D Compound verbs across Kiranti

Introduction
Throughout the Kiranti languages, we find various compound verb constructions. In this appendix, the analysis of compound verbs as in §7.2 is extended to other Kiranti languages. The hypothesis is that the analysis made for Bantawa compound verbs can be extended to get an insight into the morphological variety in compound verbs across Kiranti languages. While there is some morphological variation, the similarities between compound verbs across Kiranti, in usage as well as in form, by far outdo the differences. Compound verbs in the sense discussed here are a defining feature of Kiranti languages.

By the term ‘compound verbs’ we refer to sequences as in (497).

(497) verb verb
   a. in which the first verb (V1) gives the main semantic content of the expression, and
   b. the second verb (V2) adjusts the meaning by giving additional information.

In compound verb constructions, V1 determines the primary semantics and also the argument structure.

The Kiranti compound verb
In the several sections of §7.2, I have alluded several times to the facts that a) Bantawa compound verbs are not at all unusual in their Kiranti context, and that b) Bantawa compound verbs, because of their formal marking of semantically different constructions, may shed light on Kiranti compound verbs as typological feature.

Kiranti compound verbs can be analysed as a subtype of serial verb constructions (Aikhenvald and Dixon 2006). However, across all Kiranti languages the syntax of compound verbs is subject to much more stringent rules and definitions than the general defining properties of serial verb constructions. Even when the lexical instantiations of the compounding verbs in compound verbs may be highly contingent, both formally and semantically there are such correspondences between compound constructions in Kiranti languages that we can say that a language without compound verbs is not a Kiranti language. The consistency in the use of the grammatical device of compound verbs across Kiranti languages is surprising, compared to the lexical and phonological variation between Kiranti languages.

Kiranti compound verbs can be meaningfully compared as a syntactic phenomenon (§D.1), with regard to their morphology (§D.2) and function and degree of grammaticalisation (§D.3).

D.1 Kiranti compound verbs: syntax
Kiranti compound verbs are the head of a single clause and replace a simplex verb. There are strict syntactic constraints on compound verb constructions. For Bantawa,
we have defined compound verbs as this subset of all complex verbs, that have the additional property that the constituting parts agree in form.

This formal constraint can be shown to correlate with the syntactic make-up of the compound verb construction. This means, that for syntactic reasons, we expect the extra formal properties as in (498) to apply.

(498) specific properties of compound verbs as opposed to other complex verbs
   a. there are no affixes on V1 that are not present on V2,
   b. there is agreement of valence: if V1 is transitive, then so is V2.

In ordinary compound verbs, (498a) applies, as the first and second verb should not have conflicting agreement parameters. There may well be clause-level morphology or morphology to apply to the verb as core of the clause. However, we expect that morphology a) to affix to either the compound verb as a whole (i.e. on its fringes) rather than in between the main and vector verb, or b) to distribute over both members of the compound, as they are equal parts.

As we shall see, across Kiranti, there is not much morphology on the first verb beyond tense and actant agreement. In any case, the first verb is not a converb or gerund, has no marking for manner, temporal conjunction or the like, and is not nominalised — unless the second verb is also marked in that way. This means that all Kiranti compounds are real compounds in the sense that they are contiguous, i.e. no other constituent intervenes, and there is no syntactic linkage.

**Valency agreement**

For Kiranti languages that have little or no morphology on the first verb, such as Wämbule, and Yamphu, we find that there is no formal clue that distinguishes causatives and other valency-changing compounds from valency-preserving compounds. For these languages, analysts have generally not distinguished these categories that are very different for Bantawa.

**Valence decreasing auxiliaries** Excepting the middle or reflexive marker, other valence decreasing verbs in verb complementation structures are not common across Kiranti languages. A passive is attested only for Limbu. For other languages, there are alternative strategies to express the desired meaning. Most verbs have intransitive counterparts or can simply be conjugated intransitively. The passive -tct in Limbu deserves discussion’, e.g. (142, 143).

(142) kʰo-me-det-nct
    get-3pl-PASS-NEG.3pl
    ‘they are not available’

(143) suk-tct-Ø
    can-PASS-NPT.3s
    ‘it is possible’
This structure confirms the point that was made for Bantawa (§7.3.1) that complex verbs with a valence-changing operation are not regular verb compounds. The Limbu examples show that there is no agreement at all on the first verb unlike what happens in ordinary Limbu compound verbs, cf. §D.2. The proper analysis is to reanalyse the first verb as a verbal noun that is incorporated much like the Bantawa constructs in §7.3.1.

