

Verbal morphology in Katla

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1. Introduction¹

Katla is usually classified as Kordofanian, although it shows certain phonological and grammatical peculiarities when compared to other Kordofanian languages (see, e.g., Schadeberg 1989). As a result, earlier work has often left Katla unclassified (Stevenson 1964; Tucker & Bryan 1956; 1966). More recent research suggests that Kordofanian does not form a coherent branch, and offers alternative proposals for the place of Katla and its closest relatives within the Niger Congo language family (Dimmendaal 2011: 324; Blench, this volume).

The closest relatives of Katla are Tima (see the contributions on Tima in this volume by Alamin, Bashir, Mugaddam and Schneider-Blum) and Julud. Despite their close genetic relationship, Katla and Tima are not mutually intelligible, and this paper will point out some differences (and similarities) within the area of verbal morphology. Julud is often considered a dialect of Katla, e.g., in the Ethnologue (Lewis 2009). Ethnically, however, there is a clear division between the two groups. Linguistically, the two can be said to form a dialect continuum. Katla consists of two dialects, East Katla (= *Kə̀l̩ə̀r̩ə̀ŋ*) and West Katla (= *Cəl̩kəm*); and Julud is mutually intelligible with neighboring East Katla, but not with West Katla. The data discussed in this paper comes from West Katla.

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Katla is spoken in 11 villages around Jebel Katla, about 50 km southwest of Dilling. Katla and Julud together number approximately 14,000 speakers (Lewis 2009); their self-denomination is *kàlāk*.

The language has only received limited attention, and the available information is restricted to very few published pages in older sources (Heinitz 1917: 57-58, 98; Meinhof 1916/1917: 212-235; Stevenson 1956-1957: 190-196; 1964: 89-90; Tucker & Bryan 1956: 64; 1966: 262-269), which focus on phonology and nominal morphology. This paper is a first description of Katla verbal morphology. Section 2 gives an overview of the available morphology, focusing on inflectional morphology; section 3 turns to derivational morphology; and section 4 concludes the discussion.

2. Katla and its verbal morphology: an overview

Typologically, Katla can be characterized as an agglutinating and head-marking language. There are a number of morphophonological changes at morpheme boundaries, but these changes are predictable and the identification of morphemes tends to be straightforward. In particular, if a vowel-final and a vowel-initial morpheme combine, the final vowel and tone of the first morpheme are dropped. This phenomenon is illustrated with the help of various forms of the verb *jò* 'go' in Table (1). Similarly, if a consonant-final and a consonant-initial morpheme combine, the final consonant of the first morpheme is dropped; in some rare cases, this dropped consonant causes phonological changes in the remaining consonant.

Table 1. Morphophonological changes (exemplified with *jò* 'go')²

Changes in vowel quality and tone:		
<i>jàná</i>	<i>jànâŋ</i>	<i>jâŋóŋ</i>
<i>jò-àná</i>	<i>jò-àná-âŋ</i>	<i>jò-âŋ-óŋ</i>
go-HAB	go-HAB-DEIC	go-DEIC-COM
go always	come always	come with

² This paper follows the Leipzig Glossing Rules wherever possible making use of the following abbreviations: AFF – petrified affix with unspecified meaning; APPL – applicative; CAUS – causative; COM – comitative; COMPL – completive; CONJ – conjunction; CONS – consequence clause; DEIC – deictic / ventive; DEM – demonstrative; EMPH – emphasis; EXCL – exclusive; FOC – focus; HAB – habitual; INCL – inclusive; INTERJ – interjection; INTERR – interrogative; IRR – irrealis; IT – iterative; LOC – locative; NEG – negative; OBJ – object; PL – plural; POSS – possessive; PROH – prohibitive; PROX – proximal; PST – past; SG – singular; SUBJ – subjunctive; TOP – topic.

The language also exhibits a vowel harmony system that is based on the feature of Advanced Tongue Root (ATR): affix vowels belong to the same ATR set as root vowels.

In its nominal morphology, the language exhibits remnants of a noun class system, which has been reanalyzed as a number system in the present-day language: number is marked both on the noun and as agreement on some elements of the noun phrase. The unmarked constituent order is SVO (subject-verb-object), and the grammatical alignment follows a nominative/accusative pattern. In its verbal morphology, Katla cross-references arguments on the verb, marks polarity as well as tense, aspect and modality (TAM), and allows for a large number of derivational affixes. Table (2) illustrates schematically the structure of the verb and the position of the different categories relative to the root; and example (1) shows a complex verb that contains many of the available categories.

