Chapter 2

The origin of comitative adverbs in Japhug

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The aim of this paper is threefold. First, it provides a description of the morphological and syntactic properties of comitative adverbs in Japhug and other Gyalrong languages, a class of adverbs derived from nouns by a combination of prefixation and reduplication. Second, it argues that they result from a two-step derivation, first from noun into proprietive denominal verb, then from that verb into a participial form. The resulting form is later reanalyzed as a single morphological derivation from the noun. Third, this paper contributes to the study of language contact within the Gyalrongic group by showing how one of the two processes for building comitative adverbs in Japhug is borrowed from the neighbouring Tshobdun language.

Introduction

This paper discusses the origin of comitative adverbs in Japhug and other Gyalrong languages. These adverbs, only attested in the core Gyalrong languages, are a relatively recent innovation in these languages, and provide an interesting case study to investigate the origin of comitative constructions in the world's languages.

The paper contains four sections. First, I provide background information on Japhug and the other Gyalrongic languages. Second, I describe the morphological expression of possession in Japhug nouns, which must be taken into consideration in all types of denominal derivations, including that of comitative adverbs. Third, I discuss the morphological and syntactic properties of comitative adverbs. Fourth, I propose a grammaticalization hypothesis to account for their origin, involving comparison with the closely related Tshobdun language, and show that

the pathway in question has not previously been proposed for comitative markers.

1 Japhug and Gyalrongic languages

Japhug (in Chinese Chapu 茶堡) is a Gyalrong language spoken in Mbarkham county, Rngaba prefecture, Sichuan, China. The present study is based on the Kamnyu dialect, whose location is indicated in Figure 1. In addition to Japhug, there are three other Gyalrong languages, Tshobdun (in Chinese Caodeng 草等, Sun 2003), Zbu (aka Showu, in Chinese Ribu 日部, see Sun 2004; Gong 2014) and Situ, the language with the greatest number of speakers and dialectal variation (四土, Lin 1993; Huáng & Sūn 2002; Prins 2011). The Gyalrong languages in turn belong to the Gyalrongic branch of Trans-Himalayan, which also includes Stau and Khroskyabs (see Sun 2000 and Lai 2015).

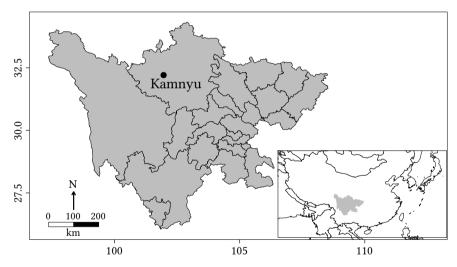


Figure 1: Location of Kamnyu village

The Gyalrong languages, unlike most other languages of the Trans-Himalayan family, are polysynthetic languages with a rich derivational and inflectional verbal morphology (Jacques 2012b; Sun 2014a) and direct-inverse indexation (De-Lancey 1981; Sun & Shidanluo 2002; Jacques 2010; Gong 2014), which are argued to be of proto-Trans-Himalayan origin (DeLancey 2010; Jacques 2012a). This morphology is typologically unusual in being mainly prefixing despite Gyalrong languages having strict verb-final word order (Jacques 2013).

2 Inalienably possessed nouns

Japhug nouns can be divided into inalienably possessed nouns (IPN) and non-inalienably possessed nouns (NIPN). IPNs differ from NIPNs in that they require the presence of one of the possessive prefixes (Table 1), while NIPNs can appear as their bare stem without any possessive prefix. The IPN / NIPN distinction is not completely predictable: although all body parts and kinship terms are IPNs, we also find nouns referring to (but not all) clothes (tuu-ŋga 'clothes', tuu-xtsa 'shoes', etc), some implements (tx-mkum 'pillow'), and abstract concepts (tuu-sum 'thought', tuu-zuuβ 'sleep', tuu-phu 'price', tuu-nŋa 'debt', tuu-khur 'official position', etc). Note that IPNs can refer to entities or properties that are not necessarily permanently and definitively associated with the possessor, as is the case with clothes and concepts like 'debt' or 'official position', but that are not freely removable at least during a period of time (the time of being awake in the case of 'clothes', the time of sleeping in the case of 'pillow', the period between contracting the debt and repaying it in the case of 'debt', etc).

