

The Functions of Non-Final Verbs and Their Aspectual Categories in Northern Mao (Omotic) Narrative

Michael Ahland

California State University, Long Beach

Abstract

Northern Mao (Afroasiatic-Omotic) employs a set of non-final (medial/converb) verbs and aspectual morphology to distinguish events on the main storyline from background comment in narrative discourse. These verb-forms include same-subject (SS) and different-subject (DS) (medial verb-like) and temporally-integrated (TI) (converb-like) constructions in clause chains. While the SS and DS verbs move the storyline forward by marking sequences of main events, the TI verbs do not move the storyline forward; rather, they provide backgrounded commentary on main events. The SS and DS non-final verbs can take Perfect or Progressive aspect, which correlates with discourse function: Perfect divides discourse into major temporal sections and Progressive results in the possibility of temporal overlap (i.e. not part of the main storyline).

1 Introduction

Northern Mao (called *Màwés Aats'è* by its speakers) is one of the Mao languages of western Ethiopia. The Mao group is a primary branch of the Omotic family of Afroasiatic (Hayward 2000: 242 and Bender 2003: 3). The language is endangered and is spoken by fewer than 3,000 people in areas outside of Bambassi town (in Benishangul-Gumuz Regional State) and by a small population near Dimt'u in the Didessa valley (300 km to the east, in Oromia Regional State). A comprehensive reference grammar¹ of Northern Mao was finished in 2012 (Ahland 2012), and while the Mao languages had been called the 'least documented' of the Omotic subgroups (Bender 2000: 180), large-scale documentary and descriptive research has now begun on each of the four members of the Mao subgroup (Ganza, Hozo, and Seze, in addition to Northern Mao).

Northern Mao (NM) employs a subset of its verbal constructions and aspectual morphology to distinguish events on the main storyline from

¹ The fieldwork which resulted in the reference grammar and corpus of Northern Mao data was funded in part by a Documenting Endangered Languages grant from the National Science Foundation (#0746665) under the direction of Doris Payne. This work would not have been possible without the support of the Benishangul-Gumuz Culture Office in Asosa, the support of the Mao communities in Bambassi and Diddessa, especially Ato Yasin Ibrahim, Ato Mamo Shimagele, and Ato Tefera Ibrahim and the support and sponsorship of the Department of Linguistics at Addis Ababa University and SIL Ethiopia.

background support and comment in narrative discourse.² At the center of this system are three non-final verb constructions which can be used to form clause chains: a same-subject construction, a different-subject (i.e. switch-reference) construction, and a temporally-integrated construction (Ahland 2012: 555-61). The same- and different-subject constructions are by far the most frequently used constructions in NM narrative discourse. These two constructions can take Perfect or Progressive aspectual marking, but neither is a morphological requirement; the choice of aspect correlates with a change in function in discourse: either dividing main events in narrative into temporal sections (Perfect) or backgrounding events through establishing temporal overlap with what follows (Progressive). The temporally-integrated non-final construction is not as frequent in discourse, but it is nonetheless important to understanding how morphological distinctions are used to differentiate main and non-main events.

The discussion below begins with an overview of NM patterns relevant to typology (§2). Section 3 introduces the three non-final verb constructions and explores their morphological composition. Section 4 examines the functions of these non-final verb constructions in narrative discourse and the ways in which they interact with aspectual marking relative to their discourse function.

2 An overview of relevant Northern Mao patterns

Before turning to the discussion of non-final verbs and their interactions with aspectual marking in narrative discourse, a few preliminaries are necessary. The discussion below explores patterns that are relevant to the present study: word-order, case-marking and verbal bound pronominal markers (§2.1), the final verb category and what sets these verbs apart from the non-final verbs (§2.2), and a definition of ‘sentence’ for Northern Mao (§2.3).

2.1 Northern Mao alignment: Word order, case marking, and bound pronominal marking

NM exhibits a generally rigid OV type pattern in syntax (Ahland 2012: 47). Overt subjects are typically in first position in the clause (1-3). All subject noun phrases (that is, both A and S) are obligatorily marked

² The textual corpus from which the narrative portions are taken is expanded from that on which the Northern Mao grammar (Ahland 2012) was largely based. To date, there are 50 fully interlinearized texts most of which are in a database while others are in a collection of texts which have been compiled for a literacy project. There are also many smaller bits and pieces of natural discourse in sets of field notes which have been used in this study.

with the /-iʃ/ Subject Case marker. Subjects also control bound pronominal marking on the final finite verb of the sentence (3SG³ is zero-marked on realis verbs (1), Ahland 2012: 375).⁴

(1) *es-iʃ* *ha-∅-kí-ti-á*
 person-SBJ AFF-3SG-come-PF-DECL
 ‘A person has come.’

(2) *tí-ʃ* *ha-tí-kí-á*
 1SG-SBJ AFF-1SG-come-DECL
 ‘I came.’

(3) *íʃ* *mùnts’-iʃ* *kan-(ná)*
 DEF woman-SGJ dog-(OBJ)
ha-pí-gà-m-biʃ-á
 AFF-kill-FUT-3SG-NPST:AUX-DECL
 ‘The woman will kill a dog.’

Objects are positioned before the verb (3) and may be marked with the /-na/ (or [-la] after [l]) Object Case marker. In the case of double-object (ditransitive constructions), the first object (whether THEME or RECIPIENT) is obligatorily marked with the /-na/ case marker and the second object is optionally marked with the object case marker (4). The order RECIPIENT-THEME is also attested in natural discourse (cf. Ahland 2012: 595).

³ In the remainder of the data, 3SG is not indicated with a /∅-/ prefix. The absence of any other subject marking on final realis verbs themselves indicates the 3SG subject. On irrealis verbs, the 3SG subject is overtly marked by the /-m/ suffix (as in ex. 3).

⁴ The Northern Mao data are written in an IPA-based system that generally only represents those elements which are contrastive (i.e. phonemic). The only exception to this tendency is the marking of tonal downstep with a superscript arrow. While downstep is fully predictable from noun classes, the classes themselves are not always apparent on the surface. The tone levels are indicated with acute (high tone) and grave (low tone) diacritics. The absence of tonal marking signifies a mid tone.

- (4) *háts'à tí-f fapków-nà p'if-(na)*
 tomorrow 1SG-SBJ shoe-OBJ child-(OBJ)
ha-tà-gà-t-bíj-á
 AFF-give-FUT-1SG-NPST:AUX-DECL
 'Tomorrow, I will give shoes to a child.'

The Object Case marker is required when objects are positioned before the subject, as in instances of focus (5).

- (5) *nogdów-nà íf p'if-ìf ha-int'-á*
 lion-OBJ DEF child-SBJ AFF-see-DECL
 'The child saw *a lion!*'

If one compares the Object Case marker (OBJ) in Northern Mao with the Subject Case marker (SBJ), the former is less marked functionally (i.e. the OBJ Case marker is used in more functions than the SBJ Case marker). In addition to its use as a marker of objects, the /-na/ case marker also serves to (optionally) mark goals (6), and serves as an obligatory marker of standards in comparative constructions (7).

- (6) *àsós-(nà) ha-tí-hów-á*
 Asosa-(OBJ) AFF-1SG-go-DECL
 'I went to Asosa.'

- (7) *kan-íj àndúr-ná kè̃m-ít-è*
 dog-SBJ cat-OBJ be.big:INF-REL-TV
 'The dog is bigger than the cat.'

The fact that the Object Case form is functionally unmarked while the Subject marker is used only (and always) for grammatical subjects is somewhat similar to the so-called marked-nominative alignment pattern (see König 2006 and 2008) attested in other languages of the East Africa area. An important difference from the marked-nominative patterns identified by König is that the citation form of a noun in NM is a bare stem noun with a terminal vowel and is never the same as the object-marked 'accusative' noun form, which is typical of marked nominative systems (cf. the discussion in Ahland 2012: 668). In short, NM's alignment system can be characterized as a marked S/A vs. marked P system (cf. Creissels

2009: 453).⁵

2.2 The Final verb category

The NM verbal system can be divided into Final and Non-Final verbal categories.⁶ Final verbs are the most finite in NM and are marked, not only by their final position in the sentence, but also by the requirement of bound pronominal subject marking. Final verbs can take a realis or irrealis form, marked as such by their morphological item-arrangement. Realis verbs mark subject through bound pronominal prefixes (examples 1, 2, 5, and 6, above), while irrealis verbs code the subject through bound pronominal suffixes (examples 3 and 4, above).

Final verbs must also carry an utterance-type/mood marker: Declarative, Interrogative, Imperative, or Jussive (Ahland 2012: 468ff). While different utterances or moods may require multiple morpho-syntactic differences in the verbal constructions,⁷ all also involve a verb-final utterance-type/mood marker, which also serves as an indication of sentence completion.⁸

Declarative

- (8) *kà:l-là* *ha-tí-mí-ǎ*
porridge-OBJ AFF-1SG-eat-DECL
‘I ate porridge.’

⁵ While Creissels (2009) uses case terminology of ‘antiaccusative’ and ‘accusative’ for the S/A and P markers in this system, I have elected to use the terms ‘subject’ and ‘object’ here as these may be more widely understood by the reader. Additionally, it should be noted that the Subject case is more marked functionally than the Object case in Northern Mao. The use of the term ‘antiaccusative’ suggests that the accusative case should be the more marked in the system. In Northern Mao, if one case should be viewed in terms of another, it seems the Object case might be better called ‘non-nominative’. The terms ‘subject’ and ‘object’ are used to avoid such issues.

⁶ Non-final verbs are characterized as non-final within a clause chain, and dependent but not subordinate. They are defined and explored in §3. As will be seen, while one of the non-final verbs in NM patterns like a converb (cf. Haspelmath 1995), two others function like medial verbs (cf. Haiman 1987).