Table 2. Structure of the Katla verb

NEG-	TAM=	SUBJ-	root	-derivations	-OBJ & -TAM	-NEG
(1)	<i>lɾàgètɛ</i>	<i>tániyàniŋíná</i>			<i>tʃɾɔ</i>	
	<i>l-ràgètɛ</i>	<i>tá-nì-jò-àná-âŋ-íŋ-náj</i>			<i>tʃɾɔ</i>	
	PL-Arab	NEG-3PL-go-HAB-DEIC-PST-NEG			past	
	the Arabs used not to come here in the past (NO06HCIMCA-024) ³					

As example (1) shows, Katla verbs can become very complex. There are simpler examples, though, and this section illustrates the inflectional categories one by one. Starting with the cross-referencing of arguments, subject arguments are obligatorily marked on the verb, while object arguments are optional. Their presence and absence interacts with animacy, as animate objects are more likely to be cross-referenced; ditransitive verbs cross-reference only one of their object arguments. Table (3) summarizes the available forms. Excepting 1SG, 3SG and 3PL, these forms are cognate to the corresponding Tima forms (see Schneider-Blum, this volume, for further discussions on pronouns).

³ The free translation is followed by an identifier that links the example to the Katla corpus that is currently under construction and will be made available through the Endangered Languages Archive www.elar-archive.org.

Table 3. Cross-referenced arguments

	SUBJ- (obligatory)	-OBJ (optional)
1SG	<i>ɲ-</i> ~ <i>ɲλ-</i> ~ <i>ɲò-</i>	<i>-ɲòɲ</i> ~ <i>-ɲòɲ</i>
2SG	<i>ɲ-</i> ~ <i>ɲλ-</i> ~ <i>ɲò-</i>	<i>-ɲλɲ</i> ~ <i>-ɲòɲ</i>
3SG	∅	∅
1PL.INCL	<i>ì-</i> ~ <i>ì-</i>	<i>-ɲèɛ</i> ~ <i>-ɲèɛ</i>
1PL.EXCL	<i>nù-</i> ~ <i>nù-</i>	<i>-nèn</i> ~ <i>-nèn</i>
2PL	<i>n-</i> ~ <i>nλ-</i> ~ <i>nò-</i>	<i>-nòn</i> ~ <i>-nòn</i>
3PL	<i>nù-</i> ~ <i>nù-</i>	<i>-ɲìɲ</i> ~ <i>-ɲìɲ</i>
Focused & relative SUBJ	<i>ɛ-</i> ~ <i>ɛλ-</i> ~ <i>ɛò-</i>	n/a

Example (2) illustrates a simple transitive verb that cross-references both its arguments.

- (2) *nìróóɲì.*
nì-róó-ɲìɲ
 3PL-run.after-3PL
 They run after them. (F06HRABBIT-067)

Frequently, the verb is unmarked for TAM. In this case, a default present tense reading arises, as in example (2) above. It is, however, possible to mark the verb overtly for TAM. Katla has one proclitic, irrealis *kλ=* ~ *kà=*, which directly precedes the subject prefix (as in 3). This proclitic has an alternate free form *kâr*, and it very likely grammaticalized from the full verb *kârì* 'like, want'. All other TAM morphemes are suffixes whose origins are no longer transparent, and which occur in different positions relative to the object suffix (-O). They include (i) the past tense suffix *-íɲ* (-O) ~ *-íɲ* (-O) (as in 4), (ii) the complex completive suffix(es) *-í* (-O) *-lúɲ* ~ *-í* (-O) *-lóɲ*, and (iii) the consequence suffix (-O) *-lúɲ* ~ (-O) *-lâɲ*. None of these forms bears any resemblance to the TAM morphemes of Tima.

- (3) *kâɛ̀òlâk.*
kâ=ɛ̀-òlâk
 IRR-FOC-eat
 He wanted to eat him. (F06HRABBIT-019)
- (4) *óóɲíɲ lá lá lá*
ò-óɛ̀-íɲ lá lá lá
 AFF-say-PST no no no
 He said: no, no, no (F06HRABBIT-075)

Finally, Katla marks negation by means of an optional prefix and an obligatory suffix (as in 5). The prefix is probably related to the focused

subject (see table 3), but now shows a different distribution; the suffix is likely to be cognate to the corresponding Tima suffix *-Vŋ* (see Alamin 2012).