When no definite possessor is present, IPNs take one of the indefinite possessive prefixes tr or tur. The citation form of IPNs is built by combining one of the indefinite prefixes with the noun stem (tr-lu 'milk', tur-nga 'clothes', tr-rpur 'uncle', tur-ci 'water'). The distribution of the prefixes tr-vs tur-u is lexically determined. When a specific possessor is present, the indefinite prefix is replaced by the appropriate possessive prefix (ur-lu 'her/its milk (from her nipple)', a-nga 'my clothes', nr-rpur 'your uncle', ur-ci 'its juice').

Although the generic possessive prefix *tut*– is homophonous with one of the indefinite possessive prefixes, the two are semantically distinct (compare *tr-se* INDEF.POSS-blood 'blood' with *tut-se* GENR.POSS-blood 'one's/people's blood').

It is possible to turn an IPN into a NIPN by prefixing a definite possessive prefix to the indefinite one, as in *w-ty-lu* 3SG.POSS-INDEF.POSS-milk 'his milk (to drink)', *w-tw-ci* 3SG.POSS-INDEF.POSS-water 'its water (of irrigated water, to a plant)'. NIPNs cannot take indefinite possessive prefixes. However, they are compatible with the human generic possessor prefix *tw-*, as in (1), where the nouns *kha* 'house' and *laxtcha* 'thing' are NIPNs.

¹A similar phenomenon is reported in Tshobdun (Sun 1998: 140)

Prefix	Person	
a-	1SG	
ny-	2SG	
uı–	3SG	
tçi-	1DU	
ndzi-	2DU	
ndzi–	3DU	
i-	1PL	
nuı-	2PL	
nuu-	3PL	
tui-, ty-	indefinite	
tur-	generic	

(1) wuma zo tur-kha cho tur-laxtcha ra
really EMPH GENR.POSS-house and GENR.POSS-thing PL
sur-nqhi.
CAUS-be.dirty:FACT
'(Flies) make one's house and one's things dirty.' (25 akWzgumba, 62)

3 Comitative derivation

In Japhug, adverbs meaning 'having X' or 'together with X' can be productively built from various types of nouns.² In this section, I first describe the morphological processes involved in the derivation from noun to adverb, and then provide an overview of the use of these adverbs in context.

3.1 Morphology

Comitative adverbs are formed by reduplicating the last syllable of the noun stem and prefixing either $k\acute{x}$ – or $k\imath \gamma uv$ –, as in examples such as $\chi c\imath lmuv$ 'glasses' \Rightarrow

²Comitative adverbs in Japhug have been briefly mentioned in a previous publication (Jacques 2008: 51), but this paper is the first detailed description of this derivation and its uses.

 $k\acute{x}$ - $\chi c\acute{x}lmuv$ -lmuv/ $k\acute{x}\gamma uv$ - $\chi c\acute{x}lmuv$ -lmuv 'together with glasses'.³ No semantic difference between the comitative adverbs in $k\acute{x}$ - and those in $k\ddot{x}\gamma uv$ - has been detected; both are fully productive and can be built from the same nouns.

When the base noun is an IPN, it is possible to build a comitative adverb with the indefinite possessor prefix or with the bare stem. For instance, from tx-rte 'hat' one can derive both kx-rtu-rte / kxyuv-rtuv-rte 'with his/her hat' and kx-rtuv-rte / kxyuv-tx-txv-

- (2) kyyur-rtuv~rte zo kha ш-ŋgш ly-tш-ye coміт-hat емрн house 3sg-inside pfv-2-come[II]'You came inside the house with your hat (on).' (You were expected to take it off before coming in)
- (3) *laxtcha kyyur-ty-rtur~rte zo ta-ndo* thing COMIT-INDEF.POSS-hat EMPH PFV:3→3'-take 'He took the things together with the hat.' (Not wearing it)

Cognates of the Japhug comitative adverbs have been reported in other Gyalrong languages, in particular Tshobdun ko- (Sun 1998: 107), and the comitative adverb derivation can thus be reconstructed back at least to proto-Gyalrong. However, given the dearth of data on languages other than Japhug (in particular in terms of text examples), little external data will be discussed in this paper. A full comparative assessment of the hypotheses laid out here will have to await the publication of fully-fledged grammatical descriptions of all Gyalrong languages.

Comitative adverbs, in any case, appear to be unattested outside of the core Gyalrong languages (even in Khroskyabs, their closest relative, see Lai 2013), and are probably one of the many common Gyalrong morphological innovations.

