

## Omotic Features in the Mao Group and Internal Coherence

*Oxford Guide to the Afroasiatic Languages*

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### 1. Introduction

The Mao languages of Ethiopia (Mawes Aas'e [myf], Seezo [sze], Hoozo [hoz], and Ganza [gza]) have posed a challenge for comparativists. One of the most important and revisited questions is whether the Mao group is better represented as having an Omotic or Nilo-Saharan genetic relationship. A second, broader question concerns whether Omotic constitutes a unique genetic group itself or whether this group should be positioned within Cushitic--this debate is well-known in the field of Afroasiatic scholarship (Zaborski 1990; Lamberti 1991; Theil 2012:371-372; Azeb Amha 2012:425-434).

This chapter explores the degree to which the Mao languages fit within the Omotic family. The focus here is two-fold. First, the examination will consider select phonological and morphosyntactic features which have been identified as both widespread in Omotic and generally unique within the Ethiopian context (i.e. not typically found in other Ethiopian languages). These features were identified in Azeb Amha's 2017 overview of the Omotic language family:

Some features that are widespread in Omotic are not that common in other Ethiopian languages. These include robust tone, terminal vowels, sibilant harmony, demonstrative and interrogative verbs, switch reference, and special interrogative and negative paradigms, all of which are found in every branch of Omotic. (Azeb Amha 2017:848)

While a number of these features (e.g. robust tone and switch reference) can be found in other language families of the area (especially, Cushitic and Nilo-Saharan), it is the bundling together of these features which is treated as an Omotic phenomenon.

The family tree provided in Azeb Amha's chapter (p. 816) is based on Fleming's early work (1976) and does not include any of the four Mao group languages.<sup>1</sup> As a result, the extent to which the Mao group exhibits these six identified features is not yet fully explored. This is the focus of section 3 in this paper.

Following the examination of the selected Omotic features, the discussion then turns to consideration of developments within the Mao group in an attempt to underscore the internal coherence of the group. While the Mao group is apparently old--an early branch of Omotic (Hayward 2000:224; Bender 2003:1), which is itself an early branch of Afroasiatic (Fleming 1983; Ehret 1995:489; Bender 1997:20)--the group shares typologically interesting features which attest to their shared history. These include co-evolutions of definite marking and nominative case where definite markers precede the NP and case markers follow and both the pre- and post- forms are cognate; a number systems that exhibit an archaic quintisimal system; a two-way verbal opposition involving the placement of subject markers relative to the verb stem; and the development of verbal aspectual markers through clause chaining and verb serialization.

The significance of this research lies in the reliance on the latest scholarship to revisit the problematic historical question of the Mao languages. The methodology proposed builds on earlier work where lexical and/or structural similarity and phonological innovation were primary tools. Now that scholars have access to the details of most of the Mao grammar systems, a more accurate picture of links between the Mao languages and the rest of Omotic can be explored.

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<sup>1</sup> Throughout this paper, the classifications used for Omotic are taken from Bender (2003:1-3). Bender's classification is the only widely known classification that includes the Mao languages as part of Omotic, and given the number of debates about internal classification of Omotic and subgrouping nomenclature, it is easiest to refer to just one system.

## **2. The Historical Position of the Mao Group**

The Mao group, even among those who accept the Omotic hypothesis, has remained a point of contention. Bender's early work on the position of the Mao group waffled between different interpretations of what he called "the Mao problem." At times, Bender argued for an Omotic lineage for the Mao group and, at other times, for a mixed lineage with Koman (Nilo-Saharan) languages (cf. Bender 1975, 1985, & 1990). In his later work, however, Bender concluded that the Mao group was in fact an early, primary, branch of Omotic (2000 and 2003). Zaborski continued to disagree and argued for a Nilo-Saharan lineage, largely on the basis of the pronominal system (Zaborski 2004). Zaborski's claims about the Mao pronouns also shaped general Omotic work, where the Mao languages were not considered in discussions and descriptions of the Omotic family (cf. Azeb Amha 2012). In more recent years, however, the body of work on the Mao languages has grown considerably: reference grammars featuring large-scale descriptions of three of the languages are now available (e.g. Mawes Aas'e (Ahland 2012), Seezo (Girma Mengistu 2015), and Hoozo (Getachew Kassa 2015)) in addition to multiple articles, and there is now a phonological description (Smolders 2016) and substantial glossary (Smolders 2015b) for the Ganza language as well. These works all assume an Omotic lineage for the Mao group, but none of them has directly taken up the challenge of defending the Mao group as Omotic.

## **3. Features of Omotic and Correspondence Across the Mao Group**

The discussion below begins with an exploration of select 'Omotic' phonological features and then proceeds to select 'Omotic' morphosyntactic features; in all cases, Azeb Amha's identified Omotic features (2017) will be central to the discussion.

### **3.1. Phonological Features**

The three phonological features explored below include the presence of complex tone systems with lexical and grammatical relevance (section 3.1.1), the presence of a non-functional terminal vowel system on nominal forms (section 3.1.2) and the appearance of sibilant harmony within words (section 3.1.3).

#### **3.1.1. Complex Tone System with Both Lexical and Grammatical Relevance**

Most Omotic languages are tonal. There is, however, considerable variation in the number of phonemic tones which make up these systems: Omotic tonal languages exhibit anywhere from 2 to 6 phonemic tones (Azeb Amha 2017:819); the only contour tones attested derive from the combination of two level tones being assigned to a single tone-bearing unit (cf. the discussion of the contour tone in Benchnon in Wedekind 1983 and Rapold 2006). Omotic tone systems generally serve for marking lexical distinctions as well as grammatical function. Grammatical functions can include such domains as gender distinctions, verbal valence-changing devices, case, marking stem categories (including paradigmatic subtypes as well as semantically-related noun vs. verb stems), mood, and modality (cf. Azeb Amha 2017:820). Section 3.1.1.1, below, explores lexical tone and comparative connections across the Mao languages while section 3.1.1.2 explores grammatical tone in Mao languages.

##### **3.1.1.1. Tonal Contrasts, Major Features, and Historical Links**

All four of the Mao languages are tonal. Hoozo, Seezo, and Ganza exhibit two underlying levels (H and L). In Seezo, contour tones are attested only on syllables with long vowels and appear to be the result of two level register tones assigned to the same tone-bearing-unit (Girma Mengistu 2015:71). Mawes Aas'e, on the other hand, shows three contrastive levels with four underlying tones. The four underlying tones in Mawes Aas'e are required because two mid tones behave differently with respect to downstep and particular morphosyntactic constructions (see Ahland 2012:102-108; 150-179). While the distinction between 2 and 4 underlying tones may suggest significant divergence from the three other languages of the subgroup, there are correspondences that link the tone systems of Ganza and Mawes Aas'e in particular. In order to demonstrate this, we must explore the Mawes Aas'e data involving the two M tones in the verbal suffixes below. First, we should note that in the citation form of the verb, the

declarative suffix /-á/ is downstepped after a H toned verb stem (3) but is not downstepped after a M (1) or a L toned verb stem (2).<sup>2</sup>

	M Verb Stem	L Verb Stem	H Verb Stem
(1)	$\left[ \begin{array}{c} \text{--} \quad \text{--} \\ \text{ha-int}'\text{-}\acute{\text{a}} \\ \text{AFF-see-DECL} \\ \text{'S/he saw.}' \end{array} \right]$	(2) $\left[ \begin{array}{c} \text{--} \quad \text{--} \\ \text{ha-}\grave{\text{a}}\text{ld-}\acute{\text{a}} \\ \text{AFF-know-DECL} \\ \text{'S/he knew.}' \end{array} \right]$	(3) $\left[ \begin{array}{c} \text{--} \quad \text{--} \\ \text{ha-h}\acute{\text{e}}\text{z-}\acute{\text{a}} \\ \text{AFF-hit-DECL} \\ \text{'S/he hit (it).}' \end{array} \right]$

It turns out that all H-tone verb stems in Mawes Aas'e cause this downstep of a following H and the reason is that a floating L tone is at the right edge of this class of verbs (see Ahland 2012:96ff). Some M toned suffixes also exhibit downstep after the H-toned verb stem (the passive /-ek'/ and the reflexive /-iŋk/). In examples (4 and 5) and (7 and 8), the two suffixes surface as M tones following the M and L verb stems, but after the H-toned verb stems, these same suffixes behave like the declarative suffix above and downstep (see examples 6 and 9).

	M Verb Stem	L Verb Stem	H Verb Stem
(4)	$\left[ \begin{array}{c} \text{--} \quad \text{--} \\ \text{ha-int}'\text{-ek}'\text{-}\acute{\text{a}} \\ \text{AFF-see-PASS-DECL} \\ \text{'S/he was seen.}' \end{array} \right]$	(5) $\left[ \begin{array}{c} \text{--} \quad \text{--} \\ \text{ha-}\grave{\text{a}}\text{ld-ek}'\text{-}\acute{\text{a}} \\ \text{AFF-know-PASS-DECL} \\ \text{'S/he was known.}' \end{array} \right]$	(6) $\left[ \begin{array}{c} \text{--} \quad \text{--} \\ \text{ha-h}\acute{\text{e}}\text{z-}\acute{\text{a}} \\ \text{AFF-hit-PASS-DECL} \\ \text{'S/he was hit.}' \end{array} \right]$
(7)	$\left[ \begin{array}{c} \text{--} \quad \text{--} \\ \text{ha-int}'\text{-iŋk-}\acute{\text{a}} \\ \text{AFF-see-REFL-DECL} \\ \text{'S/he saw her/himself.}' \end{array} \right]$	(8) $\left[ \begin{array}{c} \text{--} \quad \text{--} \\ \text{ha-}\grave{\text{a}}\text{ld-iŋk-}\acute{\text{a}} \\ \text{AFF-know-REFL-DECL} \\ \text{'S/he knew her/himself.}' \end{array} \right]$	(9) $\left[ \begin{array}{c} \text{--} \quad \text{--} \\ \text{ha-h}\acute{\text{e}}\text{z-}\acute{\text{a}} \\ \text{AFF-hit-REFL-DECL} \\ \text{'S/he hit her/himself.}' \end{array} \right]$

Not all M-toned suffixes downstep following H verb stems. The non-singular suffix /-and/ and the perfect suffix /-ti/ surface as identical tones to the passive and reflexive above when they following M and L verb stems (10 and 11) and (13 and 14); however, examples (12) and (15) illustrate that the tones of the non-singular and the perfect suffixes do not downstep as the passive and reflexive do.