⁷ There are multiple subtypes for these utterance types (cf. Ahland 2012: 468ff, for a comprehensive description); only simple examples are provided here for the sake of illustrating how clauses are marked as fully finite, complete sentences in Northern Mao.

⁸ Verb roots are marked tonally as either finite or infinitive stems (cf. Ahland 2012: 360); the infinitive stem is used in a wide variety of verbal constructions, including negatives, imperatives (see ex. 10), and some jussive constructions.

Interrogative

- (9) *kó-ná tí-mí-à:*
 what-OBJ 1SG-eat-INTR
 ‘What did I eat?’

Imperative

- (10) *kà:l-là mì-wà*
 porridge-OBJ eat:INF-2PL:IMP
 ‘(All of you) Eat porridge!’

Jussive

- (11) *kà:l-là tí-mí-tà*
 porridge-OBJ 1SG-eat-JUSS
 ‘Let me eat porridge.’

As the most finite verbs in the utterance, Final verbs are the only potential carriers of tense. Irrealis verbs mark tense overtly (Future vs. Non-future) while Final Realis verbs imply a non-future temporality that is not grammaticalized (Table 1). On Irrealis verbs, only negative verbs can be marked with the ‘zero’ Non-future (i.e. the absence of the Future suffix).⁹

Table 1. Temporality and tense on Final verbs

| Realis | Irrealis | |
|--|--|--|
| non-future temporality (on affirmative verbs only) | Future Tense /-gà/ (affirmative or negative) | Non-future Tense /-Ø/ (on negative verbs only) |

Examples (12) and (13) illustrate the Irrealis verb’s Future and Non-future tense.

Future Irrealis

- (12) *ha-kí-gà-tí-bíj-á*
 AFF-come-FUT-1SG-NPST:AUX-DECL
 ‘I will come.’

⁹ All negative Final verbs are constructed with the Irrealis verb form.

Non-Future Irrealis

- (13) *ki-á-tí-bíj-á*
come:INF-NEG-1SG-NPST:AUX-DECL
'I did not come.'

Final Realis verbs do not carry any overt morphological tense marker. The Realis verb form itself expresses a non-future temporality in its most basic form (14).

Realis (non-future temporality)

- (14) *ha-tí-jé:ts'-á*
AFF-1SG-run-DECL
'I ran.'

Since only Final verbs can express tense (either through overt coding as in the Irrealis verb or through implication as in the basic Realis verb), the temporal setting of the Final verb has scope over the entire sentence, including non-final verbs in clause chains (see §3).

The basic Realis verb can be modified to code various aspectual and temporal distinctions. In some cases this modification involves the use of auxiliary elements as in the Progressive construction (examples (15) and (16)). These auxiliary elements further specify the Realis verbs' non-future temporality as Past or Non-past; the set of auxiliaries are grammaticalized from existential and copular forms (cf. Ahland 2012: 460 for a complete description of the full set). In this study, *progressive* refers to an aspectual coding which marks an event as ongoing at the referenced time (Bybee et al. 1994: 126).

Past Progressive (Realis + Past Aux)

- (15) *hí-kí-èt* *ha-tí-mí-t* *bitè*
3SG-come-TI AFF-1SG-eat-REL PST:AUX¹⁰
'I was eating when s/he came.'

¹⁰ The use of the past auxiliary (and also copular forms) make up the only exceptions to the requirement for utterance-type/mood markers on final verbs. There is no utterance-type marker on these forms, but all other final verbs in the language take them (cf. Ahland 2012: 459).

Non-Past Progressive (Realis + Non-Past Aux)

- (16) *to:lo ha-tí-mí bif-á*
now AFF-1SG-eat NPST:AUX-DECL
'I am eating now.'

Other aspectual constructions involve suffixation to the stem of the Realis verb; these include Perfect, Past Habitual, Completive, Durative, Iterative/continuative, and Non-past Habitual, cf. Ahland 2012: 433 for illustration in wider discourse contexts).

In NM, there are two Perfect aspect markers, one marked by the suffix /-ti/ (17) and the other derived rather recently from the verb 'have' /-kòt'/ (18) (Ahland 2012: 437). No difference in function between these two perfect suffixes has been observed.

Perfect with /-ti/

- (17) *múnts'-ìf ha-kí-ti-á*
woman-SBJ AFF-come-PF-DECL
'A woman has come.'
(implication: still present at location)

Perfect with /-kòt'/

- (18) *jéf kop-èt nogdów-nà han-int'-kòt'-á*
DIST road-LOC lion-OBJ 1DU-see-PF-DECL
'We two have seen a lion on that road.'
(implication: may still be present)

Without the Perfect suffixes, examples like (17 and 18) do not offer such an implication: /múnts'-ìf ha-kí-á/ 'A woman came.'
According to native speakers, there is no implication that the 'woman' is still present (cf. Ahland 2012: 435).

The term 'perfect' is used here in accord with Comrie's definition, indicating a "continuing present relevance of a past situation" (Comrie 1976: 52). In (17) and (18), each of these Perfect suffixes triggers an implication of particular relevance between a past event and the present time.¹¹ As Comrie notes (1976: 52), perfect is itself an admittedly strange aspect, linking past with present, but some functions of the so-called

¹¹ Comrie calls this use of perfect the 'perfect of result' (1976: 52).

Perfect suffixes do appear to be more aspectual (cf. §4).

While the Progressive and Perfect aspects can be expressed on Final verbs as well as on non-final verbs (see §4), the Past habitual (19), Completive (20), Durative (21), Iterative/continuative (22) and Non-past habitual (23) cannot; these aspectual distinctions are found only on Final Realis verbs.

Past Habitual

- (19) *Mùts'á-t ha-tí-hadèm-òw-á*
Muts'a-LOC AFF-1SG-work-PST:HAB-DECL
'I used to work in Muts'a Mado.'

Completive

- (20) *kwalla ha-hadèm-ts'e:l-á*
yesterday AFF-work-finish-DECL
'I finished work yesterday.'

Durative

- (21) *kwalla ha-kò-hadèm-á*
yesterday AFF-DUR-work-DECL
'I worked for a while yesterday.'

In examples (20) and (21), the interpretation is a temporal past even when 'yesterday' is not present. This past interpretation is typical of Realis verbs that involve activities in Northern Mao.

Iterative/Continuative

- (22) *íʃ pʔíʃ-íʃ ha-òns-òns-á*
DEF child-SBJ AFF-cough-cough-DECL
'The child coughed and coughed / coughs and coughs.'

Non-past Habitual

- (23) *ha-tí-hadèm-hadèm bíf-á*
AFF-1SG-work-work NPST:AUX-DECL
'I am always working.'
Literally, 'I am working and working.'

Since the aspectual distinctions illustrated in (19-23) do not figure into the discussion of non-final verbs themselves, they are not discussed in detail here. Their relevance lies only in that they help to differentiate the Final verb category from the non-final verb category.

Of these aspectual distinctions coded on Final Realis verbs, Final Irrealis verbs can take only the /-ti/ Perfect marker (24). Final Irrealis verbs cannot take the /-kòt'/ Perfect marker or any of the other aspectual distinctions found on final realis verbs

- (24) *ki-tó* *hí-bíj-ij*
 come:INF-NEG 3SG-EXIST-DS
tí-f *pònd-ti-gà-t-ná*
 1SG-SBJ arrive-PF-FUT-1SG-AUX
 'I will have arrived before he comes.'

Final verbs, then, are marked by their final position, the requirement of bound-pronominal subject marking, the utterance-type marker, tense, and (in the case of Realis verbs, at least) a wide range of aspectual possibilities.

2.3 A note on the Northern Mao sentence

The last element which needs to be considered before turning to the discussion of non-final verbs is the notion of the NM sentence. For the purpose of this study, I define a NM sentence as minimally a clause which includes a final verb. As will be seen in the discussion below (in both §3-4), it is not uncommon to have many clauses joined in chains into a single sentence. In some cases, I have encountered entire texts made up of a single sentence, and it's by no means unusual to find five or more clauses in a single NM sentence. In terms of discourse, then, it could be argued that the notion of SENTENCE in a language like English is quite limited in terms of the typical number of clauses when compared with the notion of sentence as defined here for NM. Northern Mao sentences frequently correspond to paragraphs and even longer sections of discourse in English.

3 Northern Mao's non-final verb types

Section 3 explores preliminaries related to the morphological composition of NM's non-final verbs: subject marking and non-final verb types (§3.1), tense-inheritance from Final verbs (§3.2), aspectual marking possibilities (§3.3), and event sequence vs. overlap relations (§3.4).

Like many OV type languages (cf. Longacre 1985, Haiman &

Thompson 1988), NM exhibits widespread clause chaining where multiple clauses are typically combined into a single complex sentence, without being subordinated through operations such as nominalization, relativization, or complementation. In NM, three types of morphologically-marked non-final verb constructions show their relation to the following clause: those having the same subject (SS) as the following clause, marked with /-in/ (25); those having a different subject (DS) from the following clause, marked with /-ij/ (26); and those expressing an event temporally integrated (TI) or overlapping with the event of the preceding clause (regardless of subject co-reference), marked with /-et/ (27-28).

Non-final verb Type 1: same-subject

- (25) *kà:l-là mí-in ha-hów-j-á*
 porridge eat-SS AFF-go-AWAY-DECL
 ‘S/he ate porridge and went away.’

Non-final verb Type 2: different-subject

- (26) *kà:l-là hí-mí-ij ha-hów-j-á*
 porridge 3SG-eat-DS AFF-go-AWAY-DECL
 ‘S/he ate porridge and (someone else) went away.’

Non-final verb Type 3: temporally-integrated with same-subject

- (27) *kà:l-là tí-mí-èt ha-tí-hów-j-á*
 porridge 1SG-eat-TI AFF-1SG-go-AWAY-DECL
 ‘While I ate porridge, I went away.’
 (walking while eating)

Non-final verb Type 3: temporally-integrated with different subject

- (28) *kà:l-là hí-mí-èt ha-tí-hów-j-á*
 porridge 3SG-eat-TI AFF-1SG-go-AWAY-DECL
 ‘While s/he ate porridge, I went away.’

