Northern Mao (Màwés Aats'è)

1 Introduction

This chapter provides an overview of major features of Northern Mao's[1] (NM) sound and grammatical systems and focuses on those features which are most salient in the language and/or typologically rare. The chapter begins with introductory remarks about language and speech communities, the corpora used in this study and then progresses through the phonology (§2), word classes (§3), verbal morphology (§4), nominal morphology (§5), simple clauses (§6), and clause combining (§7).

1.1 The Mao Name

The name 'Mao' has been used to refer to a variety of different groups and languages in the literature, including some languages of the Nilo-Saharan family (Gwama and Komo in the Mao special woreda) (see Fleming 1984: 31). In this chapter, the name is used to refer only to the Omotic-Mao languages: NM, Hozo, Seezo, and Ganza (cf. Fig. 1). Bender used the term 'Mao' for this subgroup of Omotic languages (1971; 1975; 2003).

In this chapter, the name 'Northern Mao' refers to the Omotic-Mao language spoken in and around Bambassi woreda, particularly along the Dabus river, and then 300km further to the east, along the Diddesa river. Speakers refer to their own language with the autonyms /màw-és ↓a:ts'-tòs-è/ Mao-person tooth/language-talk-TV 'language of the Mao people' or sometimes /màw-és ↓a:ts'-è/ Mao-person tooth/language-TV. The self-name for the people is /màw-és-↓wol-

[1] This research was funded in part through a Documenting Endangered Languages grant from the National Science Foundation (#0746665). The Northern Mao project would not have been possible without the support of the Benishangul-Gumuz Culture Office in Asosa, SIL Ethiopia, and the help and support of the Mao communities in Bambassi and Diddessa, especially Yasin Ibrahim, Mamo Shimagele, Lelia Gichile, Tefera Ibrahim, Dageya Moosise, Hike Abune, Mamude Abde, and Almaade Tefera. The author is also indebted to the scholars at the Department of Linguistics at Addis Ababa University, who have helped to facilitate the research—especially Baye Yimam, Girma Mengistu, Getachew Kassa, Hirut Woldemariam, and Moges Yigezu. Finally, I would like to thank Doris Payne, Scott DeLancey, Spike Gildea, and Tom Payne, all of whom helped to shape the reference grammar from which this chapter draws substantially.

e/ Mao-person-PL-TV ‘Mao people’. In the literature, NM has been frequently referred to by the toponyms Bambassi and/or Diddessa (Bender 2003; Baye 2006; Girma 2007).

The NM language is endangered. There are an estimated 2,300 speakers of the language (cf. the discussion in Ahland 2012: 13), and it is clear that in some areas, such as Wamba k’ebele (northwest of Bambassi town), NM children are learning Oromo instead of the NM language.

1.2 The Mao Subgroup of Omotic

There are four Mao languages which make up the Mao subgroup of Omotic: NM, Hozo, Seezo, and Ganza (Bender 2003: 267). Hayward has included NM (Bambassi and Diddessa) as well as Hozo-Seezo (which he sees as a single language) in his Mao group, but he doesn’t mention Ganza (Hayward 2000: 242). At times, the status of the Mao group has been a matter of debate: as being either Nilo-Saharan or possibly of mixed-lineage (see the summary of the debate in Ahland 2012: 13-18). In the work of Hayward and Bender (two of the most prominent Omotic comparativists), the Mao group is represented as a one of the primary splits from Proto-Omotic (Hayward 2000: 242; Bender 2003: 3).

1.3 Map of the Mao Languages

Figure 1 provides a rough estimation of the locations of the Mao languages in western Ethiopia (the Mao languages are shaded).

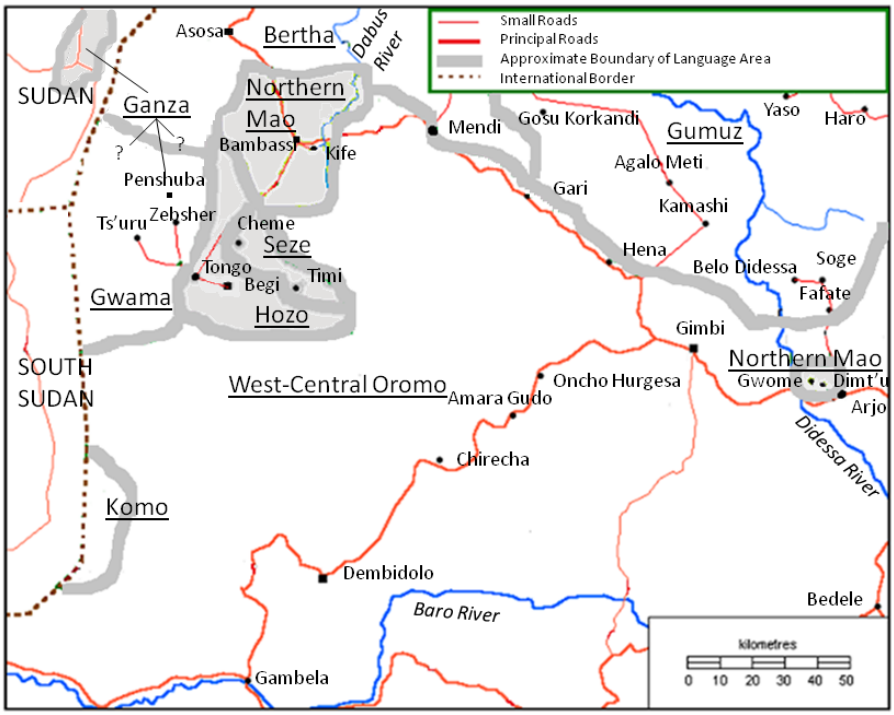


Figure 1: Map of the Omotic-Mao Languages (taken from Ahland 2012: 5)

NM is found in two primary locations: around Bambassi town and then 300km further to the east in the Diddessa valley, northwest of Dimt'u. Hozo and Seezo are found to the south of NM and Ganza to the west.[2]

1.4 Previous Work on Mao Languages

While Bender referred to the Mao languages as the least documented of the Omotic subgroups (2000: 180), the situation is changing quickly. Research has now begun on all four of the Mao languages, and three grammars have been produced thus far: NM (Ahland 2012), Hozo (Getachew 2015), and Seezo (Girma 2015). Projects on Ganza also began in 2014.[3]

[2] Klaus-Christian Küspert identified Ganza speakers around the area of Penshuba (see Fig. 1). We now know that there are at least several hundred Ganza speakers living inside Ethiopia, primarily in small villages north of Zebsher, and many of these Ganza speak Oromo and Komo (Nilo-Saharan) as well (Küspert, forthcoming).

[3] These include a phonological analysis and description (Josh Smolders of SIL Ethiopia) and a grammar (Melkamu Abate, a PhD student at Addis Ababa University) in addition to my own research on Ganza pronominals and verbs.

Apart from the grammars, substantial work included Baye's 2006 sketch of phonological and morphosyntactic features in the Bambassi variety of NM, and Girma's 2007 examination of both phonology and a survey of morphosyntactic features of Diddesa Mao verbs. Earlier work on Mao languages offers extremely little on the structures of the language. Grottanelli (1940) gives some basic information on ethnicity and culture, while Fleming (1988) examines the linguistic history of both Northern and "Southern" (Hozo and Seze) Mao, focusing mainly on a reconstruction of consonants for Proto-Mao. Short word-lists and paradigmatic information including NM data were published in various small papers and sketches (Bender 1985, 1990, 2000, 2003; and Wedekind and Wedekind 1993; and Siebert et al. 1994.

1.5 The Northern Mao Corpora

The research represented and summarized in this chapter is based on the reference grammar, various articles and conference papers (see references), unpublished field notes from trips in 2007-2009 and 2014, a detailed lexical database of more than 3,000 entries (+5,000 words) and a corpus of more than 50 interlinearized texts across many genres.

2 Phonology

The phonological analysis explores contrastive segments (§2.1), syllable patterns and phonotactic constraints (§ 2.2), and tone (§2.3).

2.1 Contrastive Segments

NM's contrastive consonants are spread across five places of articulation: bilabial, alveolar, post-alveolar, velar, and glottal (Table 1).