	M Verb Stem	L Verb Stem	H Verb Stem
(10)	$\left[ \begin{array}{c} \text{--} \quad \text{--} \\ \text{ha-int}'\text{-and-}\acute{\text{a}} \\ \text{AFF-see-NSG-DECL} \\ \text{'They saw.}' \end{array} \right]$	(11) $\left[ \begin{array}{c} \text{--} \quad \text{--} \\ \text{ha-}\grave{\text{a}}\text{ld-and-}\acute{\text{a}} \\ \text{AFF-know-NSG-DECL} \\ \text{'They knew.}' \end{array} \right]$	(12) $\left[ \begin{array}{c} \text{--} \quad \text{--} \\ \text{ha-hez-and-}\acute{\text{a}} \\ \text{AFF-hit-NSG-DECL} \\ \text{'They hit (it).}' \end{array} \right]$

<sup>2</sup> In the data throughout this chapter, all underlying M tones in Mawes Aas'e are unmarked diacritically (that is the vowel which carries them does not take either an acute or grave diacritic).

	M Verb Stem		L Verb Stem		H Verb Stem
(13)	[ -- - - ]		(14) [ - - - - ]		(15) [ - - - - ]
	ha-int'-ti-á		ha-àld-ti-á		ha-héz-ti-á
	AFF-see-PF-DECL		AFF-know-PF-DECL		AFF-hit-PF-DECL
	‘S/he has seen.’		‘S/he has known.’		‘S/he has hit (it).’

Mawes Aas'e L-toned suffixes, as expected, also do not undergo downstep. Consider the reciprocal /-mùnd/ below in the same environments.

	M Verb Stem		L Verb Stem
(16)	[ -- - - ]		(17) [ - - - - ]
	ha-int'-mùnd-and-á		ha-àld-mùnd-and-á
	AFF-see-RECP-NSG-DECL		AFF-know-RECP-NSG-DECL
	‘They saw one another.’		‘They knew one another.’

	H Verb Stem
(18)	[ - - - - ]
	ha-héz-mùnd-and-á
	AFF-hit-RECP-NSG-DECL
	‘They hit one another.’

Ultimately, then, the data above demonstrate that Mawes Aas'e exhibits two different underlying M tones which appear the same on the surface in some environments (e.g. after M and L tone verb stems) but which behave differently with respect to downstep (e.g. after a H tone verb stem which is followed by a floating L tone).

Ganza's synchronic underlying forms, in addition to the H and L underlying tones, include high and/or low “associated or unassociated (floating) tones” (Smolders 2016:128).<sup>3</sup> One result of Ganza's underlying floating tones is that surface forms of monomorphemic words may contain tones at a mid-level between the H and L targets. Consider the forms below (19).

(19)	HL /wádã/ ‘to insult’ is realized as HL
	H <sup>1</sup> H /wá <sup>1</sup> dã/ ‘to distribute’ is realized as HM [wádã] (Smolders 2016:129).

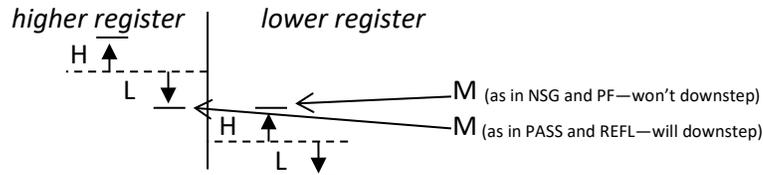
Effectively, then, on the surface, there can be found three levels of tone in Ganza monomorphemic words, and the surface M tone is derived (synchronically, according to Smolders' analysis) from a process of downstep in (19) above.

The argument that Ganza's middle level tone surfaces as a result of a downstep process is analogous to what has been reported historically for Mawes Aas'e. In Mawes Aas'e the two M tones appear to be the result of historical processes involving the interaction of H tone with a low register and L tone with a high register.<sup>4</sup> In Mawes Aas'e, evidence includes the following: 1) that one underlying M tone behaves like a H tone and can be downstepped in certain tone environments (see exs. 6 and 9 above); 2) the fact that the other M tone behaves like a L tone (i.e. not undergoing downstep) presumably because this M is already associated with a low register (see exs. 12 and 15); and 3) the fact that synchronic

<sup>3</sup> Seezo also exhibits floating tones which are often assigned to the terminal vowel of nouns (Girma Mengistu 2015:107) and can also result in contour tones in Seezo as well (Girma Mengistu 2015:328).

<sup>4</sup> For a complete discussion of this phenomenon, see Ahland 2012:102-119.

downstepping of H tones is targeted to the same level as the M tone (that is a downstepped H is indistinguishable from a M on the surface, Ahland 2012:113). Fig. 1, below, illustrates the proposed status of two M tones at the same level on the surface where one M tone is from a L on a higher register (the M associated with the PASS and REFL suffixes) and the other is from a H on a lower register (the M associated with the NSG and PF suffixes).<sup>5</sup>



**Figure 1. The Derivation of Mawes Aas'e's Two M Tones (adapted from Ahland 2012:106)**

Tonal correspondences across example cognate sets in Ganza and Mawes Aas'e are illustrated in Tables 3 and 4, below. But before these can be discussed, another interesting feature of both Ganza and Mawes Aas'e's tonal systems must first be discussed—the citation vs. construct tonal melody system.

Another important tonal feature that unites both Mawes Aas'e and Ganza is the fact that these two languages exhibit two melodies for each noun: one tonal melody which is found on nouns in citation form (here called the citation melody) and another when the noun is modified (the so-called construct form) (Ahland 2009:26, 2012:145-149 and Smolders 2016:131).<sup>6</sup> Example (20) below shows the cognate form for 'tree' across Mawes Aas'e and Ganza and demonstrates that while the citation forms for 'tree' show a HL2 or H with a floating L in each language respectively, both languages show only a L melody in the construct form (that is when the noun is modified syntactically by any other form (e.g. demonstrative, definite article, possessor, etc., regardless of the tone of that preceding modifier).

	Citation Form		Construct Form		
(20)	Mawes Aas'e	íínsè 'tree'	HL2 class	ìínsè	L class
	Ganza	ínsâ 'tree'	H <sup>↓</sup> class	ìnsà	L class

One thing that's particularly interesting is that these construct forms are not synchronically derivable through phonological processes today (see also Ahland 2012:145-150). For instance, the word 'tree' in Mawes Aas'e follows the tone pattern in (20) regardless of the tone of the preceding modifier: /íínsè/ > /nâ ìínsè/ 'this tree' vs. /íj ìínsè/ 'that tree', where the first collocation involves a L tone proximal demonstrative and the second, a H tone distal demonstrative.

These construct form melodies, in Mawes Aas'e and Ganza involve neutralization of contrast with respect to the tonal melody of the noun in isolation. An example is provided in Table 1 below.

**Table 1: Citation vs. Construct Tonal Melodies in Ganza and Mawés Aas'è**

<b>Ganza</b> (Smolders 2016:133)		<b>Mawés Aas'è</b> (Ahland 2012:145)	
<u>Citation/Isolation</u>	<u>Construct</u>	<u>Citation/Isolation</u>	<u>Construct</u>
H <sup>↓</sup> , H <sup>↓</sup> H, L <sup>↑</sup>	> H <sup>↓</sup>	H1	> M
H <sup>↓</sup> H, HL	> HL	M, L, HL1, MH, ML	> ML
H, H <sup>↓</sup> , LH, LH <sup>↓</sup> , L	> L	H2, HL2, LH	> L

<sup>5</sup> Register changes resulting in M tones is not particularly unusual (Yip 2002:43). What's more interesting in MawesAas'e is that the two M targets involve the same interval differences from H and L and thus sound identical today (Ahland 2012:106-110).

<sup>6</sup> A similar system where nouns in citation show a larger number of melodies and modified nouns show a limited subset of melodies which are not synchronically derivable is attested in Sheko (Hellenthal 2010:123).

While no such systems has been reported for the other Mao languages (Hooze or Seezo), it does appear that such a two-melody system for citation and modified nouns is rather old. A similar phenomenon has been attested outside of the Mao group in the Sheko language as well. Consider the tonal patterns in Table 2.

**Table 2: Citation vs. Construct Tonal Melodies in Sheko**  
Sheko (Hellenthal 2010:252)

<u>Citation/Isolation</u>	<u>Construct</u>
44	> 22
41	> 21
33, 31, 21, 13	> 11

From Hellenthal's description, it's clear that Sheko's system, like Mawes Aas'e's and Ganza's, is not synchronically derivable via phonological processes today. The facts that this system is 1) somewhat typologically unusual and 2) attested in three different languages (identified thus far; it is perhaps more common but heretofore unidentified in other Omotic languages) suggest that the system must be old and the result of inheritance. Certainly, Sheko, which is spoken far to the south of the Mao area, did not pick this up through contact.

There are a number of interesting correspondences between the Ganza tonal melodies and corresponding cognates in Mawes Aas'e which lend support to the notion that Ganza's L and H tones (along with floating tones which raise or lower the register) correspond to different M tones in Mawes Aas'e. In Table 3, for instance, the L tone with a following floating H corresponds to both M tones in some words and L tones in other words.<sup>7</sup>

**Table 3: Ganza's L + † Corresponds to Mawes Aas'e's M (and L)**

Ganza				Mawes Aas'e			
Tone classes	Citation	Gloss	Construct	Tone classes	Citation	Gloss	Construct
L <sup>†</sup> H <sup>↓</sup>	ìjì <sup>†</sup>	one	íjì <sup>↓</sup>	ML ML	hiʃki	one	hiʃki
L <sup>†</sup> H <sup>↓</sup>	àsì <sup>†</sup>	human	ásì <sup>↓</sup>	ML ML	esè	person	esè
L <sup>†</sup> H <sup>↓</sup>	àns'à <sup>†</sup>	gold	áns'a <sup>↓</sup>	LH L	àànzé	gold	àànzè
L <sup>†</sup> H <sup>↓</sup>	dìgà <sup>†</sup>	peace	dígá <sup>↓</sup>	LH L	dìgé	greeting	dìgè

Table 4, on the other hand, exhibits data which show Ganza's H tone with a floating L tone corresponding to both a M and a H in Mawes Aas'e.