The decision to use the term ‘non-final’ for the first verb type in each sentence in (24-28) is discussed in the introduction to §4, where the discourse function of these verbs and their clauses is explored more fully.

In NM, the non-final verb category is coherent on certain structural grounds. As seen in examples (25-28) above, each non-final verb is marked as such by a suffix. Each type of non-final verb can co-occur in clause chains involving the other non-final verb types. The non-final verb class is also differentiated from final verbs by four things that will be discussed in the subsections to follow: the lack of obligatory morphological subject marking on the verb form, the absence of utterance-type markers, the lack of tense marking and inheritance of temporality (either from the Irrealis Final verb tense or the Realis Final verb temporal implication), and a strictly limited set of aspectual possibilities (progressive and perfect). Section 3 concludes with a discussion of the function and meaning of these non-final verb constructions, highlighting an important distinction: the expression of event sequences vs. overlap.

3.1 Subject marking and non-final verbs

Bound pronominal subject marking is rarely used in the SS non-final constructions (as observed in ex. 25) (cf. Ahland 2012: 563ff). And even in DS constructions, which tend to carry subject markers (as observed in ex. 26), it is not unusual to find lack of subject marking on the DS non-final verb (29) in cases where the discourse context makes the subject clear.

- (29) *es-ìf uns kí-in uns-na pòn-títit-ìf*
 person-SBJ house come-SS house-OBJ arrive-PF-DS
hìfki dù:l-ìf dúr-in ìf-nà ha-pí-á
 one hyena-SBJ wait-SS 3SG-OBJ AFF-kill-DECL
 ‘A person came home and after he had arrived at the
 house, a hyena was waiting and killed him.’

In (29) there is no subject marking on the DS-marked non-final verb ‘arrive’. When simple examples like (29) have been checked with native speakers, they appear to accept DS non-final verbs with or without subject marking. In other examples (especially in complicated discourse where overt NPs are lacking), subject markers appear to be preferred on DS-marked non-final verbs.

The data contain only a few examples where subject marking is not found on the TI non-final verb (cf. exs. 27-28). In most instances where subject-marking is absent, it is clear from context whether the same subject is shared by verbs chained together. In (30), for instance, one may assume that the subject of ‘sleep’ is not the same as the subject of

‘arrive’.¹² In (31), on the other hand, the acts of running and falling are connected, allowing the first clause to be interpretable even though subject marking is missing.

(30) *há:l-èt kí-in tí-pòn-á*
 sleep-TI come-SS 1SG-arrive-DECL
 ‘While he slept, I came and arrived.’

(31) *uns jé:ts’-èt ha-tí-pèk-á*
 house run-TI AFF-1SG-fall-DECL
 ‘While I ran home, I fell.’

Nonetheless, what’s clear from examples like (25, 29, 30, 31) is that subject marking is not a morphological requirement on non-final verbs, unlike on final verbs.

3.2 Tense-inheritance and non-final verbs

No non-final verbs have their own tense marking. However, all non-final verbs and their clauses are marked by the fact that the tense or temporality setting of the Final verb has scope over them. Examples (32-33) illustrate the same non-final verb interpreted as non-future and future, due to the different tenses of the final verbs.

(32) *àsúg hí-in fapków jén-á.*
 market go-SS shoe buy-DECL
 ‘S/he went to the market and bought shoes.’¹³

(33) *àsúg hí-in fapków jén-gà-m-bìf-á.*
 market go-SS shoe buy-FUT-3-NPST:AUX-DECL
 ‘S/he will go to the market and buy shoes.’

Examples (34-35) demonstrate the tense-inheritance on DS non-final verbs,

¹² The specific context of this utterance involved a discussion where one person was describing how he walked up (arriving) while his friend was sleeping.

¹³ This sentence and others that involve Final Realis verbs denoting activities or actions (i.e. not states) cannot be interpreted as expressing events which are occurring at the time of speech. The Final Realis verb would have to be marked with the non-past Progressive to denote such a present temporality.

and examples (36-37) do the same with the TI non-final verbs.

- (34) *hí-hí-ìf fapków tí-fén-á.*
 3SG-go-DS shoe 1SG-buy-DECL
 ‘S/he went (left), and I bought shoes.’
- (35) *hí-hí-ìf fapków fén-gà-t-bìf-á.*
 3SG-go-DS shoe buy-FUT-1SG-NPST:AUX-DECL
 ‘S/he will go (leave), and I will buy shoes.’
- (36) *fapków tí-fén-èt tí-ŋ ʼma:gèw-ìf int’-á*
 shoe 1SG-buy-TI 1SG-GEN friend-SBJ see-DECL
 ‘While I was buying shoes, my friend saw me.’
- (37) *fapków tí-fén-èt*
 shoe 1SG-buy-TI
tí-ŋ ʼma:gèw-ìf int’-gà-m-bìf-á
 1SG-GEN friend-SBJ see-FUT-3-NPST:AUX-DECL
 ‘While I will be buying shoes, my friend will see me.’

3.3 Aspect on non-final verbs

Progressive and Perfect aspect are the only aspectual distinctions which have been attested on non-final verbs. This limitation appears to be directly related to functional needs and will be discussed in detail in §4. At present, the discussion will focus on simply illustrating the forms. Only the SS and DS non-final verbs can take these aspectual markers. The TI non-final verb has not been observed with any aspectual marking.¹⁴

Progressive aspect on non-final verbs is expressed most frequently by [bɸ] (38-39), a reduced form of the Non-past auxiliary /bìf/ used on Final Irrealis verbs (exs. 13 and 14 above) and Realis Non-past Progressive verbs (16). In the examples below, the event expressed by the progressive-marked non-final verb may or may not overlap with the

¹⁴ The TI non-final verb, due to its temporally-integrated function with respect to event structure, necessarily has a progressive meaning. This is likely the reason why Progressive aspect is not found marked on these verbs. In a similar fashion, the use of Perfect to note one event as sequentially preceding the following event (see exs. 40-42) is likely the reason why the Perfect marking is not attested on the TI non-final verb.

following event. As a result, two readings are given in the free translation (cf. Ahland 2012: 578-81).

- (38) *tí-f m̀̀m̀̀s mí-bf-in ha-tí-hów-j-á*
 1SG-SBJ eat:INF-thing eat-NPST:AUX-SS AFF-go-AWAY-DECL
 ‘I was eating and (then) left.’ / ‘While I was eating, I left.’

- (39) *tí-f m̀̀m̀̀s tí-mí-bf-íf*
 1SG-SBJ eat:INF-thing 1SG-eat-NPST:AUX-DS
tí-ŋ ma:gèw-ìf ha-hów-j-á
 1SG-GEN friend-SBJ AFF-go-AWAY-DECL
 ‘I was eating, and (then) my friend left.’ /
 ‘While I was eating, my friend left.’

Perfect aspect is most often expressed on non-final verbs by /-tit/ or [-titit:] (related to the /-ti/ form on final verbs) (40-41).

- (40) *íf-kol-té kí-tit-ín mí-and-á*
 3-PL-SBJ come-PF-SS eat-NSG-DECL
 ‘After they came, they ate.’
 Literally, ‘They have come, and they ate.’

- (41) *í-té kí-tit-íf ha-hój-gà-n-bif-á*
 3SG-SBJ come-PF-DS AFF-go-FUT-1DU-NPST:AUX-DECL
 ‘After s/he comes, we’ll both go.’
 Literally, ‘S/he has come, and we will go’

Perfect aspect may also be expressed by /-kòt’/ on non-final verbs, in the same way as it is used on final verbs (42).

- (42) *hek’-ít es-nà tí-mé:nt-kòt’-íf ha-já:p-and-á*
 die:INF-REL person-OBJ 1SG-tell-PF-SBJ AFF-cry-NSG-DECL
 ‘After I told about the dead person, they wailed.’
 Lit., ‘I have told about the dead person, and they wailed.’

The function of Perfect on these non-final verbs appears to be to

highlight that the event expressed with the Perfect-marked non-final verb occurs before the following event (i.e. as a sequence and not any other possible reading such as cause/effect or manner, see §3.4 below). The use of perfect aspect to signal that an event or action is prior to another is commonly attested cross-linguistically (Givón 1982; Bybee et al. 1994: 54). The discourse function of Perfect on non-final verbs features prominently in the discussion in §4.

3.4 Event Sequence vs. overlap

The three non-final verb types can be grouped into two classes relative to expression of temporal sequence: 1) those which most typically indicate a chronological sequence relationship with the following clause (SS and DS, cf. examples 25 and 26) and 2) the TI non-final verb which indicates a chronological overlap relation with the following clause (cf. examples 27 and 28). This binary split based on interpretation/reading and structure is typologically common in clause chaining systems, according to Longacre (1985: 264). Additional readings for the NM SS and DS non-final verbs are also possible, as discussed below.

The non-final verb in example (43) can simultaneously be interpreted as having a sequential and a cause relation to the event expressed in the final clause.

- (43) *p'if-if kòts'-ín ha-já:p-á*
 child-SBJ laugh-SS AFF-cry-DECL
 'The child laughed and (then) cried.' /
 'Because the child laughed (so hard) he cried.'

The cause and effect reading of (43) is likely due to inference based on the commonly experienced real-world relationship between the two events: a child's fear may lead naturally to crying.

Affirmative SS non-final clauses can sometimes be read as expressing the manner of achieving or carrying out an event expressed in a final clause (44). But as with cause-effect readings, the manner vs. sequence reading is not always easy to tease apart. The 'manner' interpretation notwithstanding, a sequence reading is still possible.