Table 1: Contrastive Consonants

		Bilabial	Alveolar	Post-Alveolar	Velar	Glottal
Plosives		p b	t d		k g	
	glottalized	p’	t’		k’	
Fricatives			s z	ʃ		h
Affricates	glottalized		ʦ’			
Laterals			l			
Taps			r			
Nasals		m	n		ŋ	
Approximants		w		j		

A number of these contrastive consonants exhibit allophones (either in free variation or in complementary distribution). Only a couple of the most interesting examples are discussed below (cf. Ahland 2009 for a complete discussion). The consonant /p/ exhibits variation between the phones [p], [f] and [ɸ], across all environments:

(1) *[púw-é] ~ [fúw-é] ~ [ɸúw-é]*
‘traditional beer’[4]

(2) *[hup-é] ~ [huf-é] ~ [huɸ-é]*
‘brooding (of a hen)’

Such variation is found elsewhere in Omotic: Benchnon (Rapold 2006: 73) and between [f] and [ɸ] in Dizin (Beachy 2005: 26).

The consonant /t’/ is an alveolar implosive in intervocalic environments. In (3), the root ‘house’ is a noun in the first instance and is a finite verb in the second (marked by the tone change, cf. §2.3.3 and Ahland 2012: 184ff). The final ejective of the first instance is realized as an implosive in the second example.

[4] Throughout this chapter the acute [á] and grave [à] diacritics serve to mark H and L tone, respectively. The M level tone is unmarked.

(3) *[kjat' kjád-↓á]*
house house.build-DECL
'S/he built a house.'

While the glottal stop is not contrastive in NM, it is commonly attested: as a result of epenthesis before an onset-less vowel word-initially:

(4) *[ʔɛsɛ̀]* 'person' and *[ʔíʃɛ̀]* 's/he/it' (3SG)

Like some Omotic languages (e.g. Benchnon (Rapold 2006: 54) and Maale (Azeb 2001: 20),[5] NM's contrastive vowel system includes five vowels, both long and short, (forming a characteristic 'V' shape, cf. Ladefoged 2001: 35) (Table 2).[6]

Table 2: Contrastive Vowels

	Front	Central	Back
High	i, iː		u, uː
Mid	e, eː		o, oː
Low		a, aː	

The short vowels exhibit a tendency to be more centralized (cf. the vowel plot charts in Ahland 2009). The long vowels, on the other hand, exhibit slightly narrower target areas positioned further to the edges of the vowel space, thus increasing perceptual distinction.

Due to the centralization of short vowels, the realization of vowels, in addition to the prototypical [i], [e], [a], [o], and [u], often involves [ɨ] and [ɪ] for /i/, [ɛ] and [ə] for /e/, [ə] for /a/ and occasionally [ɔ] for /o/. Evidence for contrast of vowels is illustrated in detail in Ahland 2009.

[5] One might add Sheko to this list as well, if the schwa is interpreted as a more centralized and neutralized variant of multiple vowels (as per Hellenthal 2010: 57).

[6] In other languages, such as Hozo, the schwa appears to form a sixth contrastive phoneme (Getachew 2015: 31).

2.2 Syllable Patterns and Phonotactic Constraints

Table 3 illustrates NM's most frequently attested syllable patterns; essentially, these can be summarized by CV and CVC with contrastive vowel length (i.e. CV / CVV and CVC / CVVC). These patterns account for the vast majority of syllables in the language.

Table 3: Syllable Patterns in CV Templates

Unambiguous CV Pattern	Example	Gloss
CV	/pó.t'-è/	thigh/hip-TV
CVC	/tál.k'-è/	headpad-TV
CVV	/bé:.z-è/	broom-TV
CVVC	/ma:l.t'-è/	bone-TV

The only other pattern is attested in a very small number of words: a nasal-sibilant coda (NC), as in /wints'.k'è/ 'aunt' (Ahland 2012: 80).

In terms of phonotactics, all NM consonants (Table 1) are attested word-initially except for /ŋ/ and /r/. The /r/ is attested word-initially only in loanwords: e.g. /ràz-á/ 'melt' and /rékkètè/ 'problematic' (both are from Oromo, according to the Mao consultants). It should be noted also that only one example of /l/ is attested word-initially: /lùké/ 'curdling' (Ahland 2012: 81). Consonants are attested word-finally only in connected speech, e.g. when the terminal vowel of nominals is not present or when case-markers or postpositions are used (cf. Ahland 2012: 194 and 313).

Table 4 provides the full range of consonant sequences in the language discovered thus far. Rows indicate the consonant in first position while the columns indicate the consonant in second position. The (+) indicates a CC sequence attested word-initially (i.e. a complex onset), and the (x) indicates a medial CC sequence across a syllable boundary (i.e. a coda C followed by an onset C).

Table 4: Consonant Sequences
(+ = tautosyllabic word-initial CC onset and x = heterosyllabic medial sequence)

	Consonants in Second Position (Onset)																				
Consonants in First Position (Coda)		p	b	t	d	k	g	p’	t’	k’	s	z	ʃ	h	ts’	l	r	m	n	ŋ	w	j
	p					x																+
	b				x																	
	t																				+	
	d																					
	k																		x		+	+
	g				x																+	+
	p’																					+
	t’																				+	
	k’																				+	+
	s					x												x			+	
	z																		x			
	ʃ					x															+	
	h																					
	ts’									x												
	l		x	x	x	x	x		x	x								x			x	x
	r		x	x		x	x			x								x	x			
	m	x	x					x			x				x							
	n		x	x	x				x		x	x	x		x							
	ŋ					x	x			x												
	w																					
	j																					

Before leaving the phonotactic discussion altogether, basic word-shape should also be mentioned. Most monomorphemic non-verbal word-forms in NM (nouns, demonstratives, basic numbers, etc.) are formed with two syllables. Less than two hundred three-syllable monomorphemic forms are attested. Fewer than ten monomorphemic four-syllable non-verbal word-forms have been identified so far.

Finally, it is worth noting that there appears to be two root harmony constraint systems. First, sibilants in a single root must agree in terms of place (either alveolar /s, z, ts’/ or post-alveolar /ʃ/): /soːnts’è/ ‘child,’ /sèwísè/ ‘young man,’ and /suːnts’é/ ‘back,’ vs. /ʃeːʃe/ ‘urine’ /ʃáʃè/ ‘tendon/vein’ /ʃóːʃé/ ‘snake.’ Second, roots may contain either any combination of /i/ and /e/ or of /u/ and /o/ (the vowel /a/ can co-occur with any vowels). The backness harmony is only observable in three syllable nouns since all nominals end with the final (terminal) vowel /e/ in

NM: /ílíʃ-è/ pot-TV, /t'épìl-è/ patch-TV, /éwèt-è/ eavesdrop:INF-TV, /kólòːl-é/ malaria-TV, /ʃùndóːr-é/ donkey-TV, and /ts'úgùn-è/ squirrel-TV 'squirrel.'

2.3 Tone

As is the case in most Omotic languages, tone in NM is contrastive. There are three levels of tone independent of vowel length (Table 5).

Table 5: Levels of Tone (from Ahland 2009)

Lexeme	Tone	Gloss	Mean F0 for each syllable (from 3 tokens)	Mean Vowel Length (from 3 tokens)
/káw-é/	H	hang:INF-TV	160 / 166 Hz	110 ms
/kaw-e/	M	bamboo.mat-TV	146 / 146 Hz	96 ms
/kàw-è/	L	top/upwards-TV	120 / 120 Hz	92 ms

While H and L tones are found preceding and following each of the three levels (H, M, and L), M tone is found preceding all three levels but only following M: /káw-é/ hang:INF-TV, /kaw-e/ bamboo.mat-TV, /kàw-è/ top/upwards-TV, /kál-è/ corral-TV, /kan-é/ dog-TV, /kam-è/ fire-TV, and /kàw-é/ arm-TV.

2.3.1 Nominal Tone Melodies

Two-syllable nominals exhibit the seven surface melodies illustrated immediately above: H, M, L, HL, MH, ML, and LH. Two-syllable nominals with long vowels exhibit these same melodies (Table 6).

Table 6: Tonal Melodies of Two-Syllable Nouns with Short and Long Vowels

H	M	L	HL	MH	ML	LH
/gólg-é/ throat-TV	/p'erk'-e/ lightning-TV	/wèts'k'-è/ earthworm-TV	/tálk'-è/ headpad-TV	/mosk-é/ semen-TV	/t'ulk'-è/ pit/stone-TV (fruit)	/bèlg-é/ star-TV
/ts'áːld-é/ marrow-TV	/kiːnts'-e/ snot-TV	/gèːnd-è/ rainbow-TV	/sáːnts'-è/ bed-TV	/suːnts'-é/ waist-TV	/maːlt-è/ fat-TV	/dìːld-é/ bless:INF-TV

Three-syllable nouns as mentioned above are far fewer in number; they exhibit more melodies: H, M, L, HL (both HHL and HLL), HLH, MH (MHH), MHL, ML (MLL), LH (both LHH and LLH), and LHL (cf. Ahland 2009: 25). Since two-syllable nouns are most frequent in

NM, the discussion of tonal processes below focuses on them.