<sup>7</sup> While the Mawes Aas'e data here are my own, the Ganza data have been culled from Smolders' published glossary (2015).

**Table 4: Ganza's H + ↓ Corresponds to Mawes Aas'e's M (and H)**

Ganza				Mawes Aas'e			
Tone classes	Citation	Gloss	Construct	Tone classes	Citation	Gloss	Construct
H <sup>↓</sup> H <sup>↓</sup>	jéǝǝ	rainy season	jéǝǝ	ML ML	joǝǝ	rainy season	joǝǝ
H <sup>↓</sup> H <sup>↓</sup>	támâ	fire	támâ	ML ML	kamè	fire	kamè
H <sup>↓</sup> H H <sup>↓</sup>	ká <sup>↓</sup> ná	dog	káná <sup>↓</sup>	MH ML	kané	dog	kanè
H <sup>↓</sup> H HL	mám <sup>↓</sup> bú	two	mám <sup>↓</sup> bù	M ML	numbu	two	numbù
H <sup>↓</sup> H HL	má <sup>↓</sup> s'í	four	más'î	M ML	mes'e	four	mes'è
H <sup>↓</sup> H HL	sá <sup>↓</sup> ?á	goat	sá?à	MH ML	ʃak'é	goat	ʃak'è
H <sup>↓</sup> H <sup>↓</sup>	kánô	doorway	kánô	HL1 ML	k'únsè	door	k'unsè
H <sup>↓</sup> H <sup>↓</sup>	síjâ	excrement	síjâ	HL1 ML	ʃíjè	excrement	ʃijè
H <sup>↓</sup> H <sup>↓</sup>	ʃánj <sup>↓</sup> k'â	stone	ʃánj <sup>↓</sup> k'â	HL1 ML	ʃówè	stone	ʃowè
H <sup>↓</sup> H <sup>↓</sup>	kwént'ê	tail	kwént'ê	H1 M	kwínt'é	hair	kwiint'e
H <sup>↓</sup> L	ínsâ	tree	ìnsà	HL2 L	íinsè	tree	ìinsè
H <sup>↓</sup> L	k'áns'î	ground; soil	k'áns'î	H1 M	k'és'é	land	k'es'e

The data in Tables 3 and 4 lend support to the concept that while some of Mawes Aas'e's M tones are historically related to a L tone, other M tones are historically related to a H tone. This also supports the observation that some M tones behave as L tones while others behave like H tones with respect to downstep.

Thus far, the discussion has focused on tonal contrasts, interesting features of the lexical tone systems, and correspondences across select Mawes Aas'e and Ganza cognate sets. In addition to complex tonal contrasts and patterns, Omotic languages are also known for using tone in marking grammatical function. This is true for the Mao languages as well.

### 3.1.1.2. Tone as a Marker of Stem Type in Mao

Perhaps the most striking function of tone in these languages involves the marking of both lexical words and grammatical structures, including grammatical sub-categories, e.g. verbal vs. nominal stems and/or verbal subtypes. Mawes Aas'e's system has been most fully explored to date, so we'll begin there (for a more complete discussion, see Ahland 2009:26-27, 2012:184-192, and 2016:470-473). In Mawes Aas'e, many roots appear to be pre-categorical in the sense that they can be used to build finite verbal structures or non-finite, nominal structures where the principle marking distinction is the tonal melody assigned to the verbal or nominal stem (Ahland 2016:470). In (21), for instance, two roots /p'ij/ and /to:k/ are shown with their various assigned tones for each stem: verb, infinitive verb (with the nominal terminal vowel ending /-e/)<sup>8</sup>, and noun.

	Root	Verb	Infinitive Verb	Noun	
(21)	p'ij	p'ij 'give.birth'	p'ij-é	p'ij-e	'child-TV'
	to:k	tó:k 'carry.on.head'	tò:k-è	to:k-è	'head-TV'

<sup>8</sup> Terminal vowels in Mawes Aas'e are themselves toneless. They serve to carry the final tone of the stem (i.e. of the verbal or nominal melody that is assigned to the pre-categorical root)--see Ahland 2012:313-324).

Certainly not all roots in Mawes Aas'e show this same ability; there are some nouns for which no verbal form has been found due to the semantics involved (e.g. wít'è 'calabash'). But all verbs in the language do exhibit a corresponding infinitive form which is tonally distinct from the finite verb form, and this distinction is one of the most exploited oppositions in the Mawes Aas'e grammar system itself. For instance, infinitive verb stems are required for forming most negative verb constructions (negative future, non-future, medial, hypothetical conditional counterfactual and imperative) as well as select affirmative constructions (imperative, 3rd person jussive, impersonal jussive, polite hortative imperative) and the vast majority of highly nominalized subordinate verbs (Ahland 2012:366 and 2016).

The system present in Mawes Aas'e corresponds most clearly to that in Ganza where many verbs appear to exhibit two melodies, relative to particular grammatical constructions. The tone changes between these two subtypes of verb (which Smolders calls citation and construct forms, respectively) do not appear to be the result of synchronic phonological processes themselves<sup>9</sup> (Smolders 2016:137-138).

	Verb		Verb + AUX Construction <sup>10</sup>	
(22)	tákú-bô	'run-DECL'	tàkù-nà	'run-AUX'
	gàrà-bô	'sit.SG-DECL'	gàrà-nà	'sit.SG-AUX'
	ʃí'ní-bô	'work-DECL'	ʃíní-nà	'work-AUX'

(Ganza data from Smolders 2016:137)

Like Mawes Aas'e, the different tonal melodies in Ganza are exploited cross-constructively. The so-called citation melody is used with negatives, imperatives, jussives, nominalized forms, medial verbs and content questions while the construct melody is associated with conditional, future, purpose, reason, polar question and relative clause constructions (Smolders 2016:138). A rather fascinating difference between the two languages, though, is that the tonal melodies do not appear to reflect a simply degree of finiteness distinction as is the case in Mawes Aas'e.

In Hoozo, there is evidence of tone's involvement in the marking of verbal vs. nominal stems--see Getachew Kassa 2015:80, 119-120). In (23), the verbs 'call' and 'eat' differ only tonally from their corresponding nominal forms 'name' and 'food'.

	Verb		Noun	
(23)	ʔíʃí	'call'	ʔíʃí	'name'
	màà	'eat'	máá	'food'

(Hoozo data from Getachew Kassa 2015:80)

In (24), the verb and infinitive verb are distinguished from the nominalized 'gerund' form by a prefix with consonant reduplication as well as a change of tone.

	Verb		Infinitive Verb		Gerund	
(24)	pállì	'create'	pállí-ʃ	'create-INF'	pì-pállì	'GER-create'
	kwá	'come'	kwá-ʃ	'come-INF'	kì-kwà	'GER-come'

(Hoozo data from Getachew Kassa 2015:120)

<sup>9</sup> There is in fact a third category of verbal construction in Ganza where verbs can take either of these two tonal melodies--the choice of tonal melody in such cases is made by required 'agreement' with the matrix (e.g. final) verb (see Smolders 2016:138).

<sup>10</sup> The form /nà/ is very likely derived from an old copula, attested across Mao and many other Omotic languages (see Ahland 2012:448-449, 460-468; 2016:482-483). Smolders shows no difference in English translation between these two forms (2016:137).

In Seezo, the verbal noun (infinitive) form is derivable from the finite verb through the addition of a terminal nominal vowel which carries a polar tone (in relation to the preceding tone on the verb stem).

	Verb		Verbal Noun	
(25)	sís	'shave'	sís-ì	'shaving'
	wě:ŋk'	'open'	wě:ŋk'-ì	'opening'
	hèzz	'hit'	hèzz-í	'hitting'

(Seezo data from Girma Mengistu 2015:107)

### 3.1.1.3. Tone as a Marker of Stem Type in Broader Omotic

The use of tone as a marker of stem types and/or grammatical category is not limited to the Mao subgroup. Clear evidence of the use of tone to mark noun vs. verb pairings has been provided from Maale (Azeb Amha 2001:75; 2017:820). And in different branches of the TNDA branch of Omotic, similar phenomena have been reported for Benchnon (TNDA-TN-Girmira group, according to Bender's 2003 classification) and Sheko (TNDA-DA-Dizoid group, according to Bender's 2003 classification). In Benchnon, Rapold reports a two-stem verb system (factual vs. non-factual) where the factual stem is marked with a /-k'/ suffix and is used in perfective constructions while the non-factual stem is marked by tonal raising (and the lack of the factual suffix) and is used in other constructions including negatives and the future tense (Rapold 2006:266). In Sheko, verb stems can be classified as H or L; these stems group paradigmatically into three categories: basic (used for the imperative singular and jussive), factual (used for the realis and obvious mood constructions) and non-factual (used for irrealis and optative modalities and negative polarity) (see Hellenthal 2010:113-114). These different verbal subtypes are distinguished by tonal differences on the verb stem. The observation that large-scale exploitation of verbal subtypes, marked primarily by tonal distinctions, is found across the Mao group as well as in disparate parts of the wider Omotic family, suggests that such a system may be in fact quite old and indicative of the earliest stages of Omotic separation.

### 3.1.1.4. Additional Grammatical Functions of Tone in Mao

Before continuing on to other phonological features common to Omotic which are attested in the Mao group, we will briefly highlight other ways that tone is associated with grammatical function in the Mao languages. In three of the four Mao languages (Mawes Aas'e, Seezo, and Hoozo)<sup>11</sup> one interesting and typologically-marked tonal pattern is the use of a final high tone for statements (declarative) and a low tone for some corresponding question formations (in some cases tone change co-varies with vowel length distinctions in these constructions). The data which illustrate this are presented in section 3.2.3.1. where the declarative vs. interrogative opposition is discussed.