- (44) *tí-f kan-ná ts'aŋ-ín ha-tí-pí-á*
 1SG-SBJ dog-OBJ kick-SS AFF-1SG-kill-DECL
 'I kicked a dog and killed it.' /
 'By kicking a dog I killed it.'

The most common manner use of the SS non-final verb involves a non-final verb of movement, followed by ‘come’ or ‘go’ to express direction toward (45) or away (46) from the deictic center.

- (45) *bí-t ku:l-èt pʔif kót-és-ìf*
 EXIST-REL middle-LOC child have:INF-NEG:REL-SBJ
jé:tsʔ-in kí-in
 run-SS come-SS
 ‘Meanwhile, those who didn’t have a child ran here...’
 (from text 17.4, A Short History of Didessa)

- (46) *jó:f-ná intʔ-in jé:tsʔ-in ha-hów-j-á*
 snake-OBJ see-SS run-SS AFF-go-AWAY-DECL
 ‘S/he saw a snake and ran away.’ /
 ‘S/he saw a snake and left running.’

DS non-final verbs can also be interpreted as exhibiting a cause relation to an effect expressed in another clause (47). But again, as illustrated with (43-46), a sequence reading is still possible.

- (47) *pa:ltʔ-ìf entʔ-pʔif-nà hí-kòtsʔ-ìf*
 girl-SBJ male-child-OBJ 3SGlaugh-DS
(í-té) uns-fál ha-jé:tsʔ-á
 3SG-SBJ home-way AFF-run-DECL
 ‘A girl laughed at a boy, and he (the boy) ran home.’ /
 ‘Because a girl laughed at a boy, he ran home.’

No clear indication of a manner interpretation for a DS non-final verb/clause has been attested in the NM corpus. In all instances, the SS and DS non-final clauses express sequence of events and other readings are inferences based on speaker/hearer knowledge of the real world and the nature of events as commonly experienced. The TI non-final verb is not interpretable as expressing cause of an effect or the manner in which an event expressed by another verb is carried out.

Thus far, the set of non-final verbs in NM has been defined by structure: the presence of non-final verb markers and the lack of obligatory subject marking, utterance-type marking, and to a lesser extent the aspectual possibilities common to realis final verbs. At this point, the discussion turns to the function of non-final verbs and their morphological

aspectual categories in narrative discourse.

4 The function of non-final verbs and their aspectual categories in narrative discourse

Close examination of the meaning and distribution of the NM non-final verbs in discourse suggests that the non-final verb category, while structurally defensible as described above, does not hold together well functionally. The SS and DS non-final verb forms are highly frequent in discourse, prototypically occur in long chains of clauses, and express sequential relations of events. In contrast, the TI non-final verb form is far less frequent and expresses temporal overlap of events, not successive events.

In the typological literature on clause-chaining, a variety of terms have been used for the specialized verb forms which head the non-final (chained) clauses (cf. Rapold 2007). For those verb forms which prototypically occur in chains and express sequential relations and are dependent and coordinate (not subordinate), the term ‘medial verb’ is frequently used (cf. Longacre 1985: 269; Haiman 1987). These prototypically chained and sequential forms appear to be distinct from the phenomenon sometimes named ‘converb’, which at least in Haspelmath’s widely-accepted definition, is primarily and prototypically a non-finite form used for adverbial modification of other verbs and clauses/sentences (Haspelmath 1995: 7). With particular relevance to the languages of Ethiopia, Azeb Amha and Dimmendaal (2006: 396) use the term ‘converb’ in a manner that includes both adverbial modification (like Haspelmath’s definition) but also verb forms marking sequences of events, like prototypical medial verbs in clause chains. In some languages, the terminological choice between ‘medial verb’ vs. ‘converb’ is not completely straightforward.

This is the case in NM and is in fact the reason why the label ‘non-final’ has been used for this set of verb forms (cf. the discussion in Ahland 2012: 555-61).¹⁵ Careful examination of these verb forms in NM narrative discourse shows that while the SS and DS non-final verbs form a category consistent with the notion of medial verbs, the TI non-final verb behaves more like Haspelmath’s converb.

In the longer examples below, every line where a final verb is found, which by definition marks the end of a sentence in the narrative, is marked with [.] to the right of that line of text. It is not unusual to find final verbs in quoted discourse within narrative embedded under a ‘say’

¹⁵ The term ‘non-final’ has been used for chained clauses and their verbs in OV type languages by others; cf. Longacre (1985: 264), DeLancey (1991), and Andvik (2010), among others.

verb, where the ‘say’ verb itself is non-final (e.g. ex (50), lines 4 and 5 and the relevant discussion below).

4.1 *Non-final verb choice and the marking of main and non-main events*

While the SS and DS parameter is important to any discussion of NM non-final verbs, an equally important parameter is whether the verb form expresses an event as a sequence in chronological order before the following verb’s event, or whether the event is interpretable as overlapping temporally with the event expressed by the following verb (cf. the discussion in §3.4 above). This second parameter is related to the function of non-final verbs and the expression of main vs. non-main events in narrative discourse. The basic narrative storyline is a succession of events which themselves are commented on, around which background information and/or a setting may be provided. SS and DS non-final verbs express the succession of events, as do Final verbs (see Table 2). In contrast, TI non-final verbs, and various types of subordinate clauses, express events which are not in succession, i.e. not part of the basic storyline (Table 2).

Table 2. Verb types and main vs. non-main events in narrative

| Verb Types | | |
|------------------------|-------------|---------------------|
| Main Event | Final | SS and DS non-final |
| Non-Main Events | Subordinate | TI non-final |

In §4.2-4.3, the function of Progressive and Perfect aspect on the SS and DS non-final verbs will be discussed relative to the domains of main or non-main events. Suffice it to say for now that Progressive and Perfect aspects impact the narrative function of non-final verbs.

4.1.1 *Main event marking: SS and DS non-final verbs*

Example (48) contains the first seven lines of a narrative text recounting Northern Mao hunting practice. These seven lines form one Northern Mao sentence—the end being marked by the declarative suffix at the end of line 8. These lines illustrate the role of the SS non-final verb form in moving the storyline forward. Of the 16 verb forms in these eight lines, 13 are SS non-final verbs. The non-final verbs express the events of going to the bush, hunting and killing wild animals, attacking as a group, hitting (striking) an elephant, skinning the animal, placing the meat on the ground, returning to the hunt, and then dividing up the meat. The final verb, which also expresses a main event, expresses the return home after the hunt.

- (48) 1 *jeníʃ bar-et màw-és-wol-íʃ*
old generation-LOC mao-person-PL-SBJ
‘In the old days, the Mao people
- 2 *ma:r hí-in kjamb-k'ets' hí-in, ma:r hí-in*
bush go-SS hunt:INF-land go-SS bush go-SS
went out to the bush, to the hunting place, and they went
out to the bush
- 3 *oʃk-nà kjámb-in pí-in twàg íʃkol-kam-ʃín*
meat-OBJ hunt-SS kill-SS antelope 3PL-find-COND
and hunted meat and killed it, and if they found antelope,
- 4 *twàngèlè íʃkol-kam-ʃín twàngèlè hú:l-in*
elephant 3PL-find-COND elephant attack.as.group-SS
or if they found elephant, they attacked it together,
- 5 *héz-in oʃk-nà óʃk-in íʃ k'ets'-et kòt'-titit:-ín*
hit-SS meat-OBJ skin-SS DEF ground-LOC have-PF-SS
and killed it and skinned it and put the meat on the ground
- 6 *pàt'wánè hí-in kjámb-titit:-ín*
again go-SS hunt-PF-SS
and then they went out again and after they hunted,
- 7 *oʃk-nà téns-in téns-titit:-ín*
meat-OBJ divide-SS divide-PF-SS
they divided up the meat, and after they have divided up
the meat,
- 8 *uns ha-wí:ʃ-and-á [.]*
house AFF-return-NSG-DECL
they returned home.’
(from Mamo Shimagele, txt 01)

The main storyline of (48) is interrupted by two adverbial conditional clauses (lines 3 and 4) ‘if they find antelope,’ and ‘if they find elephants’. It may be the speaker decided to change from talking about hunting antelope to talking about hunting elephants. Regardless, neither of these conditionals does much to move the plot forward; rather the second conditional serves to set up and introduce the events which immediately follow. After the second conditional, the storyline resumes with the hunt

(in the second half of line 4).

Text sample (49) illustrates a similar pattern. This excerpt is from the beginning of an account of burial practices among the Northern Mao. Of the 16 verbs in the nine lines, there are eight SS non-final verb forms and three final verbs marked by the declarative suffix. All these verb forms express the main events of the narrative: washing the corpse, wrapping it for burial, repeating the washing, taking the body away for burial, burying the body, and then washing the dead man's wife for purification.

Additional verb forms which express non-main events include four conditional verb forms (lines 1, 2, 7, and 8), and a relative clause (also in line 7). The function of these adverbial (conditional) and adnominal (relative clause) forms stands in contrast to the job performed by the non-final verbs as carriers of the main storyline.

- (49) 1 *bà:b-kol bar-et es-ìf hí-hék'-fîn*
 father-PL generation-LOC person-SBJ 3SG-die-COND
 'In our father's generation, if a person died,
- 2 *ent'-ìf hí-hék'-fîn ent'ish tùwàn kúf'á [.]*
 male-SBJ 3SG-die-COND male-SBJ corpse wash-DECL
 if a man died, the men washed the body.
- 3 *tùwàn-nà ent'-ìf kúf-in kafèn-ín*
 corpse-OBJ male-SBJ wash-SS wrap.for.burial-SS
 The men washed the body and wrapped it for burial,
- 4 *hek'-tùwàn te:zè k'and-ín kúf'á [.]*
 die:INF-corpse three repeat-SS wash-DECL
 having repeated (the washing) three times.
- 5 *te:zè k'and-ín kúf-in kafèn-ín wo:s-ín*
 three repeat-SS wash-SS wrap.for.burial-SS take-SS
 They repeat three times, wash the body, wrap the body and
 take the body
- 6 *hí'-up'-tit-ín*
 3SG-bury-PF-SS
 and then after they bury it,
- 7 *múnts' hí-hék'-t es hí-bíj'-fîn*
 woman 3SG-die-REL person 3SG-EXIST-COND
 if the person who died has a wife,

8 *ent'-if hí-hék'-fîn íf níkne-kol-té*

male-SBJ 3SG-die-COND 3SG sister-PL-SBJ

if a male died, his sisters

9 *ent' esto:k-ìf íf mùnts'-nà kúf'á [.]*

male descendant-SBJ 3SG woman-OBJ wash-DECL

and male descendants wash his wife.'