2.3.2 Verbal Tone Melodies

Most verb stems in NM are single syllables (either a CV or CVC type) and carry either a H, M, or L tone, regardless of vowel length (Table 7).

Table 7: Tonal Melodies of Monosyllabic Verb Stems with Short and Long Vowels

H	M	L
kés-↓á swell-DECL	kol-á speak-DECL	kòw-á sit-DECL
ké:w-↓á wound-DECL	ka:m-á love-DECL	kù:r-á be shriveled-DECL

As is the case with nominals in §2.3.1., vowel length does not affect tonal melodies. Since most verb stems are single syllables (just as most noun stems are single syllables + a terminal vowel), the melodies in Table 7 account for the vast majority of verb stems. In each instance, after a H tone on a monosyllabic verb stem, the tone of the declarative suffix is downstepped (cf. Ahland 2012: 97).

There are a small number of two-syllable monomorphemic verb stems; these verb stems fall into four tonal melody classes: HL, M, L, and ML (Table 8).[7]

Table 8: Tonal Melodies of Two-Syllable Verb Stems

HL	M	L	ML
háŋgìl-á diminish-DECL	gobil-á pierce-DECL	kògìn-á enlarge-DECL	gadèr-á be.able-DECL

No monomorphemic three-syllable verb stems have been identified to date.

2.3.3 Tone as Marker of Stem Type

Tone is an important marker of stem type in NM. The lexicon can be analyzed as containing toneless precategorical roots with general meaning which can then receive either nominal or verbal tonal melodies and become stems. The clearest examples of precategoricality

[7] Only three exceptions to these melodies have been found: two LM stems /àta:n-á/ 'flood; flow', /wèlgel-á/ 'enter into contract' (an Oromo loan according to my NM consultants) and one stem with a L-H glide followed by L /běk'àm-á/ 'dance'.

are illustrated in Table 9.[8]

Table 9: Roots Forming Three Stems (from Ahland 2014a)

	Root	Finite Verb Stem	Infinitive Verbs	Nouns
1	√to:k	tó:k head carry	tò:k-è head.carry:INF-TV	to:k-è head-TV
2	√p'iʃ	p'íʃ give birth	p'iʃ-é give.birth:INF-TV	p'iʃ-e child-TV
3	√ki:m	kí:m earn money	kì:m-è earn.money:INF-TV	ki:m-e money-TV

Example (5) below illustrates the root √to:k as a noun (as indicated by its being possessed and case-marked).

(5) *íʃ* *ꜜto:k-ìʃ* *ha-maŋk'-á*
3SG head-SBJ AFF-hurt-DECL
'Her/his head hurts.' (e.g. a headache)

The examples below illustrate this same root serving as a noun in a locative post-positional phrase and as a finite verb (both in 6) and as an infinitive verb form in a nominalized subordinate clause (7).

(6) *to:k-èt* *ha-tó:k-ꜜá*
head-LOC AFF-head.carry-DECL
'S/he carried it on (her/his) head.'

(7) *tò:k-gàʃ* *ha-tí-wó:l-ꜜá*
head.carry:INF-PURP AFF-1SG-want-DECL
'I want to carry it (by head).'

Other roots can serve only as infinitive or finite verb stem and still others appear to serve only as nouns (cf. Ahland 2012: 184-92).

[8] For the sake of space, only examples involving the root √to:k are illustrated in syntactic context here; cf. Ahland 2012: 184-192 for full syntactic illustrations of many different stems.

2.3.4 Common Tone Processes

Tones in NM undergo a number of processes: downstep, partial assimilation, spread, and replacement. Downstep is a widely attested tone phenomenon, especially in African languages (Snider 1999: 22). The tell-tale indication of downstep is when the tonal register is lowered due to a preceding L tone (either realized or floating, non-associated); as a result, all tones in the remainder of the sentence (or in some cases, utterance) maintain their distinctiveness but at a lower level. In (8), for example, where there is no downstep, the final H tone of the DECL suffix /-á/ is at the same height as the initial H tone on the definite article /íʃ-é/ DEF-TV.

(8) *íʃ p'iʃ-ìʃ ha-kòts'-↓á*
DEF child-SBJ AFF-laugh-DECL
'The child laughed.'

In (9), however, the initial element is not the definite marker, but the 3SG pronoun /íʃ-è/ 3SG-TV. A fundamental difference between the definite article and the 3SG pronoun is the final low tone on the terminal vowel of the pronoun. In most syntactic contexts (cf. §5.2) the terminal vowel is not present, but the full tone melody of the noun remains, and when the final tone is L and the preceding tone is H, downstep is triggered, as in (9).

(9) *íʃ ↓p'iʃ-ìʃ ha-kòts'-↓á*
3SG child-SBJ AFF-laugh-DECL
'Her/His child laughed.'

In (9) all tones after the pronoun are lowered (H>M, M>L and L> extra L).

Downstep is very common in NM. It is triggered only by non-realized, floating L tones. In some cases these floating L tones appear to be historical relics which, unlike the 3SG

pronoun's melody, are never detectable except for downstep (that is, only their effect remains). For instance, the citation form of monosyllabic H stem verbs shows downstep on the final declarative suffix (H>M) (10).

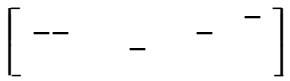
	M Verb Stem	L Verb Stem	H Verb Stem
	[– – ¯]	[– _ ¯]	[– ¯ –]
(10)	*ha-int'-á*	*ha-àld-á*	*ha-héz-↓á*
	AFF-see-DECL	AFF-know-DECL	AFF-hit-DECL
	'S/he saw.'	'S/he knew.'	'S/he hit (it).'

What's particularly interesting about NM is that this downstep also serves to illustrate that not all M tones behave the same. In fact, there are two M tones which sound identical (see Ahland and Pearce 2009; Ahland 2012: 102ff) but which exhibit different behavior with respect to downstep.[9] The first M tone (on the /-and/ NSG suffix), which I call M_1, appears to merge with the floating L that causes downstep; this M tone does not allow downstep to occur (11).

	M Verb Stem	L Verb Stem	H Verb Stem
	[–– – ¯]	[– _ – ¯]	[– ¯ – ¯]
(11)	*ha-int'-and-á*	*ha-àld-and-á*	*ha-hez-and-á*
	AFF-see-NSG-DECL	AFF-know-NSG-DECL	AFF-hit-NSG-DECL
	'They saw.'	'They knew.'	'They hit (it).'

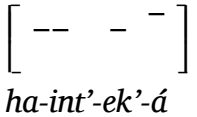
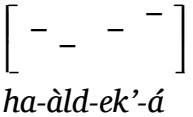
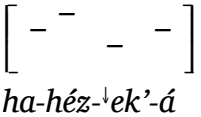
The behavior of this M_1 tone is identical to the behavior of the L tone in the same environment (12).

[9] This is similar to Sheko, which also exhibits two M tones but in Sheko the two Ms are not at the same pitch level; they are distinguishable through pitch, not only through behavior (Hellenthal 2010: 112).

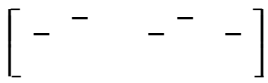
	M Verb Stem	L Verb Stem	H Verb Stem
			
(12)	*ha-int'-mùnd-and-á*	*ha-àld-mùnd-and-á*	*ha-héz-mùnd-and-á*
	AFF-see-RECP-NSG-DECL	AFF-know-RECP-NSG-DECL	AFF-hit-RECP-NSG-DECL
	'They saw one another.'	'They knew one another.'	'They hit one another.'

The L tone of the /-mùnd/ reciprocal suffix merges with the floating L that causes downstep of the declarative suffix in (10). This is the same behavior of the M tone in (11).

This absorption of downstep stands in stark contrast to the behavior of the other M tone (on the /-ek'/ passive suffix). This other M (what I call M_2) does not absorb the downstep and allows it to occur (downstepping both the M and the following H tones, from M>L and H>M, respectively) (13).

	M Verb Stem	L Verb Stem	H Verb Stem
			
(13)	*ha-int'-ek'-á*	*ha-àld-ek'-á*	*ha-héz-↓ek'-á*
	AFF-see-PASS-DECL	AFF-know-PASS-DECL	AFF-hit-PASS-DECL
	'S/he was seen.'	'S/he was known.'	'S/he was hit.'