The Hoozo language uses tone for various grammatical functions, including the difference between nominative and accusative case (-já NOM.M and -jé NOM.F vs. -jà ACC.M -jè ACC.F), modality and evidential marking (e.g. -é irrealis vs. -è subjective evidential) and pronominal distinctions (e.g. hí 2SG vs. the interrogative hi 'what'); For the full discussion, see Getachew Kassa's overview, 2015:76-78).

(26)	ʔá	ʔint-já	ʔiʔép-ʔití
	DEF.M	tree-NOM.M	HAB-bear.fruit-COP
	'The tree is fruity.'		

(Hoozo data from Getachew Kassa 2015:59)

<sup>11</sup> At this time of this work, no description of Ganza morphosyntax has yet been produced.

- (27) ʔé      ʃéé-jé      ʔá      pú-jà      ʔif-t-ì  
 DEF.F woman-NOM.F DEF.M ale-ACC.M drink-PFV-REAL  
 ‘The woman drank the ale.’  
 (Hoozo data from Getachew Kassa 2015:101)

The case-marking function of tone attested in Hoozo is not reported for the other Mao languages, but languages in the Ometo cluster (e.g. Maale), also show the H association with subjects and L with objects (see Azeb Amha 2017:819-820).

As is perhaps clear from the discussion above, tone in the Mao languages, as across the Omotic family more generally, plays an important role, both lexically and grammatically. And the presence of two-melody systems in both the nominal and verbal system provide clear links across the Mao subgroup and also serve to highlight connections to other parts of the Omotic family (most notably Maale, Benchnon, and Sheko). It is also worth noting that in terms of tonal phenomena, it appears that Mawes Aas'e and Ganza show the most similarity, though one must resist any temptation to suggest this is due to particular shared history (beyond their Omotic-Mao lineage; that is, I am not suggesting a Mawes Aas'e-Ganza branch of Mao). It may well be that these two languages are simply exhibiting a reflex of older patterns, from an earlier Mao or even Omotic state.

### 3.1.2. Nominal Terminal Vowels

Many Omotic languages exhibit terminal vowels on nouns when they are in citation form or otherwise uninflected with other grammatical formatives (Azeb Amha 2017:822). These formatives are typologically interesting in that 1) they are not part of the root because they are not always present (i.e. they interact with morphosyntactic environments) and 2) they are not themselves morphemes (e.g. suffixes) because they don't typically carry any grammatical function (Azeb Amha 2017:822).<sup>12</sup> Omotic languages vary in terms of the number of vowels (e.g. the full set of short vowels or a smaller subset) which can be used as terminal vowels; languages also vary with respect to the morphosyntactic environments where a terminal vowel may be found. Three of the Mao languages (Mawes Aas'e, Seezo, and Hoozo) show clear evidence of a terminal vowel category--though significant differences are apparent across the subgroup, both in terms of vowel quality and limitation as well as distribution relative to morphosyntax.

Mawes Aas'e's terminal vowel is strictly limited to the vowel /-e/<sup>13</sup> and can be found on nouns, pronouns, demonstratives and relativized verbs (i.e. nouns and other nominal or nominalized structures). In (28), three nouns are provided, each with a different root vowel but all showing the same /-e/ terminal vowel, first with a L tone, then a M tone, and then a H tone. That is the terminal vowel itself is toneless and receives its tone from the root to which it attaches (see also Ahland 2012:194-195;313-324).

- (28) es-è                  p'if-e                  kan-é  
 person-TV          child-TV                  dog-TV  
 ‘person’                  ‘child’                  ‘dog’  
 (Mawes Aas'e data from Ahland 2012:194)

Example (29) shows the same terminal vowel attaching to a pronoun, demonstrative and relativized verb.

<sup>12</sup> While one might be tempted to argue that the marking of citation forms is a grammatical function; the position taken here is that citation forms are outside clausal syntax and thus not strictly grammatical forms. For this reason, terminal vowels are discussed as part of the phonological system.

<sup>13</sup> The only exception involves nominal stems with long [a:] vowels; in such instances, many speakers exhibit vowel harmony where the terminal vowel becomes [a].

	Pronoun	Demonstrative	Relativized Verb
(29)	íʃ-è	jéʃ-é	mí-bi-t-è
	3SG-TV	DIST-TV	eat-NPST:AUX-REL-TV
	‘S/he’	‘that’	‘who is eating’
	(Mawes Aas'e data from Ahland 2012:195)		

Mawes Aas'e's terminal vowel is found only rarely found in connected speech. Its presence is observed only in extrasyntactic citation forms and on the heads of noun phrases when they at the end of a utterance-final noun phrase or at the end of a main clause (see Ahland 2012:313ff for details). As a result, Mawes Aas'e's terminal vowel has been analyzed as a phrasal affix.<sup>14</sup>

In Seezo, there are three terminal vowels that can be observed. First, the terminal vowel /i/ is found on all nouns (including prototypical nouns and nominalized verbs) and adjectives (Girma Mengistu 2015:99-100). Clan and ethnic names may carry either the /i/ or /o/ terminal vowel; the numerals 1-5 and some adverbials exhibit the /e/ terminal vowel. can be /i/, /o/ or /e/ on nouns (Girma Mengistu 2015:100 Girma Mengistu's description and analysis of Seezo terminal vowels and tones is similar to that reported for Mawes Aas'e: the terminal vowel is toneless and the tone is assigned from the root to which it attaches and terminal vowels delete when the nominal form is followed by a morphological (e.g. suffix) or syntactic constituent (2015:101-102).

In Hoozo, terminal vowels are "dominantly" /i/ and /a/. Getachew Kassa shows that these vowels occur on a wide range of stem types including nouns, verbs, adjectives, numerals, quantifiers, pronouns, demonstratives (Getachew Kassa 2015:80-81). While a number of distributional generalizations have been offered (with respect to which vowel and which tone are typical on which words of which grammatical category), these appear to be only generalizations; many exceptions are noted. In terms of distribution, Getachew Kassa notes that the terminal vowels are not always present but that the details are not yet determined: "Deletion of word final vowels is attested but the exact conditions for this deletion have not been studied. Likely, length of the work and/or constituent boundaries play a role in deleting or retaining the terminal vowel" (Getachew Kassa 2015:66)

Ganza is an outlier with respect to the Mao group and the wider family--it does not show any evidence of a terminal vowel category. Smolders' 2016 description of Ganza phonology does not address the notion of terminal vowels directly, but it is clear from the data presented throughout the article that many nominals do not carry any final vowel (e.g. they end in a consonant): /ʔáp<sup>h</sup>/ 'eye', /bà<sup>h</sup>/ 'duck', /kàrùŋ/ 'tent', /gùrùm/ 'wild pig' (Smolders 2016:124). For those forms which do end in a vowel, all short vowels (/i/, /e/, /a/, /o/, and /u/) are attested word-finally.

The two general observations that can be made across the three Mao languages that do show terminal vowels are the following: 1) these vowels are themselves toneless elements which belong to the domain of word-structure (i.e. they are not part of the roots themselves); they receive their tones from the roots to which they attach; and 2) While these terminal vowels are present in citation form, they are frequently not observed in many other morphosyntactic environments.

### 3.1.3. Sibilant Harmony

A widely attested phenomenon in Omotic phonological/morphological systems involves what has become known as sibilant harmony, where sibilants within roots in tend to agree in terms of place of articulation. Hayward, who first coined the term sibilant harmony, writes, "There is, in fact, in many languages a very strictly observed co-occurrence constraint or morpheme structure condition for roots, to the effect that co-occurring sibilants must agree with respect to palatality" (1988:287). Azeb Amha notes that some languages (e.g. Benchnon) also involve retroflexion as a relevant feature (2017:820). In some languages, the phenomenon clearly extends across morpheme boundaries (see Hayward 1988:267 and

<sup>14</sup> This analysis suggests that the citation form of a noun is itself a short utterance.

Azeb Amha 2017:821) while in other languages (e.g. the Mao languages, below), the co-occurrence requirement appears to be mainly limited to the root.

In Mawes Aas'e, the sibilant inventory includes alveolars (/s, z, ts'/) and alveopalatals (/ʃ, tʃ/)<sup>15</sup> (Ahland 2009:11) and involves agreement only in terms of palatalization; that is, the scope appears to be limited to the root.<sup>16</sup> This means that within roots, without respect to airstream mechanism (ejective/glottalized), sibilants are found only at the same place of articulation (only alveolar and alveopalatal sibilants are attested in the phonological inventory). Roots containing alveolar sibilants are provided in (30) while those containing palatal sibilants are featured in (31).

(30) sèwísè 'young man'; so:nts'è 'child'; su:nts'é 'back'  
(Mawes Aas'e data from Ahland 2009:12)

(31) ʃe:ʃe 'urine'; ʃáʃè 'tendon/vein'; ʃó:ʃé 'snake'  
(Mawes Aas'e data from Ahland 2009:11)

The sibilant harmony in both Seezo and Hoozo is the same as Mawes Aas'e. In Seezo, there are three alveolar sibilants (/s, z, s'/) as well as the alveopalatal /ʃ/, and all co-occurring sibilants in monomorphemic roots are required to agree in terms of place (see Girma Mengistu 2015:49). Consider examples (32-33).

(32) sì:zé 'three'; zínsĩ 'running'  
(Seezo data from Girma Mengistu 2015:49)

(33) ʃí:ʃĩ 'urine'; ʃú:ʃí 'snake'  
(Seezo data from Girma Mengistu 2015:49)

Hoozo's sibilants include four alveolars (/s, z, ts, s'/) and one alveopalatal (/ʃ/) (Getachew Kassa 2015:14). Examples (34-35) illustrate the co-occurrence requirement.

(34) ʃùʃí 'hear' ʃĩʃí 'see'  
(Hoozo data from Getachew Kassa 2015:16)

(35) sòsò 'apron' sótsì 'monkey' sátsì 'long ago'  
(Hoozo data from Getachew Kassa 2015:16)

Ganza's sibilants include alveolars /s, z, s'/ and alveopalatal /ʃ/ (Smolders 2016:92). Like the other Mao languages, Ganza also exhibits a palatal-sensitive sibilant harmony requirement within roots (36-37, below). There is, however, also the added requirement that the ejective /s'/ cannot co-occur with a non-ejective (38) (Smolders 2016:101).