(from Tato Buna, txt. 13)

Text sample (50) involves more complicated discourse and illustrates both the SS non-final verb and the DS non-final verb moving the storyline forward. This short text is provided in its entirety. The narrative recounts the story of a young boy who goes to fetch water and returns home empty-handed because he met up with a lion which chased him. The elders went to find the lion but returned without finding one and so the boy went back out and successfully drew the water from the river. A total of 15 SS and DS non-final verb forms (nine SS and six DS forms) and the three final verbs provide the main events of the story.¹⁶ I do not count the final verb forms (one interrogative and one declarative form) which appear in dialogue (lines 6 and 7) as part of the main events. The story actually continues after each section of reported speech through the use of DS non-final verbs, suggesting that the main sentence structure is not impacted by the embedded quotes contained therein.

There is one DS non-final verb (in line 9) that is problematic for classification as expressing a main or non-main event. This form is the negative existential and expresses that the lion 'was not there.' It is not clear whether the predication of the absence of existence ought to be considered a 'main' event. Certainly, the absence of the lion is important to the storyline. Regardless of the status of the negative existential, the storyline resumes with 'they didn't find' any lion and returned home.

(50) 1 *jèníf bar-èt hífkì p'íf-ìf wam hí-hí-ìf*

old generation-LOC one child-SBJ river 3SG-go-DS

'In the old days, a child went to the river

¹⁶ Two of the SS non-final verbs are marked with /-wá/ NEG, the SS negative non-final marker (lines 3 and 5). There are multiple strategies for negating non-final verbs, summarized in Ahland 2012: 584. While these are negative verbs, the action of not drawing water is clearly an important event (or perhaps non-event) which leads to future action in the storyline; for this reason, these two negative non-final verbs are counted as main events.

- 2 *nogdów-ìf hí-pòf-íʃ*
lion-SBJ 3SG-chase-DS
and a lion chased him;
- 3 *ha:ts²-nà wòk²-wá wíʃ-kj-á [.]*
water-OBJ draw-NEG return-TOWARD-DECL
the child returned home without drawing water.
- 4 *íʃ pʔíʃ-ìʃ jé:ts²-in uns hí-pòn-íʃ*
DEF child-SBJ run-SS house 3SG-arrive-DS
The child ran home and arrived.
- 5 “*nú:níʃ ha:ts²-nà wòk²-wá*
why water-OBJ draw-NEG
“Why without drawing water
- 6 *hì-wíʃ-kj-à:” íʃ-kol-wi-íʃ*
2SG-return-TOWARD-INTR 3-PL-say-DS
did you return?“ they said.
- 7 “*wam-ét nogdów-ìʃ tí-ná pòf-kj-á*”
river-LOC lion-SBJ 1SG-OBJ chase-TOWARD-DECL
“‘At the river, a lion chased me!’”
- 8 *íní wi-íʃ*
FOC say-DS
he said.
- 9 *ʃawá nik-ol-íʃ íʃ-kol-hi-íʃ*
quickly father-PL-SBJ 3-PL-go-DS
Quickly the fathers went
- 10 *nogdów-ìʃ íʃ ku:l-èt pá:j-bíʃ-íʃ*
lion-SBJ DEF place-LOC NEG-EXIST-DS
and the lion was not in the place,
- 11 *àn-ín wíʃ-ki-wand-á [.]*
not.find-SS return-TOWARD-NSG-DECL
not having found him, they all returned home.
- 12 *íʃ nogdów-nà hí-àn-ín íʃ-kol-ki-tit-íʃ*
DEF lion-OBJ 3SG-not.find- SS 3-PL-come-PF-DS
They didn’t find the lion, so they returned,

13 *íj p'íj-íj hò/kán wam hí-in*
 DEF child-SBJ alone river go-SS
 and the child went back to the river,

14 *hats²-nà wók²-in kí-'á [.]*
 water-OBJ draw-SS come-DECL
 drew water and returned back home.
 (Literacy Anthology 1, txt. 2)

In each of the sample texts above (48-50), the main storyline is advanced through the use of the SS or DS non-final verbs and also through the final verbs. This holds true for all the texts in the Northern Mao corpus.

4.1.2 Non-main event marking: TI non-final verbs

The temporally-integrated (TI) non-final verb is less frequent than the other two non-final verb types. This may be due to the fact that the function of the TI non-final verb is for comment and the expression of temporally overlapping events rather than the expression of the successive main events—and such non-main events can also be expressed through a variety of adverbial forms. Various adverbial forms are illustrated in the sample text examples above, where adverbial forms like conditionals, as well as relative clauses occur.

In the short text sample (51), there are two TI non-final verbs (in lines 1 and 4). In each instance, the events which these verbs express clearly overlap with what follows. In the first case (line 1) the speaker is in the act of going ('while going') and is still 'on the road' (second clause) when a woman screamed. The main event is the screaming and the setting of this event (in both time and space) is provided by the first two clauses (the TI and the DS). Incidentally, it is worth noting that the second clause 'I was on the road' is preceded and followed by a pause which may suggest it is added to clarify the setting.

The second TI non-final verb is found in line (4): 'while I was running to her' which is then followed by 'I saw two dogs...' It's clear that the event of running overlaps with the seeing of the two dogs because the speaker does not arrive to the location where the woman is until line (7).

(51) 1 *háts'à bambàs-ná tí-hów-èt*
 yesterday Bambassi-OBJ 1SG-go-TI
 'Yesterday, while I was going to Bambassi,

- 2 *k'óf-èt tí-bíj-íj*
road-LOC 1SG-EXIST-DS
I was on the road,
- 3 *múnts'íj hí-wù:t-íj*
woman-SBJ 3SG-scream-DS
and there was a woman and she yelled
- 4 *íj wù:t-nà k'ew-ín íj-nà tí-jé:ts'èt*
3SG scream-OBJ hear-SS 3SG-OBJ 1SG-run-TI
and I heard her scream and while I was running to her,
- 5 *numbu kan-kuw-na tí-int'íj*
two dog-DU-OBJ 1SG-see-DS
I saw two dogs,
- 6 *íj-nà ha-tás-and-á [.]*
3SG-OBJ AFF-bite-NSG-DECL
and they bit her.
- 7 *íj-ét pòn-ín hánd-ná tí-int'á [.]*
DIST-LOC arrive-SS blood-OBJ 1SG-see-DECL
I arrived, and I saw blood (on her).'

The main events in excerpt (51) include a woman screaming (while the speaker is going to Bambassi), the speaker hearing the scream, the speaker seeing two dogs (while running), the dogs biting the woman, the speaker arriving at the location and seeing blood. These are the events which move the brief narrative forward. They are marked by a combination of SS and DS non-final verb forms as well as two final verbs.

Excerpt (52) further illustrates the TI non-final verb. In this folktale, a man is on his way home when it begins to rain and the river he must cross begins to flood. Line (1) illustrates the function of TI non-final verbs: there is a man, on his way home, and while he's coming home, it rains. As with (51), the TI verb form indicates that the man is 'on the way' (akin to 'at going'), and he is coming home (DS non-final verb with Progressive aspect). The first clause establishes that the man is on the way (overlapping with what's to come) and the second clause provides more information: he is coming home. These clauses together provide the beginning of the setting.

In line (3) the main events include the rain falling, and the river becoming full of water and beginning to flood. The speaker then pauses briefly before uttering the existential, marked as a DS non-final verb. This

verb is not predicating the existence of anything in the typical sense of the existential. Rather, it may serve to divide the introduction (and setting) from the introduction of a new character.¹⁷ In line (5) the snake is introduced. The snake is afraid to cross the river and is just standing there. And then in line (7) the person arrives at the river and meets up with the snake.

- (52) 1 *hɨfkì es-ìf hów-et*
 one person-SBJ go-TI
 ‘While a person was going, on the way,
 2 *íʃ ʹuns hí-kí-bʃ-ìf*
 3SG house 3SG-come-NPST:AUX-DS
 while going to his house,
 3 *umbutʹ-ìf hí-pátʹ-ìf wam-et ha:sʹ-ìʃ sʹó:n-in*
 rain-SBJ 3SG-rain-DS river-LOC water-SBJ be.full-SS
 it rained and the river became full,
 4 *hí-bíʃ-ìf*
 3SG-EXIST-DS
 while this was the case,
 5 *ʃó:ʃ-ìʃ-ín pʹów-ná ínsʹ-in*
 snake-SBJ-TOP cross-OBJ be.afraid-SS
 a snake was afraid to cross the river
 6 *hí-núngkʹ-bíʃ-ìʃ*
 3SG-stand-NPST:AUX-DS
 and while he was standing there (waiting),
 7 *íʃ es-ìʃ-ín kí-in*
 DEF person-SBJ-TOP come-SS
 this person came
 8 *ʃó:ʃ-ná wam-et kí-kam-á [.]*
 snake-OBJ river-LOC come-meet-DECL
 and met the snake at the river.’
 (from Literacy Anthology 1, txt. 09)

¹⁷ This use of the existential DS verb in (52) is discussed further in §4.3.