3.2 Syntactic uses

The comitative adverb can either follow (4) or precede (5, 6) the noun over which it has scope. Alternatively, a comitative adverb can occur without a corresponding overt noun (7). However, if the noun is overt, the comitative adverb is contiguous to the NP to which it belongs.

³Japhug χ*çvlmuy* 'glasses' is a loanword from Tibetan *çel.mig*; note that reduplication disregards morpheme boundaries (χ*çvl* 'glass' (Tibetan *çel*) is also attested in Japhug).

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The NP in question can either correspond to the P (4, 6), the S (5, 7) or even the A (8). This last option is not attested in the text corpus, but speakers have no trouble producing sentences of this type.

- (4) *ty-sno ký-juv~jaʁ nuu lu-ta-nuu* INDEF.POSS-saddle COMIT-hand DEM IPFV-put-PL '(Then), they put the saddle with its handles.'
- (5) pyykhui nui ui-ku nuınuı luılu tsa nui-fse. owl DEM 3SG.POSS-head DEM cat a.little sens-be.like *w-mtsiou* VYZU ma ký-rnuv~rna ludu 3SG.POSS-beak exist:SENS a.part.from COMIT-ear cat ш-tш-fse nui-syre ZO. 3SG.NMLZ:DEGREE-be.like SENS-be.extremely/be.funny EMPH 'The owl's head looks a little like that of a cat; apart from the fact that it has a beak, it looks very much like a cat with its ears.'
- (6) ký-thylwur-lwa ur-zrym ra kunny chứt-wy-yurt pjứt-wy-ji ri comit-earth 3sg.poss-root pl also ipfv-inv-bring ipfv-inv-plant but maka tu-loß mứtj-cha at.all ipfv-come.out neg:sens-can 'Even if one takes its root with earth (around it) and plants it, it cannot grow.'
- (7) ký-snur~sno zo ky-rŋgui comit-saddle emph pfv-lie.down '(The horse) slept with its saddle.' (elicited)
- (8) luulu ký-ryuv-ryit ra kur zo βzur to-ndza-nur. cat COMIT-offspring PL ERG EMPH mouse IFR-eat-PL 'The cat and its young ate the mouse.' (elicited)

Nouns incorporated into comitative adverbs lose their nominal status and cannot be determined by relative clauses (including attributive adjectives), numerals or demonstratives. In a sentence such as (9) for instance, the attributive participial relative [kuu~kuu-ŋxn] 'all the ones who are evil' does not determine kryuu-ŋkhur~ŋkhor 'with his subjects', a syntactic structure which would correspond to the translation 'with all his evil subjects'. Rather, it determines the head noun together with the comitative adverb, i.e. ryrlpu kryuu-ŋkhur~ŋkhor 'the king with his subjects', which implies the translation given below.

rʒɤlpu kxɣɯ-ŋkhw~ŋkhor [kw~kw-ŋxn] (9) 20 to-ndo tce. king comit-subjects TOTAL~NMLZ:S/A-be.bad EMPH IFR-take LNK tcendyre kui-myku niii sytcha kiii~kiii-sy-scit LNK NMLZ:S/A-be.before DEM place TOTAL~NMLZ:S/A-DEEXP-be.happy *zo* рш-пи ri kш-maqhu tçe, EMPH IFR-take.away sens-be LNK NMLZ:S/A-be.after LNK kui~kui-syy-mu io-tswm zo tce TOTAL~NMLZ:S/A-DEEXP-fear EMPH IFR-take.away LNK 'She took the king and his subjects, all the evil ones; in the beginning she took them to nice places, but later she took them to fearful places.' (slobdpon)

4 Grammaticalization pathway

In this section, I first present the proprietive denominal derivation in ayu— and the infinitival and participial prefix ku—. Then, I show that in fact comitative adverbs are synchronically formally ambiguous with the infinitive and the s/A-participle of proprietive denominal verbs in some contexts. Finally, I propose that comitative adverbs derive diachronically from the participial forms of proprietive denominal verbs, and were then extended to other contexts after reanalysis.

4.1 Denominal derivation

Japhug has a rich array of denominal prefixes (Jacques 2014b). One of these prefixes, *ayur*–, derives stative intransitive verbs from both inalienably possessed and non-inalienably possessed nouns. As illustrated by the examples in Table 2, verbs derived with the prefix have meanings such as 'having X', 'producing a lot of X' or 'having the same X' (with plural S). The noun stem is sometimes reduplicated, especially for the first of these meanings.