(36) sásá 'bite'; sázà 'dry'  
(Ganza data from Smolders 2016:101 and Smolders 2015b:27)

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<sup>15</sup> Both [tʃ<sup>h</sup>] and [dʒ] could be included if loanwords are considered.

<sup>16</sup> In natural speech, there is some evidence that the scope of harmony can be extended to include suffixes/enclitics (but the data are inconsistent and variation occurs between speakers) (see Ahland 2012:68).

(37) ʃòʃó 'bag'; ʃáʃî 'rope'  
 (Ganza data from Smolders 2016:101)

(38) s'ás'à 'fat/thick'; s'jèns'k'à↑ 'edge'  
 (Ganza data from Smolders 2016:101 and Smolders 2015b:29)

### 3.2. Morphosyntactic Features

Let's turn now to morphosyntactic features identified in Azeb Amha (2017): the so-called demonstrative and interrogative verb distinctions, the presence of converb and/or clause-chaining devices with switch-reference markers, and unique interrogative and negative verbal paradigms.

#### 3.2.1. Demonstrative and Interrogative Verbs

The Wolaitta language exhibits verbal forms which are structurally related to demonstrative and interrogative pronominal forms (Azeb Amha 2017:830-1). The use of the morphological converb ending /-í/ in the Wolaitta data demonstrate clearly that the demonstrative and interrogative-related forms /yaát/ 'there.do' and /yaán/ 'there.be', related to the distal demonstrative /yáa/, are in fact verbal forms. Perhaps this is from fusion with a following verbal element (preserved today in the final [t] and [n] consonants on the converb form).

In the Mao languages, however, no clear examples of a demonstrative or interrogative verbal form have been identified. That said, Girma Mengistu reports that Seezo exhibits two 'verbal demonstratives' /hìŋkʔ/ 'like this' and /háŋkʔ/ 'like that' (2015:268). In the data provided, though, the forms appear to function pronominally, not verbally. There is no verbal morphology found on either form and the forms don't very closely match the exophoric demonstratives: /hètʔ-/ PROX, /hí-/ MED, and /hí:jàn-/ DIST (2015:263). For example, in the data below, the demonstrative form requires a verbal element 'say' after, suggesting that the form itself cannot be a converb, as is possible in Wolaitta.

(39) ʔòwwá-ʃ hín-té pì-n hín = kw-à: hìŋkʔ-wá:-n  
 fox-NOM where-LOC rise-CVB1 2SG = come-INTR like.this-say-CVB1

jé-dù:l-à ʔà:t-á:  
 DEF-hyena-ACC ask-DECL

'The fox asked the hyena saying like this, "From where did you come?"'  
 (Seezo data from Girma Mengistu 2015:269)

In Mawes Aas'e, Hoozo, and Ganza, as well, no examples of demonstrative or interrogative (where a form related to an interrogative pronoun is verbalized) verbs have been identified thus far. If there are none, then the Mao group would be set apart as a branch of Omotic where the phenomenon is not found.<sup>17</sup>

#### 3.2.2. Switch-Reference

As is typologically common in OV head-final systems (Longacre 1985 and Haiman and Thompson 1988), many Omotic languages exhibit a dependent verb form that is structurally distinct from the more finite, final verb form, can be strung together in successive clauses, and which morphologically marks either the maintenance or change in subject (known as switch reference). Terminological choices for these phenomena range from use of the term 'converb,' 'gerundive/gerund,' 'medial verb,' and even

<sup>17</sup> The reader should recall that Azeb Amha noted that these six sets of features are attested in all branches of Omotic (2017:848).

'non-final verb' (cf. Azeb Amha and Dimmendaal 2006a, Rapold 2007, Ahland 2012:555-9).<sup>18</sup> Within the literature on the Mao languages, the terms 'converb,' 'non-final,' and 'medial' have all been used.

In Mawes Aas'e, there are three distinct forms which fall into this dependent verb category: a same-subject /-in/ vs. different-subject /-iʃ/ medial verb opposition and also a more converbial suffix which indicates temporal overlap (integration) between clause-events /-et/ (cf. Ahland 2015:89-92). The same vs. different subject switch reference system is illustrated below, where the switch in reference is indicated between the first and second clause in (41) by the DS suffix as well as the 3SG prefix marking. In Mawes Aas'e, subjects are generally only referenced on DS medial verbs (and temporally-integrated converbs).

(40) mún̄tsʹ-iʃ      mí-in    ha-há:l-ʹá  
 woman-NOM eat-SS    AFF-sleep-DECL  
 'A woman ate and (then) slept.'

(41) mún̄tsʹ-iʃ      hí-mí-iʃ      ha-há:l-ʹá  
 woman-NOM 3SG-eat-DS    AFF-sleep-DECL  
 'A woman ate and (then) (someone else) slept.'

In Seezo, there are two forms that show up on converb/medial verb forms. They are marked with two suffixes which closely resemble the forms in Mawes Aas'e: /-n/ and /-já:/. They do not, however, mark switch reference (Girma Mengistu 2015:318). In the examples (42-43), we have two sentences with such forms and both are reported to communicate the same meaning: both with same-subjects.

(42) ʔòwwá-ʃ    kwá:-n      jé-dù:l-à      ʔát-á:  
 fox-NOM come-CVB1 DEF-hyena-ACC ask-DECL  
 'The fox came and asked the hyena.'  
 (Seezo data from Girma Mengistu 2015:319)

(43) ʔòwwá-ʃ    kwá:-já:      jé-dù:l-à      ʔát-á:  
 fox-NOM come-CVB2 DEF-hyena-ACC ask-DECL  
 'The fox came and asked the hyena.'  
 (Seezo data from Girma Mengistu 2015:319)

Switch reference, however, is communicated by the presence of overt subject marking on one of these dependent verbs. Girma Mengistu argues, "The attachment of the pronominal subject clitics...to the converb is triggered by the need for switch reference" (2015:323).

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<sup>18</sup> There are important differences between the uses of these terms in the typological literature. Haspelmath (1995) limits the term 'converb' to adverbial constructions whose primary function is modification of a clause (1995:7). Azeb Amha and Dimmendaal (2006a) have used the term 'converb' in a much broader sense, including both Haspelmath's adverbial-like constructions as well as what are often called 'medial' verbs which are used not adverbially but to express a sequence of events.

(44) dà:-j<sup>19</sup> k'és-à pà:nt-n hù:zz-n mí:-à  
 1SG-NOM land-ACC clear-CVB1 farm-CVB1 grain-ACC

**dà =** fùu:-n **nàm-má:** sés's'-n fál-n k'úl-n  
 1PL.EXCL = saw-CVB1 2PL-FOC weed-CVB1 mow-CVB1 collect-CVB1

kàns-té nám = tìl-á:  
 granary-LOC 2PL = add-DECL

'We (excl.) cleared the land, farmed, and cut the grain, and you (PL) weeded, mowed, and collected (the grain) in the granary.' (Seezo data adapted from Girma Mengistu 2015:323)

It appears, then, that one could argue that no subject marking indicates no switch in reference, while the presence of overt subject indexing on a converb indicates the end of a reference period. It would then be the following subject form (in this case 2PL) which establishes the new reference (44) (cf. Gimra Mengistu 2015:322). It's worth noting that this is a different use of the subject marking on dependent verbs from what we've seen in Mawes Aas'e. In Mawes Aas'e, subject marking on dependent verbs indicates the new referent where in Seezo it appears to indicate the end of a period of reference.

In Hoozo, converbial verb endings which are very likely cognate with Mawes Aas'e and Seezo do exhibit sensitivity to switch reference (Getachew Kassa 2015:290). Examples (45-46) illustrate the SS /-nà/ and switch reference/different subject /-áʃ/ forms.

(45) ná jé-nà kwá-j-é  
 1SG go-SS come-FUT-IRR  
 'I will go and will come.'  
 (Hoozo data from Getachew Kassa 2015:290)

(46) ná jé-áʃ ʔá kwá-j-é  
 1SG go-DS 3SG.M come-FUT-IRR  
 'I will go and he will come.'  
 (Hoozo data from Getachew Kassa 2015:291)

It's worth noting, again, that Hoozo does not exhibit any bound subject markers on verb forms. The new referent is indicated by the form following the DS marker (it cannot be marked on the verb as in Mawes Aas'e).

Ganza also exhibits a switch reference system on medial verb forms, albeit with suffixal forms that are not apparently cognate with the other Mao languages: /-p/ marks SS and /-l/ marks DS, switch reference (47-48).

(47) hà-dí pòʃó-p kwá'á-bô  
 AFF-1SG chase-SS come-DECL  
 'I chased (it), and returned.'  
 (Ganza data from Smolders 2015a)

<sup>19</sup> The mismatch arising from the first 1SG in this example and the following 1PL.EXCL at the end of the converbial series is perplexing. I don't know if this is due to a glossing error. Given that this is the only example of clear switch reference provided in this section of the grammar, the example was required.

- (48) hà-dí p'òfó-l-gá kwá'á-bô  
 AFF-1SG chase-DS-3SG.M come-DECL  
 'I chased (it), and he returned.'  
 (Ganza data from Smolders 2015a)

In Ganza, there are two pronominal sets: the free form pronouns and a reduced enclitic form that attaches to various elements in the clause. In (47), where there is no switch reference, only the initial enclitic is required (1SG) in the first clause. In (48), however, a second enclitic follows the DS switch reference marker to indicate the new subject.

### 3.2.3. Unique Interrogative and Negative Verbal Paradigms

Some Omotic languages (especially those in the Ometo branch) exhibit different verb inflectional patterns relative to the declarative vs. interrogative and affirmative vs. negative oppositions (Azeb Amha 2017:839-40). Some Omotic languages, which are not geographically or genetically close, distinguish declarative and polar interrogative utterances by the loss of a morphological form in the polar interrogative--a form that is not typically expected to mark sentence type distinctions (Azeb Amha 2017:840).

The Mao languages, however, do not show different verbal paradigms sensitive to the declarative vs. interrogative opposition; negative forms, also, while interesting in their own right, do not exhibit unique inflectional patterns. While the patterns found in Mao languages don't exhibit the same patterns identified in Azeb Amha's study, a brief comparative overview is called for. The discussion below will be subdivided into declarative vs. interrogative and the expression of negation.