Example (52) is particularly interesting because it pairs the TI verb form with a Progressive-marked DS verb form in the setting. The role of aspectual marking on SS and DS non-final verbs is the topic of the following two sections (§4.2-4.3). At this point, it's worth drawing attention to the use of progressive aspect on DS non-final verbs (in line 2 and also in line 6, on the verb 'stand'). In both instances, these events are shown to be overlapping with following events in much the same way as the TI non-final verb. The other non-final verbs and the final verb provide the main events of the text.

Examples (53-54) provide a simple (non-textual) illustration of the difference between the TI non-final verb and the DS non-final verb in otherwise very similar contexts. Example (53) was gleaned from a conversation between two speakers. When the speaker was questioned as to the argument, he said that the argument occurred while traveling to Asosa.

- (53) *ham-té àsós-shàl ham-hi-èt*
 1PL-SBJ Asosa-way 1PL-go-TI
tí-ŋ †ma:gèw-ìf tí-ná ha-tàg-tà-á
 1SG-GEN friend-SBJ 1SG-OBJ AFF-argue-give-DECL
 'While we were on the way to Asosa, my friend argued with me.' (argument occurred on the way)

When the non-final verb ending was changed to the DS form, the speaker said that in that case the argument would have occurred in Asosa, after arrival (54).

- (54) *ham-té àsós-shàl ham-hi-íf*
 1PL-SBJ Asosa-way 1PL-go-DS
tí-ŋ †ma:gèw-ìf tí-ná ha-tàg-tà-á
 1SG-GEN friend-SBJ 1SG-OBJ AFF-argue-give-DECL
 'We went to Asosa, and (then) my friend argued with me.'
 (argument occurred in Asosa, after arrival)

4.2 Progressive aspect and temporal overlap: non-main events

The presence of Progressive aspect on non-final verbs changes their discourse function from expressing a succession of events, to expressing events with internal complexity, allowing at least the potential interpretation of temporal overlap with one or more following events. In

terms of function, the SS and DS forms with Progressive aspectual marking can be interpreted as temporally-integrated with another event, in a manner similar to the function of TI non-final verb forms.

Example (55) is an elicited restatement of (53-54), but with the addition of the Progressive aspectual marking (via the auxiliary *bf*) on the DS non-final verb.

- (55) *ham-té àsós-shàl ham-hi-bf-íf*
 1PL-SBJ Asosa-way 1PL-go-NPST:AUX-DS
tí-ŋ ˈma:gèw-ìf tí-ná ha-tàg-tà-á
 1SG-GEN friend-SBJ 1SG-OBJ AFF-argue-give-DECL
 ‘While we were on the way to Asosa, my friend argued
 with me.’ (argument occurred on the way)

Example (55) was checked with multiple speakers and all agreed that the argument occurred on the way to Asosa, highlighting that the addition of Progressive aspect changes the nature of the event to include temporal overlap with what follows.

In other instances, speakers say that the Progressive marked non-final verb may or may not overlap with the following event. In some cases, it may be that this interpretive issue has to do with the specific events involved and what is expected. In (56), for instance, the speaker is farming (marked with a Progressive DS verb), and his friend goes out to the bush. Speakers are unsure as to whether the friend left while the speaker was actually farming (out in the field) or whether a sequential series of events took place at a time when he was simply living and farming in the area. Apparently, either reading is possible for the Progressive-marked non-final verb in line 1 of (56).

- (56) 1 *múts’à-t tí-húz-bf-íf*
 Muts’a-LOC 1SG-farm-NPST:AUX-DS
 ‘I was farming in Muts’a
 2 *tí-ŋ ma:gèw-ìf ma:r-fal-nà ha-hów-íf*
 1SG-GEN friend-SBJ bush-way-OBJ AFF-go-DS
 and my friend went out to the bush
 3 *kjám-b-in te:z-aw-èt ha-ò:s-á [.]*
 hunt-SS three-day-LOC AFF-be.lost-DECL
 and went hunting and got lost for three days.

4 *ò:s-titit:-íʃ* *ham-kam-íʃ*
 be.lost-PF-DS 1SG-find-DS
 After he was lost, we found him,
 5 *mar-et* *ha-hék'-tí-á* [.]
 bush-LOC AFF-die-PF-DECL
 and he had died in the bush.'

In (57), however, the interpretation of two Progressive-marked non-final verbs (in lines 1 and 3) is clear with regard to temporal overlap. In the first instance, the speaker is eating (expressed with a Progressive-marked DS verb) and his father comes and then they finish eating (marked by a dual subject on the verb). It is clear from this morphological context that both the speaker and his father were eating, so it appears that the speaker was eating at the time of his father's arrival. This suggests temporal overlap and not a simple succession of main events. The second Progressive-marked non-final verb is found in line (3), with the speaker going to market, after the two finish eating. While the speaker's going is expressed with Progressive aspectual marking, it is clear that this event of 'going' does not overlap with the vomiting expressed in line (4). The speaker vomits at the market, not on the way.

(57) 1 *tí-ʃ* *mì-mìs* *mí-bʃ-íʃ*
 1SG-SUBJ eat:INF-thing eat-NPSG:AUX-DS
 'I was eating,
 2 *tí* *bà:b-íʃ* *kí-in*
 1SG father-SBJ come-SS
 and my father came,
 3 *han-mí-ts'e:l-íʃ* *àsúg-nà* *hów-bʃ-in*
 1DU-eat-finish-DS market-OBJ go-NPST:AUX-SS
 and we finished eating and I was going to the market,
 4 *àsúg-èt* *tí-tó:ʃ-á* [.]
 market-LOC 1SG-vomit-DECL
 and I vomited at the market.'

Examples (55-57) illustrate that Progressive aspectual marking on a SS or DS non-final verb allows the possibility for temporal overlap with a following event, in a manner similar to the TI non-final verb. However, this temporal overlap is not a required reading in all instances where

Progressive aspectual marking is found on non-final verbs. The morphological context can be used to clarify the ambiguity that is raised by the structure. Additional non-final verbs with Progressive aspect may be found in examples 38, 39, 50 and 52 (2 examples)). It is perhaps not a surprise that Progressive aspect makes an SS or DS non-final verb function in a manner similar to TI non-final verbs. The use of Progressive aspect and the use of the TI verb form correspond to non-punctual events, which are inherently associated with non-main events (cf. Givón 1982: 123).

4.3 Perfect aspect and highlighting sequence: temporal sectioning of main events

The addition of either of the Perfect aspect suffixes (/ -tit/ and its allomorph [-titit:] or /-kòt'/, grammaticalized from the verb 'have') to a SS or DS non-final verb serves to highlight the sequence reading of its clause. That is, Perfect marking on a clause indicates the completion of the corresponding event. And this, then, divides discourse into sections, where, in some cases, time clearly elapses between the event marked with perfect aspect and the event which follows. The anterior/past meaning associated with the Perfect aspect is an obvious choice for the function of creating temporal sections of discourse. In a sense, in NM Perfect aspect marking does a job that is almost the opposite of the Progressive aspect marker on non-final verbs (§4.2): Progressive aspect allows the possibility of a non-sequential reading, i.e. in which events can overlap.

Text (58) features three examples of Perfect aspect on non-final verbs (lines 4, 6, and 7). The first example of Perfect aspect (line 4) is positioned at the end of the background/setting information and just before the entrance of the vervet monkey into the discourse: 'a farmer is out planting his corn and working hard to help it to grow and then after the corn ripens (PF marking) a vervet comes'. In lines (5-6), the events include the vervet monkey coming, eating the person's (farmer's) corn and then leaving. The perfect-marked non-final verb is 'go' and once again, after the event of going, there is the possibility of time passing and then the farmer returns and sees that something has been eating his corn (the hearer is not told what the farmer sees explicitly) but he does immediately set a trap. In line (7), the third example of Perfect marking on a non-final verb involves the verb 'set a trap'. Then, after the trap is set, a colobus comes and unluckily gets caught and dies.

- (58) 1 *jèníf dur-èt* *k'é:l-wam-et*
 old generation-LOC irrigation-river-LOC
 'In the old days at an irrigation ditch

- 2 *hɨfki es-ɨf ak'-na hú:z-in*
 one person-SBJ maize-OBJ plant-SS
 a person planted corn
- 3 *kénz-in hí-ta-áf ak'-ɨf kè̃m-ín*
 hoe-SS 3SG-give-DS maize-SBJ be.big-SS
 and having the field worked and the corn grew,
- 4 *pút-in hí-kas-titit:-ɨf*
 maize.silk.grow-SS 3SG-be.ripe-PF-SBJ
 its silk became long and then after it ripened,
- 5 *fékɨf-ɨf kí-in ɨf es ak'-na mí-in*
 vervet-SBJ come-SS DEF person maize-OBJ eat-SS
 a vervet monkey came and ate the person's corn
- 6 *hí-hój-titit:-ɨf*
 3SG-go-PF-DS
 and after he left,
- 7 *int'-ín ja:f ɨf ku:l-et já:f-kòt'-ɨf*
 see-SS trap DIST place-LOC set.trap-PF-DS
 the farmer saw (that something had been eating) and so
 after he set a trap in this place,
- 8 *kweɨ-ɨf kí-in ɨf es ak'-na kí-in*
 colobus-SBJ come-SS DEF person maize-GOAL come-SS
 along came a colobus monkey to the person's corn
- 9 *mì-wá ja:f-èt már-ek'-ín hék'-á [.]*
 eat:INF-NEG trap-LOC grab-PASS-SS die-DECL
 and he didn't eat corn but was caught in the trap and died.'
 (from Literacy Anthology 1, txt. 7)

The Perfect aspect marking serves to divide text (58) into four temporal sections: the setting, the introduction of the vervet monkey and the conflict, the actions of the farmer, and then the resolution with a twist – the trapping and subsequent death of a colobus monkey who didn't even eat the corn.