In some cases, the semantic relationship between the base noun and the derived verb is more metaphorical and not predictable. For instance, from the noun *tuu-jau* 'hand' one can derive either *ayuu-jau* 'having a lot of hands' (of a bug), while the non-reduplicated form *ayuu-jau* means 'who steals anything (that comes near his hand)'.

Base noun	Meaning	Denominal verb	Meaning
tur-yli tx-lu	excrement, manure milk	ауш-үlі ауш-lu	producing a lot of manure (of pigs) producing a lot of milk (of cows)
tui-mnas	eye	аүш-трав	having a lot of holes
tш-¢naβ ш-mdoк	snot colour	аүш-¢пш∼¢паβ aүш-mdoв	be slimy having the same colour
tui-suim	thought	аүш-ѕшт	get along well
smyn	medicine	аүш-sm	have a medical effect
tur-¢na	nose	аүш-ҫпш~ҫпа	having a keen sense of smell

Table 2: The denominal prefix ayuu-

4.2 S/A participle and infinitive

In Japhug, stative verbs (including the denominal verbs in ayuu– presented in the previous section) have two homophonous non-finite forms with a prefix kuu–, the s/A-participle (Jacques 2014b: 5) and the infinitive.⁴ The participle appears mainly in participial relatives (including all forms corresponding to attributive adjectives in European languages), as in example (10).

(10) tçheme ci kuı-puı~pe kuı-mpçuı~mpçır, girl a nmlz:s/a-emph~be.good nmlz:s/a-emph~be.beautiful nı-çıya kuı-xtçuı~xtçi zo a-nuı-tuı-ıβzu 2SG.POSS-tooth nmlz:s/a-emph~be.small emph irr-pfv-2-become smuılım prayer 'May you become a nice and beautiful girl with short teeth.' (Slobdpon, 261)

The infinitive is used (by some speakers) as the citation form of verbs, and appears in some types of complement clauses and manner subordinate clauses (Jacques 2014a: 271–272; 321–325), as in (11) where *kuu-puu~pe*, meaning here 'nicely', is a manner subordinate clause comprising a single verb.

⁴The morphological evidence for distinguishing between participle and infinitive is clearer with dynamic verbs, whose infinitive in kv- differs from the s/A-participle. Cognates of the participle and the infinitive kw- are found in all Gyalrong languages, with only minor differences (see in particular Sun 2014b).

(11) ¢rr t¢e ʁzrmi ni kw-pw-pe zo
evening lnk husband.and.wife du inf:stat-emph~good emph
¢-ko-nw-rŋgw-ndzi
TRANSL-IFR-AUTO-lie.down-du

'In the evening, the husband and the wife laid down in bed nicely.'

4.3 Potential ambiguity

Due to the sandhi rule according to which *kut*– combined with *a*-initial verbs yields /*ky*–/ in Japhug (Jacques 2004), s/A-participles or infinitive forms of denominal verbs in *ayut*– are formally homophonous with comitative adverbs in *kyyut*–. For example, the form *kyyutturtau* 'together with its branches' from *ty-rtau* 'branch' is identical to the participle *kyyutturtau* 'the one which has many branches' found in example (12).

(12) si kui-yuurtuurtau ki kui-fse
tree nmlz:s/A-have.many.branches this nmlz:s/A-be.this.way
nui-car-nui
IPFV-search-PL
'They are searching for a tree which has a lot of branches like this.' (NOT:

'a tree with its branches' in this particular context)

Examples (13) and (14) present a minimal pair contrasting the comitative adverb 'with his/her children' on the one hand and the participle 'having many children' on the other hand (both derived from the possessed noun *ty-rjit* 'child').

- (13) içqha tçʰeme nui kui-vyuirjuirjit ci
 the.aforementioned woman DEM NMLZ:S/A-have.many.children INDEF
 pui-nju
 PST.IPFV-be
 'This woman had a lot of children.'
- (14) kyyur-rjur zo jo-nur-çe-nur comit-children emph ifr-vert-go-pl 'She/They went back with their children.'

4.4 Reanalysis

The formal ambiguity between the comitative adverbs on the one hand, and the participles and infinitives of *ayuu* – denominal verbs on the other hand, together

with the semantic proximity of the two forms, raise the question of their potential historical relatedness.

An obvious possibility is that comitative adverbs originate from the reanalysis of the s/A-participles of reduplicated *ayu*r– denominal verbs. Ambiguous sentences like (12) actually constitute the pivot constructions which allow reanalysis in contexts where both proprietive ('having X') and comitative ('with X') interpretations were possible.