Another common tone process in NM is partial assimilation where a preceding L tone spreads to the following tone-bearing-unit. Consider for example, the H-toned verb stem 'hit' (as in 14).



(14) *kan-ná ha-héz-↓á*

dog-OBJ AFF-hit-DECL

'S/he hit a dog.'

In (15), this same H toned verb stem is found following L-toned prefixes. In these instances, the L tone triggers assimilation of the H tone such that it lowers to the M level. This is essentially a

spread of the L tone without a delinking of the pre-associated H tone. The result is that both the L and the H are realized, not as contour but as a M.

(15) *kan-ná hì-hez-á* *kan-ná hàw-hez-á*
dog-OBJ 2SG-hit-DECL dog-OBJ 2PL-hit-DECL
'You hit a dog.' 'You all hit a dog.'

Another common tonal process involves the spread of tones (H, M, and L) onto toneless syllables, such as occurs on case markers, postpositions, and even phonologically bound auxiliary verbs. First, the subject marker /-iʃ/ and the object marker /-na/ occur at the right edge of noun phrases and receive their tone from the left. In Table 10, the tone associated with the final syllable (on the terminal vowel) of the noun is also observed on the subject and object case markers.

Table 10: Toneless Case Markers

Citation	Subject	Object	
kan-é 'dog'	kan-íʃ	kan-ná	H
p'iʃ-e 'child'	p'iʃ-iʃ	p'iʃ-na	M
múnts'-è 'woman'	múnts'-ìʃ	múnts'-nà	L

Tone spread is also found on the bound auxiliary verb of the the irrealis future declarative construction. This auxiliary (/-biʃ/ NPST, grammaticalized from the existential) receives its tone from the immediately preceding subject markers (e.g. /-t́/ 1SG, /-m̀/ 3rd person) whose tones need a vowel with which to associate.

(16) *háts'à ha-pò:n-gà-t-bíʃ-á*
tomorrow AFF-go.out-FUT-1SG-NPST:AUX-DECL
'I will leave tomorrow.'

(17) *háts'à ha-pò:n-gà-m-bìʃ-á*
tomorrow AFF-go.out-FUT-3-NPST:AUX-DECL
'S/he will leave tomorrow.'

There are other common tonal processes in NM that are not purely phonological: tone melody replacement, §5.1, and also a phonetic effect involving contour tone development found only across morpheme boundaries (cf. Ahland 2012: 138-45).

3 Mao Word Classes

Four structurally distinct word-classes are observable in NM: nominals (including nouns, pronouns and demonstratives), verbs, numerals, and adverbs. There is no adjective class in the language.

3.1 Nominals

In terms of structure, the word-classes noun, pronoun, and demonstrative hold together as a group: they are composed of a root plus the terminal vowel /-e/ (in citation and other contexts, §5.2) and a nominal tone melody (§2.3.1). Nominals may be subdivided by function: e.g. as heads of noun phrases (nouns), as noun phrases (pronouns), and as modifiers (nouns and demonstratives).

The noun class includes prototypical nouns as well as infinitive verb forms (often used as action nominalizations, Ahland 2012: 222) and other deverbal nominalizations, such as participant nouns and relativizations of verbs.

Table 11: Nouns and Nominalizations

Prototypical Nouns	Infinitive Verbs	Participant Nominalizations	Relative Clause
kan-é dog-TV	hez-é hit:INF-TV	jè:ts'-es-è run:INF-person-TV	mì-t-è eat:INF-REL-TV

Relational nouns are an important subset of nouns used in postpositional phrases to add locational specificity; these include: /ʃalè/ 'way,' /ʃupè/ 'bottom,' /kezè/ 'top,' /ga:bè/ 'place,'

/sísé/ ‘inside,’ and /pólé/ ‘outside.’

Pronouns include personal, possessive, and interrogative sets. Pronouns differ from nouns through their function as noun phrases, not as heads of noun phrases.

Table 12: Personal Pronouns in Citation and Case Forms

Gloss	Pronoun in Citation Form	With Subject Case	With Object Case	With Genitive Case
1SG	tí-jé	tí-ʃ	tí-ná	tí-ŋ
1DU	han-é	han-íʃ	hán-ná	han-íŋ
1PL	hambèl-è	hambèl-ìʃ ham-té	hambèl-là ham-tá	hambèl-ìŋ
2SG	hì-jè	hì-ʃ	hì-nà	hì-ŋ
2DU	háw-é	háw-íʃ	háw-ná	háw-ìŋ
2PL	hàwèl-è	hàwèl-ìʃ hàw-té	hàwèl-là hàw-tá	hàwèl-ìŋ
3SG	íʃ-è	íʃ-ìʃ í-té	íʃ-nà	íʃ-ìŋ
3DU	íʃkuw-e	íʃkuw-iʃ	íʃkuw-na	íʃkuw-ìŋ
3PL	íʃkol-è	íʃkol-ìʃ íʃkol-té	íʃkol-là íʃkol-tá	íʃkol-ìŋ

For a description of the internal innovations in this paradigm, see (Ahland 2013, 2014b, and 2015b). Some of these innovations have led scholars (most notably, Bender 1996:158; 2000:184) to suggest that perhaps the NM lexicon was of mixed lineage.

The possessive pronouns only surface in possessive constructions where they precede the possessum noun phrase (§5.1), and, as a result, they don’t carry the terminal vowel (no nominal does in this context). The forms themselves are mostly constructed from the personal pronouns: /tí/ 1SG, /han/ 1DU, /ham/ 1PL, /hì/ 2SG, /háw/ 2DU, /hàw/ 2PL, /íʃ/ 3SG, /íʃkuw/ 3DU, and /íʃkol/ 3PL. These forms largely overlap with the forms used as subject prefixes on realis verbs (§4.3).

The interrogative pronouns are /kí/ ‘human’ and /kó/ ‘non-human’. These pronouns, like the personal pronouns, can be marked with case: /kí-ʃ/ and /kó-ʃ/ (subject) and /kí-ná/ and /kó-ná/ (object). Other questions words for domains of time, location, goal, attribution, manner, reason

and amount are not themselves pronouns (e.g. they cannot take case marking); neither do these other question words mark a human/non-human distinction) (Ahland 2012: 265).

NM's demonstratives are in two classes: exophoric (pointing to physical referents in the speech situation) and anaphoric (pointing to already-mentioned element in discourse). The demonstratives are listed in Table 13.

Table 13: Demonstratives

	Proximal	Distal	Extra-Distal
Exophoric	nà-ʔé	jéʃ-é	gjétʃ-é ~ gjéʃ-é
Anaphoric	nà-ʔé	íʃ-é	

While all the exophoric demonstratives can function adnominally and pronominally, the anaphoric demonstrative /íʃ-é/ is only found pronominally. This is because the form /íʃ-é/ in the adnominal distribution has become reanalyzed as a definite article (see Ahland 2012: 282).[10]

3.2 Verbs

Apart from nominals, the largest open class in NM is verbs. As noted in §2.3.3, verbal stems are tonally marked as either finite or infinitive stems. Like the terminal vowel on the citation form of nominals, verbs also carry markers which serve to identify the word-class in citation form. These include the /ha-/ affirmative prefix and the /-á/ declarative suffix: /ha-tjam-á/ AFF-count-DECL, /ha-pò:n-á/ AFF-go.out-DECL, and /ha-mí-↓á/ AFF-eat-DECL.

3.3 Numerals

Unlike nominals, numerals exhibit final vowels which include [i], [e], [o], and [u]. And these final vowels are dropped only when the following noun begins with a vowel. This word-structure sets them apart from the so-called nominal set in §3.1. The set of cardinal numbers 1-10

[10] This demonstrative form is also the source of the 3rd person personal pronoun form /íʃ-è/ (Ahland 2012: 288).

are provided in Table 14.[11]

Table 14: Cardinal Numbers 1-10

1	hiʃkì	6	kjaːnsè
2	numbo	7	kúlùmbò
3	teːzè	8	kúteːzé
4	mets'e	9	kúsméts'è
5	k'wíssí	10	kúːsú

NM numerals function like nominals. They can be used pronominally and can also participate in constructions which most-prototypically involve nouns, e.g. modifying nouns through the use of the associative construction (§5.1).

Cardinal numbers 11-19 are formed the /kúːs/ 'hand' followed by a reduced /túg-ét/ foot-LOC following which precedes the 1-10 digit /kúːs-g-ét-mets'e/ hand-foot-LOC-four 'fourteen.' Twenties, thirties, etc. are formed by the combining the basic digit (1-10) with the word 'hand' (which in this case means 'ten') /teːzè-kuːse/ three-hand 'thirty'.