- (5) *íŋù* *ɬɛ̀ɛ̀ɬɬŋ̀ɪ̀nɔ́.*
í-ŋùŋ *ɬɬ-ɛ̀ɬɬŋ-ŋ̀ŋ-ɪ̀nɔ́*
 TOP-3SG NEG-know-3PL-NEG
 As for him, he doesn't know them. (F06HGBAYANG-079)

In addition to the inflectional morphology, Katla has derivational verbal affixes. In fact, these derivational affixes are largely responsible for the complexity of Katla verbs, and it is not uncommon for a verb root to occur with three or more such affixes (as in 6).

- (6) *jànâŋóŋ*
jà-àná-âŋ-óŋ
 GO-HAB-DEIC-COM
 always come with (D-28/04/2007)

The remainder of this paper takes a closer look at the available derivational morphology.

3. Derivational morphology

It is rare for a verb to consist of a simple verb root alone (as in most of the examples illustrated in the previous section) — it is much more common for it to contain one or more derivational affixes. Table (4) summarizes the productive and semi-productive affixes.

Table 4. Productive derivational affixes

	-ATR	+ATR
Habitual (HAB)	- <i>ɪ̀nɔ́</i> ~ - <i>ɪ̀nɔ́</i>	- <i>àná</i> ~ - <i>ònó</i>
Iterative (IT)	- <i>ɬkɔ́</i>	- <i>òkó</i>
Activity (ACT)	- <i>ɬk</i>	- <i>ak</i> ~ - <i>ok</i>
Causative (CAUS)	- <i>kɔ́</i>	- <i>kâ</i>
Applicative (APPL)	- <i>ɬaŋ</i> ~ - <i>ɬaŋ</i> ~ - <i>caŋ</i>	- <i>ɬaŋ</i> ~ - <i>ɬaŋ</i> ~ - <i>caŋ</i>
Comitative (COM)	- <i>ɔ́ŋ</i>	- <i>óŋ</i>
Goal (GOAL)	- <i>ɔ́ŋ</i>	- <i>àŋ</i>
Deictic/Ventive (DEIC)	- <i>âŋ</i> ~ - <i>âŋ</i>	- <i>âŋ</i> ~ - <i>âŋ</i>

In addition to the above affixes, there are numerous petrified affixes whose existence can only be discerned from the presence of alternate forms of a verb. For example, the present-day verb *òlâk* 'eat' probably contains two

petrified affixes, and should be parsed as $\delta\text{-l}\grave{\text{a}}\text{-k}$ ‘AFF-eat-AFF’ diachronically. Usually, $\delta\text{l}\grave{\text{a}}\text{k}$ acts as a simple root, and suffixes follow the final -k . In one case, however, this final -k is not treated as part of the root: $\delta\text{l}\acute{\text{o}}\eta$ ‘eat all’ (parsing diachronically as $\delta\text{l}\grave{\text{a}}\text{-}\acute{\text{o}}\eta$ ‘eat-COM’). Furthermore, this verb has two distinct nominalizations, one with the initial vowel $\delta\text{-}$ ($\delta\text{l}\acute{\text{a}}\text{k}\acute{\text{a}}\text{l}$ ‘eating’), and one without ($\text{l}\acute{\text{a}}\text{k}\acute{\text{a}}\text{l}$ ‘food’). In other cases, the existence of petrified affixes can be discerned from the presence of additional morphological material. For example, $\text{j}\acute{\text{a}}\text{k}\acute{\text{a}}\text{k}$ ‘turn’ was probably $\text{j}\acute{\text{a}}\text{k}\acute{\text{a}}\text{-k}$ ‘turn-AFF’ diachronically. In some derived forms of this verb, the final -k is still separated out, as in $\text{j}\acute{\text{a}}\text{k}\acute{\text{a}}\text{n}\acute{\text{a}}\text{k}$ ‘always turn’ (parsing as $\text{j}\acute{\text{a}}\text{k}\acute{\text{a}}\text{-}\acute{\text{n}}\acute{\text{a}}\text{-k}$ ‘turn-HAB-AFF’).

