise to a combination of the split-ergative system and the subject agreement system. This development can schematically be shown as follows.

- Stage I V-SUB
- Stage II V-SUB COP-SUB
- Stage III V-SUB-TNS-SUB

Stages II and III are found in Kinnauri, and III is found also in Gahri and Darmiya. It is plausible that once this system got stabilised, the older split-ergative marker, in Kinnauri, realigned itself to the subject agreement system, whereas traces of the older split-ergative system are still found in Gahri and Darmiya.

Sunwari, a language belonging to the Kiranti group of the TB language family, provides evidence in favour of this suggestion. Genetti (1988) describes the Sunwari verb agreement system. It shows striking resemblance with the Gahri and Darmiya data presented above. In Sunwari, as in Gahri and Darmiya, two agreement markers can be affixed to one transitive verb. Such verbs have the structure V-TNS-AGR1-AGR2. Two separate sets of agreement markers occur in the position classes AGR1 and AGR2. The agreement markers which occur in the final position are the same (with minor differences) as the agreement markers with intransitive verbs. The distribution of AGR1 "is somewhat idiosyncratic without a clear synchronic organisational pattern" (Genetti 1988:81). Interestingly, the first person singular object marker in AGR1 position is *yi* in Sunwari.

It is not clear at this stage if the stage II (i.e. V-SUB COP-SUB) should be reconstructed for PWH, or if it is a later development. It is, however, obvious that this structure is not a recent development in WH. The consistent subject agreement system in WH, and the cognate morphology suggest early development of this structure in the history of WH. The fact that subject agreement is regularly found in WH languages, and not found in neighbouring TB languages such as Tod, a variety of Tibetan, suggests that even if the subject agreement system is a secondary development, it is not a complete innovation that each of these languages underwent independently. Seeds of the subject agreement system were present in PWH.

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