For Bantawa, it makes sense to treat compound verbs of equal parts as true compound verbs as different from verbal compounds with inequal parts, i.e. those with a root argument to a conjugated verbal head. This distinction is relevant across the Kiranti area. With regard to form, introducing the distinction is overly exact for languages that do not formally distinguish valency-changing from valency-consistent compound verbs. However, syntactically and semantically the distinction is there for every Kiranti language. The valency-changing constructions that have been analysed in the literature on a par with verbal compounding, are cuckoos in the verbal compounding nest.

### D.2 kiranti compound verbs: morphology

Kiranti compound verbs share the formal properties listed in (144e) on top of the serial verb construction features defined in (496) (Aikhenvald and Dixon 2006).

(144) **Features of Kiranti compound verbs**

- a. affix agreement, i.e. both compounding verbs have corresponding or identical agreement markers,
- b. valence agreement, i.e. the compounding verbs agree in valence: if the first verb is transitive, then so is the second,
- c. asymmetrical, i.e. compound verbs are generally asymmetrical in Kiranti: V2 has a semantic contribution in the realm of aspect or direction,
- d. contiguous, i.e. Kiranti compound verbs are contiguous, there are no intervening constituents,
- e. one word, i.e. Kiranti compound verbs are one single grammatical word, perhaps also a single phonological word.

For some Kiranti languages, the main verb appears in the uninflected form. For most Kiranti languages, some flection marks are present on both compounding verbs.

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7 Aikhenvald and Dixon (2006: 49) make the point, that ‘Valency-decreasing serial verb constructions with a passive meaning employ verbs such as ‘touch’, ‘strike’’. This generalisation is borne out in Limbu in that the Limbu root \( t \) also means ‘to strike from above.’

8 Several authors have analysed the ‘compounding-like constructions’ as below as verb compounds.

1. reflexivisation
2. compound causatives
3. benefactive
4. coordinated predicates

Where it is not possible for every language to tell these constructions apart from ordinary compounds formally, each of these at least semantically forms a distinct class.
Verb compounds of this kind may still show a great degree of variation in form. The formal variation more often than not corresponds to semantic correlates (cf §D.1).

**Comparative compound verb morphology**

The primary form of the compound verb is simply a construction of a sequence of verbs, that are fully-inflected for tense and participant agreement.

All forms in Kiranti languages are somehow based on this pattern, and the differences in morphology between languages can be understood as differences in the degree of deviation of it.

**Limbu**

In Limbu, there is very little affix deletion. Prefixes are never eliminated. Suffixes are only deleted partially. More specifically, if the suffix sequence is longer than two syllables, the last will be deleted — excepting non-TA suffixes.

The two verbs are fused into one phonological word in Limbu, unless there is an intervening prefix (— on the V2). In that case, the construction falls apart in two phonological words.

(145)  
\[ \text{t\textsuperscript{a}aps-u-d\textsuperscript{o}-a\textsuperscript{j}} \]
\[ \text{knock.down-U-COMPL-PT.3s>3/1s} \]
\[ \text{‘he knocked him down’} \]

(146)  
\[ \text{natt-u-lott-usi} \]
\[ \text{drive-U-TAKE-PT.3s>3ns} \]
\[ \text{‘he drove them out’} \]

(147)  
\[ \text{latt-\text{cmme}? a-bir-\text{cmme}? natt-\text{cmme}? a-bir-\text{cmme}?} \]
\[ \text{take-IMP.2p>3s 1s-give-IMP.3p drive.out-IMP.2p>3s 1s-give-IMP.3p} \]
\[ \text{‘you (pl) take it out and send it off for me’} \]

(148)  
\[ \text{pi?l natt-u\text{ui}-des-u\text{uj}} \]
\[ \text{cow drive-1s>3s-send-1s>3s} \]
\[ \text{‘I drove the cow away’} \]

(149)  
\[ \text{o\textsuperscript{k}t-\varepsilon n\varepsilon:s-\varepsilon} \]
\[ \text{shout-3s CONT-3s} \]
\[ \text{‘it kept on screaming’} \]

Example (147) is odd, in the sense that the agreement on V2 differs from that on the first verb. This will be discussed later.