While it is thus possible to formally identify a number of diachronic affixes, their meaning is less transparent: different forms of a verb seem to arbitrarily contain or not contain the affixes; and speakers do not identify them as meaningful elements. There are, however, cases of near-minimal lexical pairs that point to their erstwhile meanings. This concerns especially the forms -k and $\lambda\text{-}$ ~ $\delta\text{-}$. In present-day Katla, a large proportion of the verbal lexicon ends in -k . In fact, it is so frequent that Stevenson (1956-1957: 192) felt compelled to remark that “ -k is usually a verb sign.” There are only few lexical pairs, but they all suggest that -k probably conveyed the notion of middle voice or reflexivity (as illustrated in Table 5a). Similarly, an initial vowel is fairly common in Katla verbs. Wherever there are minimal pairs, the presence of the vowel usually conveys the notion of continuousness or iteration (as illustrated in Table 5b). In such cases, the non-continuous form often contains another petrified suffix, -i ~ -i , which is absent in the continuous form. Comparative evidence from Tima suggests that this suffix may be an old transitivity marker (Alamin 2012).

Table 5. Near-minimal lexical pairs

	Verb:	Verb plus petrified affix:
(a)	$\text{k}\acute{\text{a}}\text{-t}\acute{\text{a}}(\eta)$ $\text{g}\acute{\text{a}}\text{g}\acute{\text{a}}\text{m}$ do-APPL hair comb someone’s hair	$\text{k}\acute{\text{a}}\text{-t}\acute{\text{a}}\text{-k}$ $\text{g}\acute{\text{a}}\text{g}\acute{\text{a}}\text{m}$ do-APPL-AFF hair comb one’s own hair
(b)	$\text{l}\grave{\text{a}}\text{m}\text{-i}$ bite-AFF bite (once)	$\lambda\text{-l}\grave{\text{a}}\text{m}$ AFF-bite munch, bite continuously

These lexical pairs are very few, and there are usually complicating factors (such as additional, unexplained, differences in form, or idiosyncratic meaning differences), i.e., these erstwhile affixes can no longer be considered productive.

Turning back to the productive affixes, section 3.1 discusses their prevalent distributional characteristics and section 3.2 illustrates some of their meaning range.

3.1 Distributional characteristics

The affixes in table 4 can be considered productive in the sense that they are attested with Arabic loanwords. For example, the habitual affix in (7) occurs with the Arabic verb *jura* ‘drag, pull’.

- (7) *gìbókòḡ* *ṭàg-àlí* *ìkòrkú"ḡí ṭúṭòḡ* (...) *òḡúrònólòḡ*.
g-ìbókòḡ *ṭà-g-àlí* *ì-kòrkú"ḡí ṭúṭòḡ* *ò-jura-ònó-lòḡ*
 SG-offspring FOC-SG-POSS POSS- < NAME > AFF-pull-HAB-CONS
 And the son of K. T. (...) kept pulling her (towards him).
 (NO06JAJANGGAL-494)

Otherwise, their frequency differs considerably — both in terms of the number of occurrences in a corpus of natural texts (containing 3,402 utterances), and in terms of their distribution across the verbal lexicon (covering a database of 652 verbs). The iterative, comitative and goal affixes are very infrequent in natural texts, and they are attested with a few verbs only. The other five, by contrast, are common. Even the most productive and frequent derivational affixes, however, show lexical restrictions in terms of their distribution, thus making them very different from the inflectional morphology discussed in section 2.

Unlike inflectional affixes, derivational affixes are not obligatory: speakers can choose how they want to frame an event. In fact, it is not uncommon for speakers to repeat their utterances, one containing the suffix, and one not containing it. For example, in (8) below, the speaker first chooses to construe the situation as an iterative event (by means of the habitual suffix), and then repeats himself, but this time without the habitual suffix.

- (8) *íí* (...) *ṭàjànà* *kàwàc* *kàṭàḡò* *àwwâl sèná*
à-í *ṭà-ḡò-àná* *kàwàc* *kà-ṭà-ḡò* *àwwâl sèná*
 PL-DEM.PROX FOC-go-HAB first.time IRR-FOC-go first year
 those (...) who go one after the other for the first time, (those) who
 will go for the first year (NO06JAJANGGAL-090)

There are also lexical restrictions: not all verbs are compatible with all affixes. For example, the utterance in (9) contains three verbs — all three of them refer to the same habitual event, but only two of them are marked by

the habitual suffix. Elicitation shows that the verb *àgù* ‘dance’ is incompatible with the habitual suffix.