Text sample (59), below, illustrates a very long and complicated clause chain which exhibits both SS and DS non-final verbs and three examples of Perfect aspect (only the /kòt'/ form) on non-final verb forms

and one use of Perfect on a final verb. Interestingly, the text also illustrates two examples of Progressive aspect on non-final verbs, providing an opportunity to observe the difference in function between these two aspectual markers in discourse. A particularly important part of this text involves two instances of the semantically-bleached verb ‘have’ as a non-final verb (lines 2 and 12) in a function that appears to be identical to the role of Perfect aspect on non-final verbs in text (58) above. While the forms are semantically bleached, their glosses reflect their source.

Example (59) is from a hunting story and details the practice of building an antelope trap and using human feces as bait. The speaker is a woman recounting how she and her friends would accompany the elders on a hunt. While this excerpt is a single sentence (with only one non-quoted final verb), it includes two bits of quoted speech (in lines 4 and then 6-9) and includes four temporal sections, separated by the use of Perfect aspect on non-final verbs: part 1 (lines 1 and 2), part 2 (lines 3-9), part 3 (lines 10-12), and part 4 (lines 13-17). Each is discussed in detail following the excerpt.

- (59) 1 *pèŋ-nà péŋ-in fów-nà gur-ín*
 Part 1 bed-OBJ build.bed-SS rock-OBJ gather-SS
 ‘(The children) constructed a bed and gathered rocks,
 2 *íns-dundul-la k’ir-ín kòt’-ín*
 tree-trunk-OBJ cut-SS have-SS
 and after they cut a tree trunk,

 Part 2 3 *kí-in*
 come-SS
 they came,
 4 “*tí-ná há-wo:s-ki-tà-wà*”
 1SG-OBJ IMPR-take-TOWARD-APPL-2PL:IMP
 and (the fathers said) “Bring it to me!”
 5 *wi-íf ham-wo:s-ki-ta-áf*
 say-DS 1PL-take-TOWARD-APPL-DS
 he (the leader) said, and we brought it for him,
 6 “*nà ku:l-èt*
 PROX place-LOC
 and (he said) “In this place,

- 7 *tí-ná sef tí-féj-kòt'-á*
 1SG-OBJ excrement 1SG-excrete-PF-DECL
 I have relieved myself (on the bed inside the rocks).
- 8 *pàl-ìf k'ork'-gà-m-bìf-á*
 antelope-SBJ lick-FUG-3-NPST:AUX-DECL
 An antelope (will come and) will lick (the excrement).”
- 9 *há-int'-wà'' wì-kòt'-ìf*
 IMPR-see-2PL:IMP say-PF-DS
 “Watch and see” and after they said that,
-

- Part 3 10 *ham-tè:z-bìf-ìf*
 1PL-guard.wait-NPST:AUX-DS
 while we were watching,
- 11 *ìf-in pàl kjat'-nà kját'-in*
 DIST-TOP antelope house-OBJ house.build-SS
 they constructed the antelope house
- 12 *kaw-an ég-in k'ók'ùm-ín kòt'-ìf*
 mat-INS make-SS trap-SS have-DS
 and its door, and then they trapped it and after that
-

- Part 4 13 *ìf-ét k'or-ín ham-tè:z-bìf-ìf*
 DIST-LOC watch-SS 1PL-guard-NPST:AUX-DS
 we watched there and while we were guarding it,
- 14 *kí-in hí-k'ùt'-fìn*
 come-SS 3SG-enter-COND
 if it comes and enters,
- 15 *bà:b-ìf ha-k'ùt'-gà-m-bìf-á hi-ín*
 father-SBJ AFF-enter-FUT-3-NPST:AUX-DECL say-SS
 father will enter, he said,
- 16 *ham-jefk-ìf bà:b-kol-té pí-ìf*
 1PL-call-SBJ father-PL-SBJ kill-DS
 and then we called and the elders killed it

17 *ham-ak-òw-á* [.]

1PL-eat-PST.HAB-DECL

and we used to eat the meat.’

(from Gimdiya None, txt. 18)

Part 1 (lines 1 and 2) includes four non-final verbs (all SS) and details the preparations the children undertake to make an antelope trap: beginning to build the trap (a house of sorts), gathering rocks, and the cutting of a tree. Of particular interest is the use of the verb ‘have’ as a non-final verb (line 2). Its function appears to be identical to the bound morphological form of the same verb when it serves as a Perfect marker. This non-final verb form is as semantically bleached as the bound form (see line 7, where the bound form is found on the final verb). Both the bound form and this non-final verb form are grammatical functors. The final verb’s /-kòt/ suffix, however, indicates a past event with present relevance (a run-of-the-mill perfect of result) in the quoted speech of an elder. In the first example (line 2), however, the form functions to communicate that after the children have cut the tree and completed these initial preparations, they then return to the elders and the elders begin directing the subsequent preparation. The completion of these preparations is indeed relevant to what follows.

Part 2 (line 3-9) includes four non-final verbs (both SS and DS) and two bits of quoted speech and begins with the children returning to the elders after having completed the initial preparations. The first bit of quoted speech (lines 4-5) involves an elder directing the children to bring the cut tree to him; this quote is marked by the DS verb ‘say’. Line 5 includes the response, ‘and we took it to him’ marked with the DS suffix. Lines 6-9 provide the second bit of quoted speech. Here, an elder announces that he has entered to where the rocks are and relieved himself (using feces as bait). He directs the children to watch and wait. The quote is marked with the DS marker on the verb ‘say,’ and ‘say’ is also marked with Perfect aspect.

Part 3 (lines 10-12) includes five non-final verbs (both SS and DS) and details the completion of the trap by the elders while the children look on. In this section, while the children are watching and waiting (marked by Progressive aspect on the non-final verb), the elders finish building the ‘antelope house,’ and make a mat (for a door), and then they set the trap. After the setting of the trap, there is another semantically bleached verb ‘have’ marked as a non-final verb; in this case, the function appears to be to separate the completion of the trap from the resolution: the killing and eating of the antelope.

Part 4 (lines 13-17) includes four non-final verbs and provides the resolution: the killing of and eating of the antelope. This resolution begins

with some preliminary non-main events: marked by the use of Progressive aspect (on ‘guard/wait’ and also a conditional verb form on ‘enter’). In line 13, the children watch and guard the trap and this event is ongoing and a continuation of the watching and waiting in line 10. The next bit of text involves an indirect quote: if the antelope comes and enters, father (an elder) will enter. This indirect quote is marked by the SS non-final verb ‘say’ and also involves a condition of the first verb ‘enter.’ This appears to be an interruption of the storyline. The storyline continues in line 16 where (after an antelope entered), the children called the elders and they came and killed the antelope. The sentence ends with the Past Habitual form, ‘we used to eat¹⁸ (antelope).’ This Past Habitual aspect marker is only found on final realis verbs; it cannot be used on non-final verb forms.

To summarize, the use of Perfect aspect serves to divide the text in (59) into temporal sections: the children making preparations for the trap, the elders giving directions to the children, the elders completing the trap, and the killing and eating of the antelope (a sort of resolution). Where the Progressive aspect is used on non-final verbs, there is a clear sense of ongoing action and temporal overlap with other events (as in the use of Progressive in lines 10 and 13).

Example (60) is a brief excerpt of a much longer text on making injera (an Ethiopian flat sourdough pancake). There are two instances of the verb ‘have’ in this sentence. In the first example, the meaning is best understood as ‘put’ or ‘add’ (in the second line, where leaven is added to the mix). In the second instance (line 3), the ‘have’ verb is semantically bleached; the function here is to establish the passing of time for fermentation (normally three days, according to my Northern Mao consultants). After the fermentation, injera is cooked and eaten.

- (60) *pák-ìŋ hí-bíŋ-fìŋ kjákím-há:ts'-àn*
 injera-GEN 3SG-EXIST-COND be.cold:INF-water-INS
kwak'-ín fér kòt'-ín
 knead-SS leaven put-SS
ám-in kòt'-ín pàk-ín ham-mi-á
 ferment-SS have-SS cook.injera-SS 1PL-eat-DECL
 ‘If it is for injera, she uses cold water and kneads the
 dough and adds leaven, and then after it is fermented, she
 makes injera, and we eat it.’ (from Gimdiya None, txt. 08)

¹⁸ The verb used here is the verb for ‘eating’ meat. There are five verbs for eating in NM, depending on whether the eaten item is porridge/injera (i.e. staple foods; also a general word for ‘eat’), meat/fruit, corn, flour/sugar, or sorghum.

The main verb in (60) is a realis verb and implies non-future temporality. In this instance, however, the entire text portion is about making injera, which is a habitual or routine action. As a result, each of the non-final verbs is translated with present tense in English.

To summarize, examples (58-60) have demonstrated the function of Perfect aspect on non-final verbs. While the use of NM Perfect aspect on Final verbs fits with Comrie's definition of present perfect as expressing a past event with present relevance (Comrie 1976: 52), its function on non-final verbs serves also to highlight the sequenced nature of certain events and to delineate temporal sections of the discourse.¹⁹ Perfect marking in NM is *not* normally found on each non-final verb in a succession of events (such marking would correlate with typical perfective patterns in narrative, cf. Bybee et al. 1994: 54). Rather, Perfect is more sparingly used to divide discourse into temporal sections where prior event-sections are relevant to (and often necessarily completed before) later sections. That said, the frequent association of Perfect aspect and narrative sequencing on non-final verbs could perhaps lead NM's Perfect toward a perfective function, especially if relevance between temporal sections diminishes (cf. the perfect/anterior to perfective grammaticalization pathway discussed in Bybee et al. 1994: 81).

5 Conclusions

In short, Northern Mao's three types of non-final verbs can be divided into the same- (SS) and different-subject (DS) constructions which most typically mark main events as sequences in narrative discourse, and the temporally-integrated (TI) construction which marks non-main events and provides commentary or additional information for main events. The SS and DS non-final verbs most basically express a sequence-of-events reading and are usually found in long chains. Thus, these constructions are analogous to what are often called "medial" verbs (cf. Haiman 1987 and Rapold 2007). The TI non-final verb forms, on the other hand, may occur as part of a long chain, but there is not normally more than one TI non-final verb in a single clause chain and the event expressed is overlapping with, and functionally modifies, the event which follows. These non-final forms are similar to what Haspelmath calls 'converbs' (1995: 7).