The last example, from (van Driem 1987: 132) deviates from the rule, in that there are two words where we would expect a fusion. N\varepsilon:ma (‘to lie, be situated’) is different from other V2s in one more respect, that it does not stick to the rule of valency agreement, viz. (150).

(150)  
\[ \text{sapt-u n:\varepsilon:s-\varepsilon} \]
\[ \text{write-3s3sPT CONT-3PT} \]
\[ \text{‘he kept on writing’} \]
As described above, in Limbu, compound verbs consist of two juxtaposed finite verbs with exactly equal valence and morphology. The Limbu structure may be represented by (151). Greek letters represent variable parameter values. The aim of this representation is to show that the parameters of tense, agent and patient are the same in all parts of the compound verb complex.

(B151) $V^f_{\alpha \text{ tense}, \beta \text{ agreement}} \rightarrow V^f_{\alpha \text{ tense}, \beta \text{ agreement}} V^f_{\alpha \text{ tense}, \beta \text{ agreement}}$

**Bantawa**

For Bantawa, we saw that the language shows an intermediate degree of affix reduction. The suffix string is truncated halfway on formal criteria, and prefix and later suffixes appear only once (cf. §7.2.3). Compound verbs constitute a single grammatical unit in Bantawa. The way the compounds break up in prosodic units is another matter. Prefixes are present on the first verb only. Suffixes up to suffix slot sfx5 are present on both verbs, while the remaining part of the suffix string is appended to the second verb only. This symmetry in form is functional in nature, i.e. the equivalence in form is not governed by phonological but, rather, by functional constraints.

**Thulung**

Thulung has verbal suffixes only. In Thulung compounds, affix reduction is very strong. The rule is that all suffixes on the first verb are dropped, and the compound verb is fused into one single word.

But, (Allen 1975: 72) writes:

`The form taken by the first stem is independent of the initial element of the second stem. Endings combine with the second stem as they would if it were not part of a compound verb, except that in this situation stem vowels are probably never long and the stem consonant is particularly likely to be lost (...) The problem in compound verbs is to predict the alteration in the first element which may accompany the addition of endings to the second.' `The general rule is that the first element shows those changes that would have occurred if it were a free-standing verb, i.e. if the endings had been added to it directly.'

The stem changes in Thulung are mostly conditioned morphophonologically, which is to say that there is little stem selection that cannot be explained by the phonological nature of the suffixes. There is one major exception to this rule, that Allen (1975) describes as weakening. The weakening suffixes have the property to change the stem consonant, or even the stem vowel, for a number of irregular verbs, even when these suffixes are otherwise formally equal to other non-weakening suffixes. For example, there is a suffix <-ci> (DU) indicating dual agent. In present tense, stem weakening occurs, while in past tense, the fusion of stem and suffix is quite different. The baffling thing of Thulung verb compounding is that changes on the first verb take place even if they do not on the second verb, due to the phonological nature of this vector verb. This way, the difference between past and non-past may be visible on the first verb only.
The 'X' here signifies the fusion point between the first and second verb. To understand these forms synchronically in a strictly segmental framework, we must assume that there is some zero morpheme here that does the weakening job.

This curious behaviour that Allen described some thirty years ago, is mentioned again by Lahaussois, who studied this language more recently (Lahaussois 2003, 2002). In her thesis on Thulung, she writes that 'if the verb and person combination results in a main verb stem which is vowel-final, then truncated inflectional endings appear. The truncated inflectional material is consistent in being a single phoneme, namely the first of the expected full person/tense ending. [...] Exceptionally, for 3s non-past forms (where the stem and person ending are often fused), no extra material is inserted, but the stem vowel is altered to what it would be for the non-aspectivized form' (2002: 202).

**Wämbule**

In contrast with what happens in Thulung, Opgenort (2002: 394) writes that the stem of the first verb only paradigmatically adapts to the immediate context of the motionalisers, his terminology for vector verbs. He gives a sample of place assimilation for final stops, viz. (154).