- (9) *ηάγανά ηάγθη ηòmcòñó.*
ηά-γò-ανά η-άγù-θη η-òmlη-τή-òñó
 2SG-go-HAB 2SG-dance-DEIC 2SG-return-APPL-HAB
 And you always go and dance here and return back (to the corral).
 (RBHKAC07Apr07-0369)

Another fact is related to the above observation: different verbs take different affixes to convey similar meanings — and this includes verbs that are morphologically and semantically related. For example, the intransitive verb *ùjó* ‘rise’ takes the iterative affix to convey iteration (as in 10), but its transitive counterpart *ùjó-ká* ‘rise-CAUS’ takes the habitual affix for the same purpose (as in 11). It would be ungrammatical to reverse the marking.

- (10) *ηùjókólò jàñál émúkwàr àà.*
η-ùjó-òkò-lòη jò-àñá-làη í-múkwàr àà
 2SG-rise-IT-CONS go-HAB-CONS GOAL- <PLACE.NAME> INTERJ
 You got up (intr.) repeatedly and went to Mukwar, aa.
 (NO06JAJANGGAL1-379)

- (11) *ùjònákìηì*
ùjó-àñá-ká-ηìη
 rise-HAB-CAUS-3PL
 he got them up (tr.) repeatedly (RBHKAC07Apr07-1005)

Furthermore, there is considerable speaker variation. Synchronically, speakers differ in whether they produce or accept certain combinations. And diachronically, it is possible to observe changes. For example, the form *ròàñákák* ‘always be running’ in (12) is produced by an older speaker — younger speakers recognize this form as being characteristic of the speech of older speakers, but would themselves only ever use the simple form *róók* ‘run’.

- (12) *nìróàñákák níl míl nìjòàñáη*
nì-róò-àñá-k-ak níl míl nì-jò-àñá-âη
 3PL-run.after-HAB-AFF-ACT LOC CONJ 3PL-go-HAB-DEIC GOAL-
 íbéjó.
 í-béjó
 <PLACE.NAME>

They always run from there and go to Bejo. (RBHKAC07Apr07-0128)

These three characteristics — non-obligatoriness, lexical restrictions, and speaker variation — characterize all derivational affixes in Katla, making them different from the inflectional morphemes discussed in section 2.

3.2 Meaning potential

This section explores the meaning of the derivational affixes: three of them convey aspectual notions (habitual, iterative and activity), four are concerned with valency changing or valency re-arranging operations (causative, applicative, comitative and goal), and one has a deictic meaning (deictic / ventive).

Generally, each affix has a fairly broad meaning potential, and the labels only serve to convey their central meaning, i.e., the meaning that is most frequently attested in the corpus, that is available for most (or even all) verbs occurring with this affix, and that is the preferred interpretation in elicitation contexts. The habitual affix is such a case in point. It mostly conveys a habitual reading (as in 13).

- (13) *nàmán àkèlú íṭṭl nìyànâṅ jáḍò*
nàmán à-kèlú í-ṭṭl nì-yò-àná-âṅ jáḍò
 sometimes PL-people PL-big 3PL-go-HAB-DEIC exactly
- àṅl gîṭṭn nìgùkâṅòlò.*
àṅl g-ṭṭn nì-ògù-kâ-ṅòṅ-lòṅ
 day SG-one/other 3PL-take.rest-CAUS-2SG-CONS

Sometimes the old people use to come for a day, so that they help you recover. (RBHKAC07APR07-0370)

Example (13) illustrates a habitual reading, without connotations of iteration or frequency. In some cases, however, the habitual reading is not present, and the affix conveys an iterative reading (as in 14; see also 11 above) or a plural object reading (as in 15).