Ordinal numbers are formed with the genitive suffix: /hiʃk-ìŋ/ one-GEN 'first', /numb-ìŋ/ two-GEN 'second'. When used pronominally, these ordinals take the terminal vowel /-e/ after the genitive suffix.

There is a small set of quantifiers in NM which can be used as nominal modifiers and also as pronominals. The most common examples of these are provided in Table 15, below.

[11] A careful examination of the numerals in Table 14 yields evidence that the Northern Mao number system was at one time a quintesimal 5-base system. Numbers 7 and 8 begin with the sequence [kú] and 9 with the sequence [kús]; these forms are almost certainly related to the word /kúsé/ 'hand', a common source for number 5 (cf. Baye's discussion 2006: 185). And following the [kú]/[kús] forms are remnants of what appear to be the numbers 2, 3 and 4 (in numbers 7-9, respectively). There is evidence of an archaic quintesimal system in other Mao languages as well (cf. Ahland 2012: 295).

Table 15: Quantifiers (from Ahland 2012: 305)

Quantifier	Gloss
gjá:	‘many’
níts’és	‘few’
hiʃkìhiʃk(ì)	‘some’ (literally: one-one)
túŋkúl(és)	‘every’
mú:kés	‘all’

Technically, in terms of word-structure, these quantifiers are not numerals; they are included here due to their distribution and function, which clearly overlaps with numerals.

3.4 Adverbs

The class of adverbs is marked by word-forms which do not lose final vowels (it they have them at all) in connected speech (see 18) and which function adverbially (i.e. as modifiers of clauses or verbs). A selection of common adverbs are provided in Table 16.

Table 16: Common Adverbs

Time		Manner		Location	
hóllá	‘now’	wó	‘like this’	zè:p’és	‘together’
kwalla	‘yesterday’	pàt’wáne	‘again’	ʃené	‘before’
háts’à	‘tomorrow’	hòʃkján	‘only’	bek’à	‘end’

(18) *háts’à* *ha-mí-gà-t-bíʃ-á*
tomorrow AFF-eat-FUT-1SG-NPST:AUX-DECL
‘S/he will eat tomorrow.’

(19) *íʃ* *es-ìʃ* *hòʃkján* *hadèm-á*
DEF person-SBJ only work-DECL
‘The person only works.’ (i.e. doesn’t do anything else)

3.5 A note on the lack of adjectives

No class of adjectives has been identified in NM. While an adjective class is typically associated with semantic domains of age, dimension, value and color (Dixon 2004: 3-4), these domains are expressed structurally with verbs and various deverbal nominalizations (Ahland

2012: 232).

4 Verbal Morphology

The verbal system is organized around three oppositions which affect the structure and functions of the wordforms: finite stem vs. infinitive stem (§2.3.3 and §4.3), realis vs. irrealis[12] (§4.1), and final vs. non-final (§7.3). Most of the discussion of verbs focuses on final verbs (the most finite of the OV system); while most final verbs require the finite verb stem, some constructions require the infinitive stem (especially frequent for negative forms) (see §4.3). The term non-final includes medial and converb-like forms that function as clause-chaining devices (§7.3). The discussion below also highlights derivational and inflectional morphology.

4.1 Realis vs. Irrealis

Realis and irrealis verbs have distinct item-arrangement patterns; one important distinction involves subject marking: realis verbs take subject prefixes (Table 17) while irrealis verbs take subject suffixes (see Table 18). Realis is associated with affirmative polarity and non-future tense and may be used with many aspectual distinctions. Irrealis is associated with negative polarity, future tense, and counterfactual constructions; irrealis verbs do not express many aspectual distinctions.

Table 17: Realis Verbal Word (from Ahland 2014b: 3)

Inflectional Prefixes			Derivational Suffixes		Inflectional Suffixes				
(Affirmative)	Subject Prefix	Finite Stem	(Valence Decreasers)	(Applicative)	(Perfect)	(Non-Singular)	(Past Habitual)	(Hearsay)	Utterance Type

[12] The interactions between stem type and the realis/irrealis oppositions are beyond the scope of this discussion (see Ahland 2012: 343-74).

Table 18: Irrealis Verbal Word (from Ahland 2014b: 4)

Inflectional Prefix		Derivational Suffixes		Inflectional Suffixes						
(Affirmative)	Finite Stem	(Valence Decreasers)	(Applicative)	(Perfect)	(Non-Singular)	Future Suffix	Subject Suffix	Auxiliary	(Hearsay)	Utterance Type

In addition to the difference in marking subject with suffix (as opposed to prefixes on realis verbs), irrealis verbs also always have a bound auxiliary verb (grammaticalized from a constellation of copular and existential forms) which immediately follows the subject suffix (see Ahland 2014b for the development of the irrealis construction).

4.2 Derivational Morphology

Derivational markers in NM immediately follow the verb stems in realis and irrealis verbs. Derivational categories include valence decreasing operations (passive, reflexive, and reciprocal) as well as valence increasing operations (applicative and causative[13]). Table 19, below, illustrates both the valence increasing and decreasing derivational markers (see also Ahland 2012: 401-14).

[13] The causative /-sis/ is a morphological borrowing from Oromo.

Table 19: Derivational Morphology

	Derivational Morphology	
Valence Decreasers	/-ek'/ PASS	kùwás-ìʃ ha-héz-↓ek'-á ball-SBJ AFF-hit-PASS-DECL 'A ball was hit.'
	/-iŋk/ REFL	p'iʃ-iʃ ha-héz-↓iŋk-á child-SBJ AFF-hit-REFL-DECL 'A child hit herself/himself.'
	/-mùnd/ RECP	íʃ p'iʃ-wol-iʃ ha-héz-mùnd-and-á DEF child-PL-SBJ AFF-hit-RECP-NSG-DECL 'The children hit each other.'
Valence Increasers	/-tà/ APPL	p'iʃ-iʃ kùwás-ná tí-ná ha-héz-tà-á child-SBJ ball-OBJ 1SG-OBJ AFF-hit-APPL-DECL 'A child hit a ball for me.'
	/-sìs/ CAUS	p'iʃ-iʃ kùwás-ná tí-ná ha-héz-sìs-á child-SBJ ball-OBJ 1SG-OBJ AFF-hit-CAUSE-DECL 'A child made me hit a ball.'

There is also a periphrastic means of increasing valence in NM: the use of the verb 'give' in a different-subject medial construction (cf. Ahland 2012: 590). In (20), the medial verb has been semantically bleached and serves to increase the valence in the causative construction (there is no event of giving in 20).

(20) *tí-ʃ íʃ-nà tí-tà-aʃ ha-kí-↓á*
1SG-SBJ 3SG-OBJ 1SG-CAUSE-DS:NF AFF-come-DECL
'I made her/him come.'

4.3 Inflectional Morphology

Verbal inflectional morphology includes marking for subject, tense and aspect, mood/speech act/utterance types, and negation. Only subjects control bound pronominal marking on verbs. Realis verbs subject prefixes and two sets of irrealis verb subject suffixes are provided in Table 20. The use of both prefixes and suffixes for subject marking is attested in other Omotic

languages (Sheko, Hellenthal 2010; Seezo, Girma 2015; Ganza, Reidhead 1947).[14]

Table 20: Verbal Subject Markers (from Ahland 2014b: 7)

	Prefixes	Suffixes	
	Realis	Irrealis Non-Future	Irrealis Future
1SG	tí-	-tí	-t´
1DU	han´-	-n´	-n´
1PL	ham`-	-m`	-m`
2SG	hì-	-hì	-èm
2DU	háw-	-ẃ	- ´ (H Tone)
2PL	hàw-	-ẁ	- ` (L Tone)
3SG	Ø-	-Ø-	-m`
3DU/PL	Ø- /-and/	-Ø- /-and/	-m` /-and/

The basic tense distinction in NM is future vs. non-future. Only the future tense is morphologically marked, with the /-gà/ FUT suffix (21). Non-future is zero-marked, either through the use of the realis verb (which is a sort of 'factive' non-future (22-23)) or the even the non-future negative (which requires the irrealis verb) (24).

(21) *nà-àt ha-bíʃ-gà-m-bìʃ-á*
here-LOC AFF-EXIST-FUT-3-NPST:AUX-DECL
'S/he will be here.'

(22) *kwalla hí-k'àʃ ha-tí-wó:l-↓á*
yesterday go-PURP AFF-1SG-want-DECL
'Yesterday, I wanted to go.'