(154) syäk-khā-cā-me (underlying: syät-khā-cā-me)
    kill-come/bring-PUR-RES
    ‘to come or bring up and kill something’

Wämbule then seems a language with no inflection on the main verb. Opgenort reports that most motionalisers are not sensitive to transitivity classes, which means that vector verbs are the same for transitive and intransitive main verbs. However, the transitivity constraint as in (498b) is still active in the selection of some motionalisers (2002: 397). In Wämbule, the vector verbs are the only part of the compound that is inflected. Vectors may be conjugated either transitively or intransitively. However, the type of conjugation forces the interpretation of the first or main verb half if that verb is ambiguous (2002: 396).

**Yamphu**

Rutgers writes the same about the formal make up of auxiliary verbs in Yamphu, as what Opgenort wrote about Wämbule. The main verb is represented by a bare root only and the vector carries all the flection.
However, his data suggest there is some alternation. In the following examples (Rutgers 1998: 164) the verb *cama* ‘eat’ seems to alternate between a conjugated and unconjugated root according to the form.

(155)  
\[
\text{co’-dæk-pe’-tt-u-ji-hi}  \\
\text{eat-exhaust-RES-PF-→3-3NS-PLNR}  \\
\text{‘They’ve quite finished eating [everything there was].’}
\]

(156)  
\[
\text{ca’-so ca’-dæk-ma-do.}  \\
\text{eat-too eat-exhaust-INF-of_course}  \\
\text{‘Of course he’ll finish his food.’}
\]

In spite of this counter-example\(^9\), in general the first verb in the compound seems to be oblivious to its wider context. Rutgers uses the terminology ‘auxiliary’ verb for the vector verb. This choice is understandable once we see that only the vector is conjugated while the main verb merely seems to serve as a semantic content holder for the entire construction, a morphologically inert complement.

However, the auxiliary verb construction in Yamphu now contains a host of constructions that are formally distinct in other languages. Not only motionalisers are analysed as compound verb, but also category-changing constructions such as the reflexive, causative and benefactive, aspectual constructions such as result and Aktionsart auxiliaries and imperfective auxiliaries, as well as and modal constructions, e.g. inceptive and potentiality auxiliaries.

**Kulung**

Formally, Kulung mostly patterns with its close kin Bantawa. Tolsma first writes that main verbs can be represented by simple roots only (157a). However, paradigmatically exactly parallel forms with *dama* ‘downward movement’ as in example (372) from (Tolsma 1999), and *kaima* ‘to go’ have full main verb forms, e.g. (157b).

(157)  
Kulung compound verbs  
\[
a.  \text{khap-bok-a}  \\
\text{weep-INC-PT}  \\
\text{‘He started to cry’ (Tolsma 1999: ex. 306)}
\]
\[
b.  \text{yu: du-a kʰat-a}  \\
\text{millet.paste cook-PT go-PT}  \\
\text{‘The millet paste has become cooked.’ (Tolsma 1999: ex. 385)}
\]

Example (157a) contains a modal complex verb, with a subordinated main verb, whereas example (157b) patterns with regular Kiranti compound verbs. For Kulung, Tolsma (1999: 76) reports an interesting relation between finite first and second verb

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\(^9\) Rutgers (personal communication, 2007) confirmed that there are some examples of main verb stem selection that are not transparent, at least synchronically. Since these cases are very few, Rutgers considered them exceptions did not attempt to exhaustively list or analyse them.
forms. For all first person forms, we find past tense agreement morphology on the main verb, irrespective of the tense we find on the vector verb, e.g. (158)10.

Similar to what happens in Bantawa and Dumi, suffixes that come after the first few slots only appear on the vector verb, but are cut away from the main verb. Tolsma specifically mentions the exclusive marker <-ka>, but by browsing his examples, we find that second and third person plural morphemes <-ni> and <-ci> are also cut, e.g. (159). Longer morphemes are reduced.

(158)  cups-u lat-o: load-1s → 3p.PT PER-1s,NPT
        'I’ll load it.' (Tolsma 1999: Ex.361)

(159)  dil-o: po-ci-te roll-1s,NPT BNF-d-IMP
        ‘roll it for me!’ (Tolsma 1999: Ex.367)

In Kulung, compound verbs consist of two or more finite verbs of equal structure, except that the first must be in non-past tense without prefixation11.