- (14) *bàḍén gíṭṭnòṅìlò àṅyò.*
bàḍén gíl-ṭ-ònó-ṅìṅ-lòṅ à-ṅyò
 later buy-AFF-HAB-3PL-COMPL PL-slave
 Later she had bought slaves, one after the other. (F06HG BAYANG-002)

- (15) *l̥ʒá g̥iʔn̥ n̥iɡ̥iʔðn̥óŋi ɔ́ʒt̥l̥*
l̥ʒá g-ìʔn̥ n̥i-ɡ̥iʔ-t̥-ðn̥ó-ŋiʔ l̥-ʒt̥l̥
 day SG-one/other 3PL-buy-AFF-HAB-3PL PL-thing
 one day, they could (suddenly) buy many things
 (RBHKAC07APR07-0446)

And in other cases, we obtain readings of an on-going gradual state change (as in 16) or of a continuity of the state (as in 17; see also 7 above).

- (16) *kí j̥òmànòní àmáát̥à n̥óŋɛ̃*
kí j̥ò-màn-òn̥ó-í à-máát̥à n̥óŋɛ̃
 and 1SG-find-HAB-AFF PL-station/origin now
 And I'm now gradually finding out about their origins.
 (NO06JAJANGGAL-362)

- (17) *íŋi t̥ʒ n̥iʔɡ̥úʔl̥n̥l̥ q̥ɛ̃*
í-ŋiʔ t̥ʒ n̥i-l̥ɡ̥ú-l̥-t̥-l̥n̥l̥ q̥ɛ̃
 TOP-3PL really 3PL-stay-AFF-AFF-HAB EMPH
 As for them, they kept staying. (H06HWALI-010)

It is likely that the five readings above are related, and it is furthermore likely that this is not a polysemous affix (having five separate senses). Instead, I assume that the overall meaning derives from the interaction of the semantics of the verb with the semantics of the affix. For example, it is possible to argue that the common meaning component of the given examples is their reference to an extended period of time. The default interpretation is habituality (i.e., events are characteristic over that period), but additional interpretations are available for verbs of different lexical aspect classes and/or in different pragmatic contexts. One could assume that punctual verbs allow for iterative readings (i.e., events take place repeatedly over that period), inchoative state-change verbs allow for on-going state-change readings (i.e., the state change event takes place over that period), and stative verbs allow for a continuous state reading (i.e., the state continues over that period). The plural reading of example (15) could be a contextual interpretation that follows from the notion of iterativity: if people buy one thing after the other (i.e., iteratively), then by definition they also buy many things (i.e., plural things). While these hypotheses are plausible, a detailed lexical semantic analysis would be needed to verify (or falsify) them. In the meantime, any analysis can only aim to illustrate the range of possible readings, but has to remain agnostic as to whether or not the different readings constitute separate senses.

Examples (18) to (24) illustrate the central reading of each remaining affix. It should be kept in mind, however, that in each case, the central reading is not necessarily the only available reading.

Katla has another two aspectual affixes: the iterative and the activity affixes. The iterative affix is infrequent; it conveys the successive repetition of an event (as in 18). The activity affix, by contrast, is common. It gives a process or activity reading, focusing on the verb action, and downplaying the role of the object participant. Syntactically, the object argument is therefore often omitted (as in 19), but the verb remains transitive and the object can optionally be present.

- (18) *nìùòkó* *ṭòñbùlòkón.*
nì-ùjó-òkó *ṭò-nì-bùlà-òkó-náj*
 3PL-rise-IT NEG-3PL-die-IT-NEG
 They got up one after the other, they did not die one after the other.
 (NO06JAJANGGAL1-181)

- (19) *àbánà* *ḡòḡóókâ* *ḡḡl̄.*
àbánà *ḡò-ḡóó-ok-âḡ* *nà-g-ḡl̄*
 PROH 2SG-look.at-ACT-DEIC LOC-SG-end/back
 Don't keep looking back (towards me). (F06HRABBIT-050)

Katla has a number of affixes that change or re-arrange the valency of an expression. The causative affix adds an external causer in subject function, thereby creating transitive expressions (from intransitive) and ditransitive expressions (from transitive). In (20), the causative is added to the intransitive verb 'enter' and turns it into the transitive verb 'insert'. The applicative affix adds an applied object that is low on the transitivity hierarchy (e.g., a location, a stimulus, an addressee, but never a theme or a patient). In (21), for example, it allows the verb 'say' to occur with an addressee object. The comitative affix adds a comitative object (as in 22), and the goal affix adds a goal object (as in 23); both of them are infrequent.