#### 3.2.3.1. Declarative vs. Interrogative

With respect to the declarative/interrogative opposition, the Mao languages generally use verb-final/utterance-final markers to distinguish mood/modality. Utterance-final sentence type endings, themselves, are a common phenomenon across Omotic.

Both Mawes Aas'e and Seezo mark declarative and interrogative final verbs with an /-a/ suffix where H tone marks declarative and L tone marks interrogative (in Mawes Aas'e, the interrogative suffix is also lengthened). The Mawes Aas'e data are presented below (49-51). The polar interrogative is identical in form to the declarative, except for the final suffix /-à:/. The content interrogative is also marked by a prohibition of the affirmative /ha-/ prefix (51).

- |      |   |                       |
|------|---|-----------------------|
| (49) | íʃ m̀nts'-ìʃ hì-àn ha-hój- <sup>1</sup> á<br>DEF woman-NOM 2SG-COM AFF-go-DECL<br>'The woman went with you' | Declarative           |
| (50) | íʃ m̀nts'-ìʃ hì-àn ha-hój-à:<br>DEF woman-NOM 2SG-COM AFF-go-INTR<br>'Did the woman go with you?'           | Polar Interrogative   |
| (51) | kí-íʃ hì-àn hój-à:<br>Who-NOM 2SG-COM go-INTR<br>'Who went with you?'                                       | Content Interrogative |

In Seezo, the final /-a/ suffix is lengthened in both the declarative and interrogative. Again, as above in Mawes Aas'e, H tone marks declarative while L tone marks interrogative.

- (52) dà:-f jé-kjà: dí:-né k'im-dà-j-á: Declarative  
 1PL.EXCL-NOM DEF-house father-COM talk-1PL.EXCL-FUT-DECL  
 'We (excl.) will talk to the owner of the house.'  
 (Seezo data from Girma Mengistu 2015:195)
- (53) dù:l-f húld k'ák-à: Polar Interrogative  
 hyena-NOM donky eat.meat-INTR  
 'Did a hyena eat the donkey?'  
 (Seezo data from Girma Mengistu 2015:195)
- (54) dà:-f kín-à kínd-dà-j-à: Content Interrogative  
 1PL.EXCL-NOM what-ACC grind-1PL.EXCL-FUT-INTR  
 'What will we (excl.) grind?'  
 (Seezo data adapted from Girma Mengistu 2015:195)

Getachew Kassa's Hoozo grammar reports no single suffix to mark declarative. The realis suffix (55) is used for non-future construction and the irrealis suffix (56) is used for the future tense (2015:255)-these are the two most frequent endings in declarative utterances. Hoozo interrogatives exhibit two suffixes: /-è:/, for polar interrogatives (57), and /-à:/ for content interrogatives (58).

- (55) ʔé má-t-ì Realis Declarative  
 3SG.F eat-PFV-REAL  
 'She ate.'  
 (Hoozo data from Getachew Kassa 2015:163)
- (56) ʔé má-k-é Irrealis Declarative  
 3SG.F eat-IPFV-IRR  
 'She will eat.'  
 (Hoozo data adapted from Getachew Kassa 2015:258)
- (57) ʔé má-t-è: Polar Interrogative  
 3SG.F eat-PFV-QP  
 'She ate?'  
 (Hoozo data adapted from Getachew Kassa 2015:77)
- (58) hà má-t-à: Content Interrogative  
 who eat-PFV-INTR  
 'Who ate?'  
 (Hoozo data from Getachew Kassa 2015:138)

In Ganza, the distinction between declarative and interrogative involves the loss of two markers: the /-bô/ DECL suffix and the /hǎ/ affirmative marker (in the content interrogative; the /ha/ form is used in the polar interrogative, as it is in Mawes Aas'e above). Examples (59-60) illustrate two declarative sentences (structurally similar to the interrogative examples which follow).

- (59) hà = gá gàrá-bô  
 AFF = 3SG.M sit-DECL  
 'He is sitting'  
 (Ganza data from Smolders 2015a)

- (60) hà = ná      máá-bô  
 AFF = 2SG eat-DECL  
 'You ate.'  
 (Ganza data from Smolders 2015a)

Example (61) is identical to the declarative example in (60) save for the loss of the declarative suffix /-bô/.

- (61) hà = ná      máá  
 AFF = 2SG eat  
 'Did you eat?'  
 (Ganza data from Smolders 2015a)

Example (62) shows the lack of both the declarative suffix and the lack of /há/ in the content interrogative.

- (62) nò = gá      gàrá  
 where = 3SG.M sit  
 'Where is he sitting?'  
 (Ganza data from Smolders 2015a)

The /há/ affirmative marker in Ganza exhibits the same mood/modality/utterance type distribution as has been found in Mawes Aas'e for the /ha-/ affirmative prefix.<sup>20</sup> The affirmative marker is attested in all declarative non-future, future and polar interrogatives and not attested in content interrogatives, imperatives/optatives/jussives, and negatives. A primary distinction is that in Ganza the affirmative marker is a free form which itself hosts enclitics and in Mawes Aas'e, the affirmative marker is a verbal prefix which has fused with 1<sup>st</sup> and 2<sup>nd</sup> person dual and plural subject markers; this is the topic of a forthcoming article (for a preliminary discussion, see Ahland 2012:243-255).

### 3.2.3.2. Verbal Negation

Verbal negation in the Mao group is handled by a negative suffix and is in some cases also marked by secondary phenomena. While in some cases, there are special auxiliary forms associated with some negative constructions, there are not unique inflectional paradigms associated with negation.

Mawes Aas'e's negative marking appears to be the most complex in the group. Most negation in Mawes Aas'e requires four phenomena: 1) a negative suffix (most frequently /-á/, but for 3rd person non-future forms /-wé/ is used, see example (101) below), 2) the use of the irrealis verb stem which positions subject markers after the lexical verb stem and requires the use of auxiliary verbs (for more on the irrealis construction, see section 4.3 below), 3) the prohibition of the /ha-/ affirmative marker, and 4) the use of the tonally-marked infinitive verb stem (finite stems cannot be used in negative constructions). The infinitive vs. finite verb stem opposition relative to affirmative and negative constructions is exploited across the grammar (see Table 5, below). As may be expected, the pattern of finite for affirmative and infinitive for negative breaks down in the inherently less-finite jussive and imperative constructions.

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<sup>20</sup> This claim is based on my own fieldwork in 2014, Smolder's fieldnotes (2016), and data in the "Ganza Language Learning Manual" (2010), written by Lorianne Hofmeister, a missionary with SIM in Sudan.

**Table 5. The Distribution of Finite and Infinitive Verb Stems on Final Verbs  
(from Ahland 2012:364)**

Final Verb Utterance or Modality Type	Affirmative	Negative
Declarative (all tenses and aspects)	Finite Stem	Infinitive Stem
Interrogative (all tenses and aspects)	Finite Stem	Infinitive Stem
Simple Counterfactual	Finite Stem	--
Hypothetical Conditional Counterfactual	Finite Stem	Infinitive Stem
1 <sup>st</sup> Person Jussive	Finite Stem	--
3 <sup>rd</sup> Person Jussive	Infinitive Stem	Finite Stem
Polite (Hortative) Imperative	Infinitive Stem	Finite Stem
Impersonal Jussive	Infinitive Stem	--
Imperative	Infinitive Stem	Infinitive Stem

The examples below provide an affirmative-negative comparison to illustrate the three negative marking phenomena (negative suffix, use of the irrealis verb construction, prohibition of the affirmative marker, and use of the infinitive stem): non-future (63-64) and future (65-66).

- (63) ha-mí-<sup>l</sup>á  
AFF-eat-DECL  
'S/he ate.'
- (64) mì-á-tí-bìſ-<sup>l</sup>á  
eat:INF-NEG-1SG-NPST:AUX-DECL  
'I did not eat.'
- (65) ha-mí-gà-m-bìſ-á  
AFF-eat-FUT-3-NPST:AUX-DECL  
'S/he will eat.'
- (66) mì-á-gà-m-bìſ-á  
eat:INF-NEG-FUT-3-NPST:AUX-DECL  
'S/he will not eat.'

In Seezo, like Mawes Aas'e, negatives are marked by a verbal suffix and also by use of the irrealis verbal construction which requires that subject markers follow the lexical stem. Unlike Mawes Aas'e, though, there is no indication of an infinitive vs. finite verbal stem phenomenon nor is there any affirmative marker to be prohibited. Examples (67-68) offer a comparison of the future affirmative and future negative constructions.

- (67) jé-ſ:-tú:-ſ                      jé-gónz      kínd-hél-j-á:  
DEF-woman-PAUC-NOM DEF-corn grind-3NSG-FUT-DECL  
'The few women will grind the corn.'  
(Seezo data from Girma Mengistu 2015:203)

- (68) jé-ǰ:-tú:-ǰ                      ǰé-gónz    kínd-kek'é:-hél-j-á:  
 DEF-woman-PAUC-NOM DEF-corn grind-NEG-3NSG-FUT-DECL  
 'The few women will not grind the corn.'  
 (Seezo data from Girma Mengistu 2015:204)

Hoozo's negative is formed by the verbal suffix /-w/<sup>21</sup> (compare 69-70). According to Getachew Kassa's grammar, the negative suffix can co-occur with the /-ì/ realis marker.<sup>22</sup>

- (69) ǰé      má-w-t-ì  
 3SG.F eat-NEG-PFV-REAL  
 'She ate.'  
 (Hoozo data adapted from Getachew Kassa 327)

- (70) ǰé      kwá-w-t-ì  
 3SG.F come-NEG-PFV-REAL  
 'She didn't come.'  
 (Hoozo data from Getachew Kassa 227)

In Ganza, negatives are formed through the use of the /-(ǰ)án/ negative suffix and a prohibition of the affirmative form /há/. Examples (71-73) illustrate the affirmative non-future, negative non-future, affirmative future, and negative future, respectively.