Discussion of compound verb morphology

Theoretically, there is a range of possibilities for how compound verbs are realised. At the one end of the range, all full verb forms are retained and there is no fusion of the two verbal forms into a single word. On the other extreme, one would expect that only the bare root of the main verb is retained in the surface form. Of the languages considered here, Limbu is left-most, but still does have some reduction. In Thulung, only roots are retained, but roots still bear traces of affix affixation. For Wämble it has been reported that only bare roots remain of the main verb. Kulung and Bantawa share the same degree of reduction.

\[
\begin{array}{cccc}
\text{splitting / retaining} & \cdots & \text{fusing} \\
\text{Limbu} & \text{Bantawa} & \text{Thulung} & \text{Wämble} \\
\text{Kulung} & \text{} & \text{} & \text{Yamphu} \\
\end{array}
\]

If we understand the surfacing of compound verbs as a process, the rules would be as stated below.

(160) generation sequence for compound verbs

10We may speculate that the systematic preterite forms for the main verb in Kulung reflects something about the way these compound verbs are grammaticalised. Perhaps the reading of the complex is: ‘after the main verb happened, the second event happens, reflected in a non-past form, or happened which reflects in past tense vector verb’. If the vector verb is the deictic centre with regard to tense, then the main verb is always preterite.

11A generation rule for Kulung compound verbs would look similar to that of Bantawa, e.g. (503). The rule needs a slight adaptation in functional terms, but the idea remains the same, e.g. below.

\[k. \quad o^m_v \alpha \text{ tense}, \beta \text{ agreement} \rightarrow o^m_v \text{NPT tense}, \beta \text{ agreement} \quad o^m_v \alpha \text{ tense}, \beta \text{ agreement}\]
D. Compound verbs across Kiranti

a. Limbu
   • generate full forms
   • drop all suffixes beyond the first on the main verb
   • fuse, unless there is a prefix on the vector verb

b. Bantawa
   • generate full forms
   • drop all suffixes on the main verb except the first
   • drop all prefixes on the vector verb
   • fuse, unless there is a plural suffix on the main verb

c. Thulung
   • generate full forms
   • drop all suffixes on vector verb
   • fuse

D.3 Kiranti compound verbs: function

In the section on the different types of vector verbs found in Bantawa (§7.2.4), we annotated the Bantawa classes of vector verbs in footnotes, comparing these aspectuals and motionalisers and other vector verbs to Kiranti cognates.

Vector verb correspondences

By this methodology, we found some non-trivial correspondences in vector verbs. Across South-Eastern Kiranti, for example, we found that cognate verbs of the "yuŋ"-‘to sit, to put’ family designate some shade of perfectivity or definitive-ness. An even more widespread phenomenon is the usage of cognates of Bantawa cama12 ‘to eat’ as a resultative or durative experiential. The most significant family trait, however, is the pervasive usage of all motion verbs that each language has as motionaliser vector verbs in compound verbs.

While some Kiranti languages, such as Wāmbule, have been described as lacking aspectual or coordinating compound verbs, none does without motionalisers. A Kiranti cross-linguistic investigation of what the constituting parts of compound verbs contribute to the meaning of the whole may reveal more generalisations. A research of this kind may also affirm or question proposed genetic relationships in the language family.

Symmetry

As noted previously, compound verbs are generally asymmetrical in Kiranti. Vector verbs have a semantic contribution related to aspect or direction, while the main verb denotes the event as such. The first verb in a compound is selected from an open large class, whereas vector verbs form a closed class.

This picture holds true for Kiranti languages in general. Coordinate or one-off compounds that would be symmetrical are rare across Kiranti. Bantawa has the peculiarity of a single first verb, *lama* ‘to return’, that can be followed by any second verb (§7.2.5). These counterexamples do not change the picture of general asymmetry in compound verbs.

Aikhenvald and Dixon (2006: 47) note that ‘For asymmetrical SVCs, the basic verbs of motion, direction, posture and location occur most frequently (...) in the minor verb slot.’ Next in frequency, appear ‘other active intransitive verbs.’ On a third level in frequency, stative and process verbs are attested.

This finding is in line with what we see in Kiranti. Also Aikhenvald and Dixon (2006: 22) note that asymmetrical compound verbs tend to grammaticalise, and second verbs are reinterpreted as verbal suffixes to the head verb, whereas symmetrical compound verbs tend to lexicalise and become idiomatic collocations. This generalisation is illustrated by Belhare. For Belhare, Bickel (1996) describes aspect markers with obvious verbal history as verbal suffixes.