(23) *tóló hí-k'àʃ ha-tí-wó:l-↓á*
now go-PURP AFF-1SG-want-DECL
'Now, I want to go.'

[14] For a discussion on the development of these two sets of suffixes in Northern Mao, see Ahland 2014b.

(24) *kwalla* *hez-á-tí-bíʃ-á*
yesterday hit:INF-NEG-1SG-NPST:AUX-DECL
'I did not hit (it) yesterday.'

There are nine aspectual possibilities marked on realis verbs; each is identified and illustrated in Table 21 (cf. Ahland 2012: 432-46).

Table 21: Aspect Marking on Realis Verbs

Perfect /-ti/	ha-jéːts'-ti-á AFF-run-PF-DECL 'S/he has run.'
Past Habitual /-òw/	ha-jéːts'-òw-á AFF-run-HAB-DECL 'S/he used to run.'
Progressive—Present (auxiliary)	ha- jéːts' biʃ-á AFF-run NPST:AUX-DECL 'S/he is running.'
Progressive—Past (relativizer and auxiliary)	ha-jéːts'-ìt bitè AFF-run-REL PST:AUX 'S/he was running.'
Perfect /-kòt'/	íʃ kjat'-nà ha-kí-kòt'-á DEF house-OBJ AFF-come-PF-DECL 'S/he has come to the house.'
Completive /-ts'eːl/	ha-jéːts'-ts'eːl-á AFF-run-COMPL-DECL 'S/he finished running.'
Durative /kò-/	ha-kò-jeːts'-á AFF-DUR-run-DECL 'S/he was running (for a while).'
Iterative / Continuative (stem reduplication)	ha-jéːts'-jéːts'-↓á AFF-run-run-DECL 'S/he ran and ran.'
Non-Past Habitual (reduplication with auxiliary)	ha-jéːts'-jéːts' biʃ-á AFF-run-run NPST:AUX-DECL 'S/he is always running.'

The only clear aspectual distinction that can be found on irrealis verbs include perfect which co-occurs with future tense (25).

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

Like many Omotic languages, NM exhibits an array of sentence-final markers indicating mood/speech-act/utterance type (cf. Ahland 2012: 468). The sentence-final markers

Table 22: Mood and Speech Act (Utterance) Marking

Utterance Type		Marker Gloss	Construction and Marker(s)
Declarative	Neutral	DECL	Finite Realis/Irrealis Verb + -á
	Hearsay	HRSY-DECL	Finite Realis/Irrealis Verb + -w-á
Interrogative	Polar	AFF+ INTR	ha- Finite Realis/Irrealis Verb + -â: ~ -à:
	Content	INTR	Finite Realis/Irrealis Verb + -à:
Imperative	Simple	2SG:IMP	Infinitive Verb Stem + -í
		2DU:IMP	Infinitive Verb Stem + -wá
		2PL:IMP	Infinitive Verb Stem + -wà
	Polite (Hortative)	IMPR + 2SG:IMP	há- + Infinitive Verb Stem + -í
		IMPR + 2DU:IMP	há- + Infinitive Verb Stem + -wá
		IMPR + 2PL:IMP	há- + Infinitive Verb Stem + -wà
Jussive	Simple	JUSS-3-NPST:AUX	Infinitive Verb Stem + -t-í-nè
	Impersonal	IMPR + JUSS-3-NPST:AUX	há- + Infinitive Verb Stem + -t-í-nè

While the most frequently-attested utterance types (declarative and interrogative) require the finite stem of the verb in affirmative constructions, the imperative and jussive constructions require the infinitive stem.

Negation itself intersects with the utterance types in Table 22. Negation is marked by a combination of suffixation (/-á/), infinitive verb stems, and the irrealis verbal wordform on final declarative and interrogative verbs (26); the negative suffix /-wé/ is used for 3rd person subjects on non-future verbs (27) (Ahland 2012: 492).

(26) *hez-á-tí-bíʃ-á*
hit:INF-NEG-1SG-NPST:AUX-DECL
'I did not hit (it).'

(27) *hez-and-wé-jà*
hit:INF-NSG-NEG-NFUT:AUX
'They (DU/PL) didn't hit (it).'

Other negative markers are also attested in various verbal constructions: /-wá/ (non-final verbs), /-áʃ/ (imperative verbs), and the prefix /án-/ (jussive verbs) (cf. Ahland 2012: 501-5; 583).

5 Nominal Morphology

The nominal system comprises various modification constructions (associative, attributive, possessive, and genitive) where head nouns exhibit a tonally-marked construct form when modified (see the definition of construct nouns in Creissels 2009a; Ahland 2012: 199).

5.1 Noun Modification Constructions

Noun modification in NM is accomplished through one of the modification constructions, and the modified head noun's citation tonal melody is replaced by a construct noun melody (Table 23). Both the H and HL citation melodies split into two classes based on which construct noun melody they take. The replacive tonal process demonstrates that there are in fact two results in large scale neutralization.

Table 23: Noun Tone Classes and the Noun Construct Melodies

Citation Tone Classes	Construct Noun Melody
H_1	> MM
M, L, HL_1, MH, ML	> ML
H_2, HL_2, LH	> LL

There are four noun modification constructions (28-39). Associative constructions can phonologically join a noun, numeral, quantifier to a noun or numeral. The result is a new noun (which may or may not have conventionalized semantics). On top of the replacive construct tone pattern, the associative construction is marked by other tonal processes (Ahland 2012: 150; 204).

(28) *kús-kás-è*
hand-hoe-TV
'hand-hoe'

Attributive constructions produce noun phrases where the head noun is modified by any of the following: definite article, demonstrative, numeral, or relative clause (29).

(29) *jéʃ* *kas-è*
that hoe-TV
'that hoe'

Possessive constructions produce noun phrases as well. In this case, the modifier is limited to pronouns and animate nouns (prototypical possessors) (30).

(30) *es* *kas-è*
person hoe-TV

Genitive constructions produce noun phrases where a first noun phrase (often just a noun or pronoun) takes the /-ìŋ/ GEN case marker (31).

(31) *es-ìŋ* *kas-è*
person-GEN hoe-TV
'person's hoe'

In natural discourse, NM noun phrases are not normally larger than three elements, including the head noun. The order of constituents is represented in Table 24.

Table 24: Constituent Order in Noun Phrases

Constructions	Order of Constituents
Attributive and Genitive	{DEF, DEM, NP GEN} NUM RC* N
Possessive	NP_{POSS} N

5.2 Derivational Morphology

New nouns can be created through a variety of deverbal derivations. These processes include action nominalizations, relativization, and a variety of participant nominalizations involving infinitive stems + noun compounds.

Action nominalization is normally accomplished through use of the infinitive verb stem (32) and the resulting nouns take case marking associated with other NPs; they can also participate in the noun modification constructions (33).

(32) *jèːts’-ìʃ* *ha-nok-á*
run:INF-SBJ AFF-be.good-DECL
‘Running is good.’

(33) *ób-ìŋ* *tàg-nà* *káːm-á-t-éːz-↓á*
brother-GEN argue:INF-OBJ love:INF-NEG-1SG-AUX-DECL
‘I don’t like brother’s arguing.’

Relativization creates nouns through the use of the /-(i)t/ relativizer; the most highly nominalized relativizations involve the infinitive verb stem and even nominal number marking (34) (cf. Ahland 2012: 225).

(34) *ki-t-wol-iʃ* *oʃk-nà* *ha-ak-and-á*
come-INF-PL-SBJ meat-OBJ AFF-eat.meat-NSG-DECL
‘The ones who came ate meat.’

Agent, instrument, and locative nominalizations are formed through compounding infinitive verb stems with the words ‘person’ (/esè/), ‘thing’ (/mìsè/), and ‘land’ (/k’éts’é/), respectively.

(35) *jèts’-es-è*
run:INF-person-TV
‘runner’

(36) *winz-mìs-è*
write:INF-thing-TV
‘pen/pencil’

(37) *hádèm-k’ets’-e*
work:INF-land-TV
‘workplace’

5.2 Inflectional Morphology

Nominal inflectional morphology includes number marking (dual and plural), and various

phrasal suffixes (enclitics): the terminal vowel /-e/, and case and postpositional markers. Singular number is unmarked on nouns; unmarked nouns also serve as 'general' number (Corbett 2000: 13) which can semantically reference non-singulars. Dual is marked by /-kuw/ and plural is marked by /-(w)ol/.