- (71) hà = dí    kwá'á-bô  
 AFF-1SG come-DECL  
 'I came.' (Ganza data from Smolders 2015a)

- (72) tí    kwá-ǰán- bô  
 1SG come-DECL  
 'I didn't come.' (Ganza data from Ahland fieldnotes)

- (73) hà    kwá'á -s-sì- bô  
 AFF come-FUT-1SG-DECL  
 'I will come.' (Ganza data from Smolders 2015a)

- (74) kwá-ǰán-s-sì- bô  
 come-NEG-FUT-1SG-DECL  
 'I won't come.' (Ganza data from Ahland fieldnotes)

### 3.3. Summary of Omotic Features in Mao Group

In the discussion above, the focus has been on the select phonological and morphosyntactic features that have been identified widely across Omotic (attested in every branch of Omotic). The Mao

<sup>21</sup> Hoozo's /-w/ negative form is perhaps cognate with Mawes Aas'e's /-wé/ negative marker in the 3rd person non-future constructions / kí-ǰí mî-wé-j-à: / who-NOM eat:INF-NEG-COP-INTR 'Who did not eat?'.  
<sup>22</sup> This co-occurrence of realis with a negative construction is somewhat unusual typologically. It may be that Hoozo's realis system is being reanalyzed. One might normally expect negation to be more commensurate with the domain of irrealis.

languages all make use of tone contrastively and some of them (especially Mawes Aas'e) exploit the tonal system across both lexicon and grammar. Three of the Mao languages (Mawes Aas'e, Seezo and Hoozo) exhibit nominal terminal vowels; only Ganza fails to exhibit this very Omotic feature. Sibilant harmony is attested through the Mao group. Switch reference is indicated in all the Mao languages, but only Mawes Aas'e, Hoozo and Ganza allocate special morphology to carry out the function. Seezo, on the other hand, utilizes overt subject markers to communicate the switch. Given the available data, no convincing evidence for so-called demonstrative or interrogative verbs has been identified in the Mao languages. Neither has there been found evidence of unique interrogative and negative inflectional systems within the Mao languages.

#### 4. Internal Developments Across the Mao Group

The examination below explores a handful of internal developments linking the Mao languages with one another and in some cases notes the links with the wider Omotic family. The features explored below include the following: the historical link between case and definiteness marking across the Mao group, reflexes for an archaic quintesimal number system (also found elsewhere in Omotic), a unique basic item-arrangement oppositions in the verbal word, and the grammaticalization of verbal aspect markers.

##### 4.1. Nominative Case and Definiteness Marking

Azeb Amha notes that links between case and definiteness (and gender) are attested in various parts of the Omotic family (2017:823). In the Gamo language, for instance, nouns are marked for case only when they are definite (Azeb Amha 2017:823-4). The link between nominative case and definiteness in the Mao group is particularly interesting: there is an overt, structural link in the Mao languages between the morphological shape of definite markers which precede nouns and the nominative case markers which follow nouns.

In Mawes Aas'e, the nominative case marker /-iʃ/ attaches to the right edge of the noun phrase, regardless of the definite status of the noun; compare the indefinite noun in (75) with the definite form in (76).

(75) es-iʃ            ha-kí-<sup>l</sup>á  
 person-NOM    AFF-come-DECL  
 'A person came.'

(76) íʃ        kan-iʃ        ʃó:ʃ-ná        ha-pí-<sup>l</sup>á  
 DEF    dog-NOM    snake-OBJ    AFF-kill-DECL  
 'The dog killed a snake.'

The form of the definite marker is obviously very similar to the nominative case marker. The case marker, like many case markers in Mawes Aas'e is toneless and inherits its tone from the noun to which it attaches.

Seezo shows a similar pattern: indefinite and definite nouns take case marking (which appears to be cognate with Mawes Aas'e). The preceding definite marker which precedes the noun (in 86), however, does not resemble the shape of the case marker.<sup>23</sup>

<sup>23</sup> I reconstruct Seezo's definite marker as an older distal demonstrative /\*jeʃe/ which is also related to an older demonstrative in Mawes Aas'e (cf. Ahland 2019:199).

(77) ʔò:wwá-ʃ      jé-dù:l      sú:nsʔ-té      kw-á:  
fox-NOM      DEF-hyena      behind-LOC      come-DECL  
‘A fox came after the hyena.’  
(Seezo data from Girma Mengistu 2015:127)

(78) jé-má:-ʃ      hé:      hé:-á:  
DEF-man-NOM      sleeping      sleep-DECL  
‘The man slept.’  
(Seezo data from Girma Mengistu 2015:153)

In Hoozo, the link between the definite and the case marker is clearer: sharing the same tone and the same vowel, sensitive to the gender of the noun. And in (80), it is possible to see a similar link between a definite marker and accusative case.

(79) ʔá      ʔint-já      ʔiʔép-ʔití  
DEF.M tree-NOM.M      HAB-bear.fruit-COP  
‘The tree is fruity.’  
(Hoozo data from Getachew Kassa 2015:59)

(80) ʔé      ʃéé-jé      ʔá      pú-jà      ʔiʃ-t-ì  
DEF.F woman-NOM.FDEF.M ale-OBJ.M      drink-PFV-REAL  
‘The woman drank the ale.’  
(Hoozo data from Getachew Kassa 2015:101)

While the Ganza language exhibits no fully-grammaticalized case markers, it does utilize an analogous morphosyntactic pattern involving demonstratives and NPs similar to the other Mao languages above where the preceding demonstrative is of the same shape as a post-nominal form which attaches to the right edge of the noun phrase (81-83 with masculine and feminine singular as well as plural forms).

(81) ìtí      ásí = ʔdí  
DIST.M      person = DIST.M  
‘that (M) person’  
(Ganza data from Smolders 2015a)

(82) ìgì      gáŋà = gì  
DIST.F donkey = DIST.F  
‘that (F) donkey’  
(Ganza data from Smolders 2015a)

(83) ùgù      gáŋà = gù  
DIST.PL      donkey = DIST.PL  
‘those PL donkeys’  
(Ganza data from Smolders 2015a)

The Ganza pattern provides some insight on the development of the structure for the Mao languages. While this structure cannot be said to be associated with nominative case in Ganza (at least not yet), as the

analogous structure is in the other Mao languages, it does appear to be associated with topicality as in (84).

- (84)    ìtí            ásí = ʰdí                    ga = ákúm-bô  
           DIST.M   person = DIST.M        3SG.M = good-COP  
           ‘That person, he is good.’  
           (Ganza data from Smolders 2015a)

This demonstrative + NP + agreement suffix construction is associated with topicality, as seen in (84). In short the story is one the common cross-linguistic linkage between certain topic constructions becoming associated with identifiability and thus definiteness. And then from definiteness to nominative case (the details are presented in their entirety in Ahland 2019).

#### 4.2. Archaic Quintisimal Number System

All of the Mao languages generally organize their lower numerals (1-10) in a manner similar to Koorete and Central Ometo (cf. Azeb Amha 2017:832), using a 5+ quintisimal numeral addition system for numbers 6-9. In the Mao languages, Mawes Aas'e, Seezo and Hoozo all show clear similarity in a quintisimal system through numeral 9 (though this is imperfect in Mawes Aas'e, where 'six' is innovative). Mawes Aas'e's system shows that the older system must have been quintisimal, as evidenced in the numbers seven, eight, and nine, where the form [kú] ~[kús] derives from 'hand' /kúsé/, followed by the numbers two, three and four, respectively. In all four Mao languages, the numeral 10 derives from 'hand.' For eleven through nineteen, the numbers require use of 'foot': /kú:s túg-ét/ ten leg/foot-LOC, (where 'foot' is reduced from /túgé/ to /g/) meaning '10 at the feet', precedes numbers one through nine (cf. Ahland 2012:294-6). Both Seezo and Hoozo show a very similar system in which the quintisimal base is even clearer. The word 'remain' (/ʔò:t'/ in Seezo and /ʔòttá/ in Hoozo) is utilized for numbers six through nine in a construction of the following pattern: 'five' 'remain' with numerals 1-4. For the teens, Seezo uses the numeral 'ten' (which derives from 'hand' and then uses 'remain' with the numerals 1-9). Hoozo, like Mawes Aas'e, employs /dàkká/ 'foot' for eleven through nineteen.

The Ganza data are from Smolder's notes from inside Ethiopia (2016) and Reidhead's grammar from inside Sudan (1947)<sup>24</sup>--showing some significant variation. It is clear that the Sudanese variety of Ganza exhibited clear a quintisimal system, with numerals 1-4 forming part of the numbers 6-9. Ganza's quintisimal system is only preserved in the Ethiopian variety in numbers 6 and 7. In Reidhead's Ganza data, it appears that the teen numerals employ the word for 'foot' /tókó/ (Smolders 2015b) as is the case in Mawes Aas'e.

All the Mao languages have at least the option of using some version of 'a person's body' for twenty, though Mawes Aas'e and Ganza also use the multiplicative 'two times ten'.

<sup>24</sup> Reidhead's data have been presented using IPA here; his 'ä' is represented with [ɛ], and his 'sh' is represented with [ʃ].