The SS and DS non-final verbs most typically occur without aspectual marking, but they may carry either Progressive or Perfect aspect. Out of 852 non-final verbs culled from one of the NM databases, 30 were marked with Progressive aspect and 49 were marked with Perfect aspect. On non-final verbs, these aspect markers appear to have particular

¹⁹ Support for this analysis of Perfect marking on non-final verbs is found in many other examples outside of §4.3, cf. exs. 29, 40, 41, 42, 48, 49, 50, and 56.

functions with respect to the discourse. First, when Progressive is used, the event expressed with the non-final verb may be interpreted as overlapping with the following event(s). The effect is that the event expressed is not a main narrative event which moves the storyline forward. Rather, the event serves as a sort of backgrounded modification of another event (in much the same way as do TI non-final verbs). But as seen with the two Progressive examples in (57), the Progressive aspect does not always appear to be read as signaling temporal overlap. The wider context in discourse and morphology appear to help clarify the reading.

The use of the Perfect aspect with DS and SS clauses appears to strengthen or highlight the sequence reading of non-final verbs (not downplay or remove it, as does the Progressive). Perfect-marked non-final verbs appear to divide discourse into temporal sections, between which some amount of time may pass and after which (in some cases) new characters may be introduced.

The generalizations summarized above and illustrated through §3-4 are represented schematically in Figure 1.

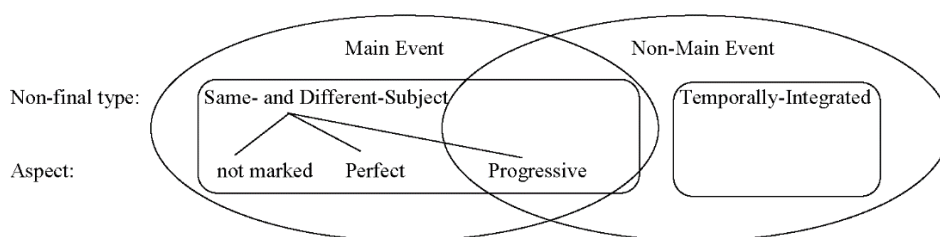


Figure 1. The Interaction of Non-Final Verb Types, Aspect, and Narrative Function

The rectangles indicate the medial-like (same or different subject) non-final verbs with their aspectual possibilities (none, perfect and progressive); and the more converb-like temporally-integrated non-final verb. The left ellipse indicates which non-final forms can be used for expressing main events (SS and DS non-final verbs). The right ellipse indicates which non-final forms can be used for expressing non-main events. The Progressive aspect is included in both ellipses (i.e. the shared center of the Venn diagram) because Progressive aspect renders a non-final verb able to be interpreted as overlapping with the following event.

Finally, as briefly mentioned in §3, the historical sources for each of the non-final verb suffixes themselves fit with their functions. The SS non-final verb's suffix /-in/ is clearly related to (and likely derived from) the /-an/ Coordinate conjunction, which can be pronounced as [n], [in], or [an] (Ahland 2012: 597).²⁰ The Coordinate conjunction source for the SS

²⁰ The SS suffix is also related to the /-an/ Instrumental/Comitative 'with' postposition.

non-final verb highlights the important role of balanced sequential relations in the development of mainline event marking (Comrie 1976: 52; Hopper 1979: 214). The temporally-integrated non-final verb's suffix /-et/ derives from a locative postposition /-et/ LOC. This grammaticalization involves the role of location as a metaphor for simultaneity and commentary (cf. Comrie 1976: 98 and Givón 1982: 123). The DS non-final suffix is identical in shape to the Subject case marker: /-ij/ DS and /-ij/ SBJ. A functional relationship between the two markers is perhaps obvious, as the DS verb suffix indicates a change of subject in the following clause.²¹ Apart from the different-subject status of the marker itself, however, the regrammaticalization pathway (if one assumes SBJ > DS) does not appear to offer any additional information as to the discourse function of the non-final construction it marks.

Ultimately, in NM, the choice of non-final verb form and the use of Progressive or Perfect aspect cannot be fully explored or explained without reference to the discourse context.

Abbreviations

Where two abbreviations must be combined to form a complex gloss for a single form, I have joined the two with a colon (e.g. NPST:AUX, non-past auxiliary form).

| | | | |
|-------|-------------------|------|--------------------------------|
| 1 | first person | GEN | genitive |
| 2 | second person | GOAL | goal oblique |
| 3 | third person | HAB | habitual |
| AFF | affirmative | IMP | imperative |
| APPL | applicative | IMPR | impersonal |
| AUX | auxiliary | INF | infinitive |
| AWAY | translocative | INS | instrumental |
| | directional | INTR | interrogative |
| COMP | complementizer | JUSS | jussive |
| COND | conditional | LOC | locative |
| DECL | declarative | NEG | negative |
| DEF | definite | NM | Northern Mao |
| DIST | distal | NPST | non-past |
| DS | different subject | NSG | non-singular (dual and plural) |
| DU | dual | | |
| DUR | durative | OBJ | object case |
| EXIST | existential verb | PASS | passive |
| FOC | focus | PF | perfect |
| FUT | future | PL | plural |

²¹ Of course, the distribution of the suffix(es) is either on the right edge of a noun phrase (the SBJ marker) or at the end verb in a non-final clause which is always followed by a clause with a non-coreferential subject (the DS marker).

| | | | |
|------|--------------|--------|-------------------------|
| PROX | proximal | SS | same subject |
| PST | past | TI | temporally integrated |
| PURP | purposive | TOP | topic |
| REL | relativizer | TOWARD | cislocative directional |
| SBJ | subject case | TV | terminal vowel |
| SG | singular | | |

References

- Ahland, Michael B. 2012. A Grammar of Northern Mao (Màwés Aas'è). PhD dissertation, University of Oregon.
- Andvik, Erik. 2010. *A Grammar of Tshangla* [Brill's Tibetan Studies Library 5/10]. Leiden: Brill.
- Azeb Amha & Dimmendaal, Gerrit J. 2006. Converbs in an African perspective. In *Catching Language: The Standing Challenge of Grammar Writing*, Azeb Amha, Gerrit J. Dimmendaal, Felix K. Ameka, Alan Dench & Nicolas Evans (eds), 393-440. Berlin/New York: Mouton de Gruyter.
- Bender, M. Lionel. 2000. *Comparative Morphology of the Omotic Languages*. München: Lincom Europa.
- Bender, M. Lionel. 2003. *Omotic Lexicon and Phonology*. Carbondale : Southern Illinois University Printing/Duplicating
- Bybee, Joan, Perkins, Revere, & Pagliuca, William. 1994. *The Evolution of Grammar: Tense, Aspect, and Modality in the Languages of the World*. Chicago/London: University of Chicago Press.
- Comrie, Bernard. 1976. *Aspect* [Cambridge Textbooks in Linguistics]. Cambridge: Cambridge University Press.
- Creissels, Denis. 2009. Uncommon patterns of core term marking and case terminology. *Lingua* 119: 445-459.
- Givón, T. 1982. Tense-aspect-modality: The creole prototype and beyond. In *Tense-aspect: Between Semantics and Pragmatics: Containing the Contributions to a Symposium on Tense and Aspect, Held at UCLA, May 1979*, Paul J. Hopper (ed), 115-163. Amsterdam/Philadelphia: John Benjamins.
- DeLancey, Scott. 1991. The origins of verb serialization in Modern Tibetan. *Studies in Language* 15: 1-23.
- Haiman, John. 1987. On the origins of medial verb morphology in Papuan languages. *Studies in Language* 11: 347-364.
- Haiman, John & Thompson, Sandra A. (eds). 1988. *Clause Combining in Grammar and Discourse* [Typological Studies in Language 18]. Amsterdam/Philadelphia: John Benjamins Publishing Company.
- Haspelmath, Martin. 1995. The converb as a cross-linguistically valid category. In *Converbs in Cross-linguistic Perspective: Structure and Meaning of Adverbial Verb Forms*, Martin Haspelmath and

- Ekkhard König (eds), 1-55. Berlin: Mouton de Gruyter.
- Hayward, Richard J. 2000. The 'empty quarter' of Afroasiatic. In *Research in Afroasiatic Grammar II: Selected Papers from the Fifth Conference on Afroasiatic Languages (Paris)*, Jacqueline Lecarme (ed), 241-61. Amsterdam: John Benjamins.
- Hofmeister, Lorianne. 2010. Ganza language learning manual. Sudan: SIM-Sudan, MS.
- Hopper, Paul J. 1979. Aspect and foregrounding in discourse. In *Syntax and Semantics, 12: Discourse and Syntax*, T. Givón (ed), 213-241. New York: Academic Press.
- König, Christa. 2006. Marked nominative in Africa. *Studies in Language* 30: 655-732.
- König, Christa. 2008. *Case in Africa*. Oxford: Oxford University Press.
- Longacre, Robert. 1985. Sentences as combinations of clauses. In *Language Typology and Syntactic Description: Complex Constructions*, Timothy Shopen (ed), 235-286. Cambridge: Cambridge University Press.
- Rapold, Christian J. 2007. Defining converbs ten years on - a hitchiker's guide. In *Converbs, Medial verbs, Clause Chaining and Related Issues*, Sascha Völlmin, Azeb Amha, Christian Rapold and Silvia Zaugg-Coretti (eds), 7-30. Köln: Rudiger Köppe Verlag.
- Reidhead, Paris W. 1947. Notes on the Ganza language: A preliminary descriptive analysis. Melut, Sudan: SIM, Manuscript.