(38) *es-è* *es-kuw-e* *es-wol-e*
person-TV person-DU-TV person-PL-TV
'person' / 'people' 'two people' 'people'

The terminal vowel /-e/ is found on all nominals in citation form and also on head nouns when they are found at the end of an utterance or at the end of a main clause (cf. Ahland 2012: 313). It is not found in other syntactic contexts, and its tone can be H, M, or L, depending on the tone class of the noun. Unlike many other Omotic languages, the terminal vowel in NM is always /e/.

Case markers includes the subject /-iʃ/,[15] object /-na/, genitive /-iŋ̀/, and vocative /-o/ and /-a/ (Ahland 2012: 325). Both S and A arguments are obligatorily marked as subjects while P arguments are optionally marked as objects in canonical position (a marked S/A vs. marked P alignment pattern, Creissels 2009b).

(39) *es-ìʃ* *ha-kí-↓á*
person-SBJ AFF-come-DECL
'A person came.'

(40) *múnts'-ìʃ* *p'iʃ-(na)* *ha-ka:m-á*
woman-SBJ child-OBJ AFF-love-DECL
'A woman loved a child.'

The form used for object case is also used as a marker for semantic goals (41).

[15] Some pronouns take the subject form /-té/ (Ahland 2012: 326).

(41) *bàmbàs-(ná) ha-tí-hów-↓á*
Bambassi-GOAL AFF-1SG-go-DECL
'I went to Bambassi.'

While the case markers above indicate grammatical relations of core arguments, postpositions (which like case markers are phrasal enclitics in NM), mark oblique adpositional relations such as locative/source (42) and instrument/comitative (43); these are semantically, not syntactically, required (Ahland 2012: 332).

(42) *tí-ŋ ↓kjat'-èt há:l-↓á*
1SG-GEN house-LOC sleep-DECL
'S/he slept at my house.'

(43) *kas-an ak'-na ha-tí-áʃ-↓á*
hoe-INS corn-OBJ AFF-1SG-PLant-DECL
'I planted corn with a hoe.'

6 Simple Clauses

Simple (single-verb) clause constructions include various transitivity constructions: intrasitive (44), transitive (45), and ditransitive (46-47).[16]

(44) *rám-ìʃ ha-kí-gà-m-bìʃ-á*
Rama-SBJ AFF-come-FUT-3-NPST:AUX-DECL
'Rama will come.'

(45) *lèlí-ìʃ rám(-nà) ha-héz-↓á*
Lelija-SBJ Rama-OBJ AFF-hit-DECL
'Lelija hit Rama.'

In ditransitive constructions, the order of theme and recipient is determined by pragmatic issues

[16] A small class of labile verbs, which can be used in multiple transitivity constructions without additional derivational valence changers, has been identified as well (Ahland 2012: 541).

such as topicality; the object case marker is always required on the first object in the ditransitive and is optional on the second.

(46) Agent Recipient Theme

háts'à rám-ìʃ íʃ-nà ʃapków(-nà) tà-gà-t-bíʃ-á

tomorrow Rama-SBJ 3SG-OBJ shoe-OBJ give-FUT-1SG-NPST:AUX-DECL

'Rama will give him/her shoes tomorrow.'

(47) Agent Theme Recipient

háts'à rám-ìʃ ʃapków-nà íʃ(-nà) tà-gà-t-bíʃ-á

tomorrow Rama-SBJ shoe-OBJ 3SG-OBJ give-FUT-1SG-NPST:AUX-DECL

'Rama will give him/her shoes tomorrow.'

A point of interest in the intransitive constructions is that no copula is required for constructions with present temporality (48); both past and future temporalities are expressed with forms of an existential verb (49-50).[17]

(48) *í-té tí-ŋ bà:b-è*

3SG-SBJ 1SG-GEN father-TV

'He is my father.'

(49) *í-té tí-ŋ bà:b bitè*

3SG-SBJ 1SG-GEN father be.PST

'He was my father.'

(50) *í-té hensíl-↓es ha-bíʃ-gà-m-n-á*

3-SBJ spear-person AFF-EXIST-FUT-3-NPST:AUX-DECL

'S/he will be a soldier.'

[17] The past copula in (49) is actually derived from a relativized existential followed by the terminal vowel (Ahland 2012: 462; 2015a). Today, this historically nominal element functions as a past copula form and an auxiliary.

7 Clause Combining

Complex clause constructions which involve more than one verb fall into three general categories: subordination, coordination, and clause chaining.

7.1 Subordination

There are three types of subordination in NM: relative clauses, adverbials, and complements. As discussed in §5.2, relative clauses are nominalizations marked by the /-(i)t/ suffix. There is also a special negative relativizer /-(w)és/ for clauses relativized on the subject (51).

(51) *kàːl-là* *mì-wés* *es-ìʃ* *ha-kí-↓á*
porridge-OBJ eat:INF-NEG:REL person-SBJ AFF-come-DECL
'The person who didn't eat the porridge came.'

Grammatical relations of subject, object, oblique and possessor may be relativized on (Ahland 2012: 609-22).

There are many adverbial clause types in NM. These include non-conditional adverbials (time, location, manner, purpose, and reason, Ahland 2012: 646) as well as conditional adverbials (including uncertain and hypothetical counterfactual forms, Ahland 2012: 649). The system of so-called adverbial clauses does not hold together as a structural domain in the language; many different structures are used for the adverbial functions.

Complementation involves clauses that function as either subjects or objects of a matrix clause. Subject complements are more highly nominalized and can occur with many types of matrix verbs (Ahland 2012: 623). There are far more object complement types, and these can be classified by their structure and degree of nominalization: from the most nominal infinitive verb stems, clauses marked by /-gàʃ/, complex object complements, to fully finite clauses (see Ahland 2012: 626-39). The most interesting complex object complement construction involves a relative

clause with a cognate head noun of the same root (in the infinitive stem) (52).

(52) íʃ ki:m-nà tí-tjam-it tjam-na ha-tí-àld-á
DEF money-OBJ 1SG-count-REL count:INF-OBJ AFF-1SG-know-DECL
'I know that I counted the money.'
(literally: 'I know counting that I counted the money.'

7.2 Coordination

Coordination of two like constituents (phrases or clauses) is marked by /-n/ (with morphophonemically conditioned vowels before the [n], cf. Ahland 2012: 339); the conjunction always attaches to a nominal element: either both nouns if two are joined in a complex noun phrase or on the first noun of the second clause if multiple clauses are joined (53-54).

(53) *p'iʃ-iʃ pák-àn kà:l-àn ha-mí-↓á*
child-SBJ injera-CONJ porridge-CONJ AFF-eat-DECL
'A child ate injera and porridge.'

(54) *es-ìʃ k'úp ʃén-gà-m-n-á*
person-SBJ hat buy-FUT-3-NPST:AUX-DECL

múnts'-ìʃ-ín ʃapków ʃén-gà-m-n-á
woman-SBJ-CONJ shoe buy-FUT-3-NPST:AUX-DECL
'A guy will buy a hat and a woman will buy shoes.'

7.3 Clause Chaining

The most frequently-attested type of clause combining in NM involves a set of three non-final verb constructions; these verbal forms cannot be used to end sentences (see Azeb and Dimmendaal 2006 and Rapold 2007 for a typological and areal discussion of such forms with special reference to Ethiopian languages). Structurally, NM's non-final verbs form a single category (see Ahland 2012: 559-61), but functionally, they form two groups: a same (55) [18] vs.

[18] The /-in/ SS suffix is cognate with the coordinate conjunction, but as a verbal suffix, it may be used only

different (56) subject medial verb system (prototypically sequential in function) and a temporally-integrated converb form (57), which is prototypically adverbial and non-sequential (i.e. overlapping events) in function and may involve same or different subjects as the following clause.

(55) *kàːl-là* *mí-in* *ha-hów-j-↓á*
porridge eat-SS:NF AFF-go-AWAY-DECL
'S/he ate porridge and went away.'

(56) *kàːl-là* *hí-mí-iʃ* *ha-hów-j-↓á*
porridge 3SG-eat-DS:NF AFF-go-AWAY-DECL
'S/he ate porridge and (someone else) went away.'

(57) *kàːl-là* *hí-mí-èt* *ha-tí-hów-j-↓á*
porridge 3SG-eat-TI:NF AFF-1SG-go-AWAY-DECL
'While s/he ate porridge, I went away.'

It is not unusual to find as many as seven clauses conjoined with the same-subject or different-subject constructions (Ahland 2012: 566). The discourse function of medial vs. converb forms is distinct as well (Ahland, forthcoming).