(15) si kryuntuntas nun-çar-nun tree nmlz:s/A-have.many.branches//comit-branch ipfv-search-pl
 'They are searching for a tree which has a lot of branches' ⇒ 'They are searching for a tree and/with its branches'

Starting from such ambiguous sentences, the comitative adverb was extended to nouns without a corresponding proprietive denominal verb. In addition, comitative adverbs incorporating the indefinite possessive prefix were created (such as *kyyur-ty-rtur~rte* 'with his hat'). Forms of this type are clearly distinct from infinitives or participles of denominal verbs, as indefinite possessive prefixes are always deleted during denominal derivation.

I therefore propose the pathway (16) to account for comitative adverbs in *kyyuu*– in Japhug:

(16) NOUN + PROPERTY DENOMINAL DERIVATION + infinitive/participle \rightarrow comitative

Among the possible origins of comitative markers, Heine & Kuteva (2002: 91, 139, 287) includes nouns meaning 'comrade' or verbs such as 'follow' and 'take' and makes no mention of proprietive markers. However, Sutton (1976) has noted etymological connections between proprietive and comitative markers in several languages of Australia, and although none of the standard references on comitative constructions (Stassen 2000; Stolz et al. 2006; Arkhipov 2009) explicitly mention a pathway PROPRIETIVE \rightarrow COMITATIVE, they all notice the close functional relationship between these two categories, notably in languages of Australia, where both comitative and proprietive cases may exist in the same language (for instance, Djabugay, see Patz 1991).

The pathway presented above accounts well for the comitative adverbs of the type kyyw, but does not explain the $k\acute{x}$ -variant, which is actually more common in the corpus.

The comitative adverb marker $k\acute{x}$ is anomalous in Japhug in being among the very few prefixes attracting stress, a feature that could indicate fusion of

two syllables (for instance, the negative sensory marker *mtij*- probably results historically from the fusion of the negative *mui*- and the sensory prefix *pui*-).

If the sound laws of Japhug (Jacques 2004) are applied in reverse, the prefix $kr\gamma uv$ — would go back to pre-Japhug *kvvv—. We know that in Tshobdun, *vv0 regularly corresponds to vv0. It is in particular the case of the inverse prefix vv0—(Sun & Shidanluo 2002) which originates from proto-Gyalrong *vv0. Through vowel fusion (which also occurs with the inverse prefix), vv0—, the actual form of the comitative prefix (Sun 1998: 107), is the expected outcome of *vv0—. We can therefore safely conclude that (1) the comitative prefixes vv0— in Japhug and vv0— in Tshobdun are cognate and (2) that the grammaticalization in (16) took place before the split of Japhug and Tshobdun, and can be reconstructed at least to their common ancestor.

The comitative prefix $k\acute{x}$ — in Japhug, on the other hand, makes no sense from a Japhug-internal perspective. A possible way to explain it, however, is to suppose *borrowing* from Tshobdun ko—. Japhug, and especially the Kamnyu variety described in the present paper, has borrowed a few nouns from Tshobdun, as shown by forms such as qro 'ant', qalias 'eagle' and tuijo 'demon' instead of expected *qros, *qarjas (attested in some dialects of Japhug) and *tuizu, following the sound laws set out in Jacques (2004).

Borrowing of Tshobdun ko- as Japhug $k\acute{y}-$ is not surprising phonologically. The stress on the prefix in Japhug is probably a trace of the stress on that prefix in pre-Tshobdun, lost due to the strong tendency of Gyalrong languages to stress the final or penultimate syllable (Sun 2005). The vowel \emph{x} rather than \emph{o} is a consequence of the fact that derivational prefixes in Japhug are subject to strong phonotactic constraints: the only possible vowels are either \emph{x} or \emph{u} (and \emph{a} , but only in the case of stem-initial $\emph{a}-$).

The borrowing hypothesis also accounts for the absence of any discernible difference in function between the two comitative prefixes in Japhug.

5 Conclusion

The contribution of this paper is threefold. First, it provides the first detailed description of comitative adverbs in any Gyalrong language. Second, it shows that language contact between Gyalrong languages is not restricted to the lexicon, but actually also involves clear cases of borrowing of grammatical morphemes. Third, it provides an example of evolution with clear directionality from PROPRIETIVE to COMITATIVE.

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