- (20) *kí* *ṭéétákâlâ* *káṭ* *nàḡḡíḡíḡè*
kí *ṭâ-éṭáḡ-kâ-lâḡ* *káṭ* *nà-g-íḡíḡè*
 and FOC-enter-CAUS-CONS foot/leg LOC-SG-grass.type
 then he put (his) foot under the *ḡíḡíḡè* grass (F06HRABBIT-053)

- (21) *éjèḡé* *ḡóóṭáḡl̄ ...*
éjèḡé *ḡò-óṭ-ṭáḡ-ḡl̄ḡ*
 INTERJ 1SG-say-APPL-2SG
 Oh, what sorrow, I say to you: ... (F06HRABBIT-050)

- (22) *állkós* *ýícóŋ* *úúbóà?*
állkós *ýá = í-có-óŋ* *úúbó = à*
 ? please = 1PL.INCL-go-COM oil = INTERR
 Please, shouldn't we go with the oil? (F06HRABBIT-048)
- (23) *nìgàjàkà* *gê* *gállkèṭ* *gállí* *dê.*
nì-gàjàk-àŋ *g-ê* *g-állí-kèṭ* *g-állí* *dê*
 3PL-fall-GOAL SG-sorghum SG-POSS-1PL.INCL SG-POSS EMPH
 They fall onto our own sorghum. (H06HKATLAGROUP2-018)

Finally, Katla has one affix that conveys deictic 'here' (with non-directional verbs) (as in 24) and ventive 'hither' (with directional verbs).

- (24) *rèṭṭéṭ* *brîŋ.*
rèṭṭéṭ *bàrî-ŋ*
 rabbit run-DEIC
 The rabbit runs around here. (F06HRABBIT-017)

Similarly to Katla, Tima also has a large number of derivational affixes. Four of them bear formal and distributional similarities to forms in Katla: *-uk* ~ *-uk* indicating the repetition of an action (probably cognate to the iterative affix in Katla), causative *-ik* ~ *-ik* (possibly cognate to Katla's causative affix), ventive *-Vŋ* (likely to be cognate to the deictic / ventive affix in Katla) and antipassive *-ak* ~ *-ak* (likely to be cognate to the activity affix in Katla). A more in-depth comparison would probably unearth further similarities. Some of the unproductive suffixes in Katla seem to be productive in Tima (e.g., Tima has a productive transitive suffix *-i* ~ *-i*, as well as a productive middle voice suffix *-ak* ~ *-ak*) (Alamin 2012). And some forms seem to have undergone a meaning shift. For example, the unproductive prefix *à-* ~ *ò-* indicates continuity in Katla, but probably not in Tima. In fact, it is even possible that it indicates the opposite in Tima: compare Katla *lìmì* 'bite (once)' and *állìm* 'munch, bite continuously' (see Table 5b) with Tima *limii* 'sting, bite (it) (several times)' and *aləm* 'bite (it) (once)' (Alamin 2012). There are also possible relationships between derivational affixes and other categories. For example, Tima has a set of locational pronouns, and one series is based on the form *-ṭaŋ* 'indirect participant (3SG, 3PL)', which may be cognate to the applicative affix in Katla (see Schneider-Blum, this volume).

4. Outlook

Kordofanian languages are said to have rich systems of verbal morphology, and Schadeberg (1981) considers their analysis one of the most challenging

aspects within Kordofanian linguistics. Katla is no exception to this generalization: verbs constitute the word class with the most complex morphology. This paper has presented a first description of this morphology, including both inflectional (section 2) and derivational affixes (section 3), and taking comparative data from Tima into account wherever possible.

As with any first description, there is room for further investigations. One promising angle is an in-depth comparison of Katla, Julud and Tima that goes beyond the sketchy information presented in this paper. Given the close genetic relationship between Katla and Tima, it is striking that they do not share a larger proportion of their inflectional verbal morphology. They share more similarities in their derivational morphology, but these similarities are not straightforward either: a productive affix in one language is only reconstructable in the other, or a meaning component present in one language has shifted considerably in the other. A second promising angle is an in-depth lexical semantic study. Given the large range of possible meanings of each morpheme (as illustrated for the habitual extension in section 3.2), a closer look at the distribution of these meanings across the verbal lexicon is warranted: an analysis of which verbs can (and cannot) occur with which meanings, and an exploration into possible reasons. It is hoped that some of these questions can be addressed and answered in the near future.

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