There are other less frequently-attested complex multi-verb constructions in NM; these include verb serialization (e.g. the directionals 'come' and 'go', as in /j/ from 'go' in 55-57, above) and compounding (cf. Ahland 2012: 601) and various types of direct and indirect speech (see Ahland 2012: 639).

with same-subjects; this is not the case in its function as a nominal suffix (see example 54 above).

Abbreviations

1	First person	JUSS	Jussive
2	Second person	L	L tone
3	Third person	LOC	Locative
AFF	Affirmative	M	M tone
APPL	Applicative	N	Noun
AUX	Auxiliary	NEG	Negative
AWAY	Translocative directional	NF	Non-Final (Medial/Converb)
CAUSE	Causativizer	NP	Noun phrase
COMP	Complementizer	NPST	Non-past
COMPL	Completive	NSG	Non-singular (dual and plural)
DECL	Declarative	NUM	Numeral
DEF	Definite	OBJ	Object
DEM	Demonstrative	PASS	Passive
DS	Different-Subject	PF	Perfect
DU	Dual	PL	Plural
DUR	Durative	POSS	Possessor
EXIST	Existential verb	PST	Past
FUT	Future	PURP	Purposive
GEN	Genitive	RC	Relative Clause
H	H tone	RECP	Reciprocal
HAB	Habitual	REFL	Reflexive
HRSY	Hearsay	REL	Relativizer
IMP	Imperative	SBJ	Subject
IMPR	Impersonal	SG	Singular
INF	Infinitive	SS	Same-subject
INS	Instrument	TI	Temporally-Integrated
INTR	Interrogative	TV	Terminal vowel

References

Ahland, Michael (2009). 'Aspects of Northern Mao Phonology.' *Linguistic Discovery* 7: 1-38.

Ahland, Michael, and Mary Pearce (2009). 'Tonal Behavior in the Northern Mao Possessive Construction: Downstep and Double Downstep?' Sixth World Congress of African Linguistics (WOCAL 6), Köln.

Ahland, Michael B. (2012). *A Grammar of Northern Mao (Màwés Aas'è).* Eugene, OR: University of Oregon, PhD. dissertation.

Ahland, Michael (2013). 'Degrammaticalization in Northern Mao's Pronominal Innovations: From Subject Prefix to Full Pronoun.' An extended abstract of a paper presented at the 2013 meeting of the Linguistic Society of America.

Ahland, Michael (2014a). 'Interactions Between Tone and Morphosyntax in Northern Mao.' 45th Annual Conference on African Linguistics, Workshop on Africa's Endangered Languages, University of Kansas.

Ahland, Michael (2014b). 'Subject Marking Interrupted: Perturbations from the Development of Northern Mao's Future Tense Suffix,' *Studies in African Linguistics* 43.2.

Ahland, Michael (2015a). 'The Development of Finite Verbs from Nominalized Structures in Northern Mao.' 46th Annual Conference on African Linguistics, University of Oregon, March.

Ahland, Michael (2015b). 'The History of 'ha': How Ganza Sheds Light on the Development of Person Marking in Northern Mao *(Màwés Aas'è)*.' 43rd Annual North American Conference on Afroasiatic Linguistics (NACAL), Georgetown University, February.

Ahland, Michael (*forthcoming).* 'The Function of Non-Final Verbs and Their Aspectual Categories in Northern Mao Narrative,' in Doris Payne and Shahar Shirtz (eds.), *Beyond Aspect: The Expression of Discourse Functions in African Languages. Typological Studies in Language.* Amsterdam/Philadelphia: John Benjamins Publishing Company.

Azeb Amha (2001). *The Maale Language.* Leiden: Research School CNWS, Leiden University.

Azeb Amha, and Gerrit J. Dimmendaal (2006). 'Converbs in an African perspective,' in Azeb Amha, Gerrit J. Dimmendaal, Felix K. Ameka, Alan Dench and Nicolas Evans (eds.), *Catching Language: The Standing Challenge of Grammar Writing*. Berlin/New York: Mouton de Gruyter, 393-440.

Baye Yimam (2006). 'A General Description of Mao,' *ELRC Working Papers* II/2: 166-225.

Beachy, Marvin Dean (2005). *An Overview of Central Dizin Phonology and Morphology*. Arlington: University of Texas at Arlington MA thesis.

Bender, M. Lionel (1971). 'The Languages of Ethiopia: A New Lexicostatistic Classification and Some Problems of Diffusion,' *Anthropological Linguistics* 13: 165-288.

Bender, M. Lionel (1975). 'Omotic: a New Afroasiatic Language Family,' *University Museum Series* 3. Carbondale: Southern Illinois University Press.

Bender, M. Lionel (1985). 'Gumuz, Koman, Mao and Omotic,' *Studies in African Linguistics* (supplement) 9: 19-21.

Bender, M. Lionel (1990). 'The Limits of Omotic,' in Richard J. Hayward (ed.), *Omotic language studies*, London: School of Oriental and African Studies, University of London.

Bender, M. Lionel (1996). *The Nilo-Saharan Languages: A Comparative Essay*. München: Lincom Europa.

Bender, M. Lionel (2000). *Comparative Morphology of the Omotic Languages*. München: Lincom Europa.

Bender, M. Lionel (2003). *Omotic Lexicon and Phonology*. (Published by author.)

Corbett, Greville (2000). *Number,* in *Cambridge Textbooks in Linguistics.* Cambridge: Cambridge University Press.

Creissels, Denis (2009a). 'Construct Forms of Nouns in African Languages,' in Peter K. Austin, Oliver Bond, Monik Charette, David Nathan and Peter Sells (eds.), *Proceedings of Conference on Language Documentation and Linguistic Theory 2*. London: School of Oriental and African Studies, University of London, 73-82.

Creissels, Denis (2009b). 'Uncommon Patterns of Core Term Marking and Case Terminology,' *Lingua* 119: 445-459.

Dixon, Robert M.W. (2004). Adjective Classes in Typological Perspective,' in Robert M.W. Dixon and Alexandra Y. Aikhenvald (eds.), *Adjective Classes*. Oxford University Press, 1-49.

Fleming, Harold C. (1984). The Importance of Mao in Ethiopian History,' in Sven Rubenson (eds.), *Proceedings of the Seventh International Conference of Ethiopian Studies*. Uppsala: Scandinavian Institute of African Studies, 31-38.

Getachew Kassa (2015). *A Grammar of Hozo*. Addis Ababa: Addis Ababa University, PhD dissertation.

Girma Mengistu (2007). *The Morphosyntax of Verbal Functional Categories of Diddessa Mao*. Addis Ababa: Addis Ababa University, MA thesis.

Girma Mengistu (2015). *A grammar of Seezo*. Addis Ababa: Addis Abba University, PhD

dissertation.

Grottanelli, Vinigi (1940). *I Mao. Centro Studi per l'Africa Orientale Italiana; Missione Etnografica nel Uollega Occidentale,* 1. Rome: Reale Accademia d'Italia.

Hayward, Richard J. (2000). 'The 'Empty Quarter' of Afroasiatic,' in Jacqueline Lecarme (ed.), *Research in Afroasiatic Grammar II: Selected Papers from the Fifth Conference on Afroasiatic Languages*. Amsterdam: John Benjamins Publishing Company, 241-61.

Hellenthal, Anne-Christie (2010). *A Grammar of Sheko.* Utrecht: LOT.

Rapold, Christian (2006). *Towards a Grammar of Benchnon*. Leiden University: The Leiden University Centre for Linguistics.

Rapold, Christian J. (2007). 'Defining Converbs Ten Years On - A Hitchiker's Guide,' in Sascha Völlmin, Azeb Amha, Christian Rapold and Silvia Zaugg-Coretti (eds.), *Converbs, Medial Verbs, Clause Chaining and Related Issues.* Köln: Rudiger Köppe Verlag, 7-30.

Siebert, Ralph, Charlotte Wedekind, and Klaus Wedekind (1994). 'Third S.L.L.E. Survey on Languages of the Begi/Asosa Area,' *S.L.L.E. Linguistic Report* 15. Addis Ababa: Institute of Ethiopian Studies, Addis Ababa University.

Snider, Keith (1999). *The Geometry and Features of Tone.* Publications in Linguistics 133. Dallas: The Summer Institute of Linguistics and The University of Texas at Arlington.

Wedekind, Charlotte, and Klaus Wedekind (1993). 'Survey on Languages of the Asosa Begi-Komosha Area, Part II,' *S.L.L.E. Linguistic Report* 12. Addis Ababa: Institute of Ethiopian Studies, Addis Ababa University.