**Table 6: Mao Numeral Systems**

Gloss	MA (Ahland 2012)	Seezo (Girma Mengistu 2015)	Hoozo (Getachew Kassa 2015)	Ganza (Smolders 2015b)	Ganza (Reidhead 1947)
1	hiʃki	ʔiʃilè	ʔónnà	ʔiʃi / ʔiʃikwèèn	iʃi
2	numbo	nòmbé	dòmbó	mám <sup>l</sup> bú	mambu
3	te:zè	sí:zé	sìjázì	tí <sup>l</sup> zì	tizi
4	mets'e	bèss'é	béts'ì	má <sup>l</sup> s'í	metsi
5	k'wíssí	k'wíssé	kwíts'ì	k'wísí	k'usi
6	kja:nsè	(k'wíssé) ʔò:t' ʔiʃilè	kwíts'ì ʔòttá ʔónnà	ʔiʃikìbín <sup>l</sup>	iʃkipin
7	kúlumbò	(k'wíssé) ʔò:t' mòmbé	kwíts'ì ʔòttá dòmbó	mámpìn	mambupin
8	kúte:zé	(k'wíssé) ʔò:t' sí:zé	kwíts'ì ʔòttá sìjázì	wòbó <sup>l</sup>	tizipin
9	kúsméts'è	(k'wíssé) ʔò:t' bèss'é	kwíts'ì ʔòttá béts'ì	ʃèlé <sup>l</sup>	metsipin
10	kú:sú	kú:sé	p'óʃʃi	kónsóbá <sup>l</sup>	kunsupa
11	kú:s-g-ét-iʃki	kú:sé ʔò:t' ʔiʃilè	p'óʃʃi dèkká ʔónnà	kónsóbá k'wàt'ó ʔiʃikwéʔèn	iʃitoko
12	kú:s-g-ét-numbo	kú:sé ʔò:t' nòmbé	p'óʃʃi dèkká dòmbó	kónsóbá k'wàt'ó mám <sup>l</sup> bú	mambutoko
16	kú:s-g-ét-kja:nsè	kú:sé ʔò:t' k'wíssé ʔò:t' ʔiʃilè	p'óʃʃi dèkká kwíts'ì ʔòttá ʔónnà	kónsóbá k'wàt'ó ʔiʃikìbín <sup>l</sup>	iʃkipintoko
20	es-k'ele / numbo-ku:se	ʔiʃil má: k'wé:jì	móó ʔónnà k'é	ʔiʃi ásí <sup>l</sup> k'jóò / mám <sup>l</sup> bú kònsòbá <sup>l</sup>	iʃi ʔesi kjo

### 4.3. Two-way Item-Arrangement Opposition in Verbal System

Three of the Mao languages show an item-arrangement opposition where bound/reduced subject markers on verbs exhibit differential placement relative to tense-aspect-mode. Only Hoozo, which has no reduced subject markers, fails to show this phenomenon.

In Mawes Aas'e, the basic verbal opposition is realis (used for affirmative, non-future tense) vs. irrealis (used for negatives and future tense), and this distinction is marked by verbal item-arrangement itself. In examples (85-86) below, the 2SG and 1SG subject markers (bolded) are found before the verb stems. This is the realis verbal arrangement.

(85) **hi**-no:m-á  
2SG-trade-DECL  
'You traded (it) (to someone).'

(86) ha-**tí**-héz-á  
AFF-1SG-hit-PASS-PF-DECL  
'I hit (it).'

In examples (87-88), on the other hand, the irrealis verb shows placement of subject markers (bolded) after the lexical verb stem.

- (87) ha-no:m-g-**èm**-biʃ-á  
AFF-trade-FUT-2SG-NPST:AUX-DECL  
'You will trade (it) (to someone).'
- (88) ha-héz-gà-**t**-n-á  
AFF-hit-FUT-1SG-NPST:AUX-DECL  
'I will hit (it) (surely).'

In Mawes Aas'e, subject markers have been impacted by the grammaticalization of the future tense marker, which precedes them. As a result, the subject suffixes in (93 & 94) exhibit some differences from the prefixes in the examples (87 & 88) (e.g. there is an intrusive [m] in 2SG which comes from the final consonant of the source of the future marker /-gàm/ (cf. Ahland 2014 for all the details related to the changes in person marking for the irrealis future)). Table 7, below, provides the subject markers in Mawes Aas'e relative to the realis, irrealis non-future and irrealis future verbal forms.

**Table 7: Free Pronouns and Subject Markers on Final Verbs (from Ahland 2014:7)**

Free Pronouns	Realis Verb Prefixes	Irrealis Verb Non-Future (Negative) Suffixes	Irrealis Verb Future (Affirmative and Negative) Suffixes
1SG tí-jé	tí-	-tí	-t
1DU han-é	han -	-n	-n
1PL hambèl-è	ham -	-m	-m
2SG hi-jè	hi-	-hi	-èm
2DU háw-é	háv-	-w	- (H Tone)
2PL hàwèl-è	háv-	-w	- (L Tone)
3SG íf-è	Ø-	-Ø-	-m
3DU íf-kuw-e	Ø- /-and/	-Ø- /-and/	-m /-and/
3PL íf-kol-è	Ø- /-and/	-Ø- /-and/	-m /-and/

In Mawes Aas'e, the two-way opposition between realis and irrealis is exploited as a system across the various verbal constructions (cf. Ahland 2012:366ff).

Seezo also exhibits a basic two-way item arrangement opposition where bound subject markers are placed before the verb stem (in the realis) and after the verb stem (in the irrealis). The realis examples with verbal subject prefixes are provided below.

- (89) dà-ʃ                      jé-kjà:-dí:-nè                      k'im                      **dà**-k'im-á:  
1PL.EXCL-NOM DEF-house-father-with talking:INF 1PL.EXCL = talk-DECL  
'We (excl.) talked to the owner of the house.'  
(Seezo data adapted from Girma Mengistu 2015:195)
- (90) há = pù:s-à                      **hà**-sìs-hàw-á:  
1SG.POSS = beard-ACC 1SG = shave-take-DECL  
'I shaved my beard for myself.'  
(Seezo data adapted from Girma Mengistu 2015:191)

Irrealis examples with subject suffixes are provided below.

- (91) dâ:-ʃ                    jé-kjà:-dí:-né                    k`im-**dà**-j-á:  
 1PL.EXCL-NOM DEF-house-father-with talk-1PL.EXCL = FUT-DECL  
 ‘We (excl.) will talk to the owner of the house.’  
 (Seezo data adapted from Girma Mengistu 2015:195)
- (92) hà:-ʃ                    há:z                    pí ~ pà:ŋ-**hà**-j-á:  
 1SG-NOM tomorrow swim ~ swim = 1SG-FUT-DECL  
 ‘Tomorrow I will swim.’  
 (Seezo data adapted from Girma Mengistu 2015:192)

In like, manner, Ganza, also provides evidence of a two-way item arrangement opposition involving the reduced subject markers. In realis verbal constructions, the subject enclitics are free to move to attach to a variety of forms,<sup>25</sup> though the host and enclitic is always positioned before the verb (quite frequently immediately before the verb).

- (93) hà = **dí**                    p`òʃò-bò  
 AFF = 1SG chase-DECL  
 ‘I chased (it).’  
 (Ganza data from Smolders 2015a)
- (94) hà = **gá**                    p`òʃò-bò  
 AFF = 3SGM chase-DECL  
 ‘He chased (it).’  
 (Ganza data from Smolders 2015a)

Irrealis verbs, on the other hand exhibit subject marking enclitics attached to the right of the verb stem, inside the verbal word.

- (95) hǎ                    p`òʃò-s-**sì**-bô  
 AFF chase-FUT-1SG-DECL  
 ‘I will chase (it).’  
 (Ganza data from Smolders 2015a)
- (96) hǎ                    p`òʃò-s-**gà**-bô  
 AFF chase-FUT-3SGM-DECL  
 ‘He will chase (it).’  
 (Ganza data from Smolders 2015a)

<sup>25</sup> These reduced pronominal forms are most frequently enclitics which attach to hosts including full pronouns, object noun phrases, and most frequently the affirmative marker /ha/. According to my data, in the realis verb, these are always preverbal (though, not always immediately preverbal; an object can be positioned between the subject-marking enclitic verb). In a few instances, it appears that the forms can also pro-cliticize to the verb (see example 84, above, where the decision to represent the form as pro-cliticized to the verb was based on intonation contour and a pause after the topicalized NP). The movability of reduced subject markers has been established as a phenomenon found in various Omotic languages (Azeb Amha 2012:466-468 & 2017:835-836).

Hoozo is unique in the Mao group due to its lack of bound (reduced) participant reference markers for pronominal subjects. All pronominal subjects are expressed by obligatory, free pronouns. As a result, the verbal system does not show any two-way opposition involving subject markers before vs. after the root.

- (97) ?á má-tí-ì  
 3SG.M eat-PST-REAL  
 'He ate.'  
 (Hoozo data adapted from Getachew Kassa 2015:238)
- (98) ná má-tí-ì  
 1SG eat-PST-REAL  
 'I ate.'  
 (Hoozo data from Getachew Kassa 2015:238)
- (99) ?á má-j-é  
 3SG.M eat-FUT-IRR  
 'He will eat.'  
 (Hoozo data adapted from Getachew Kassa 2015:238)
- (100) ná má-j-é  
 1SG eat-FUT-IRR  
 'I will eat.'  
 (Hoozo data from Getachew Kassa 2015:238)

While Hoozo is an outlier within the Mao group (and within wider Omotic) for its lack of reduced/bound subject markers, its irrealis verb construction exhibits a future tense marker /-j/ that is related to a copular verb attested across the Mao group. The irrealis forms in Mawes Aas'e, Seezo, and Hoozo all require a bound auxiliary which is in all instances grammaticalized from either existential or copular sources.

In Mawes Aas'e, a form cognate with this copula is found as an auxiliary in some 3<sup>rd</sup> person negative constructions as well as on question forms (cf. Ahland 2012:478 & 586).

- (101) tjam-ánd-wé-**jà**  
 count:INF-3NSG-NEG-COP  
 'They (dual/plural) did not count.'
- (102) íf-kol-té kí-kol-**ja**  
 3-PL-SBJ who-PL-QP  
 'Who are they?'

The copula can also be used in equative predications, as the non-past tense form--here contrasted with the past copula form.

- (103) í-té àld-mé:nt-es **jà** Non-Past  
 3SG-NOM know:INF-tell:INF-person be.NPST  
 'S/he is a teacher.'

- (104) í-té            àld-mé:nt-es            bitè            Past  
 3SG-NOM know:INF-tell:INF-person be.PST  
 'S/he was a teacher.'

The grammaticalization from copula to future tense appears to have taken place in Seezo (105) and in Hoozo (106) as well.

- (105) hà:-ʃ            há:z            pà:ŋ = hà-j-á:  
 1SG-NOM tomorrow swim = 1SG-FUT-DECL  
 'Tomorrow I will swim.'  
 (Seezo data from Girma Mengistu 2015:192)

- (106) ?á            kwá-j-é  
 3SG.M come-FUT-IRR  
 'He will come.'  
 (Hoozo data from Getachew Kassa 2015:77)

In the discussion above, we have seen a basic item-arrangement opposition across the Mao group: 1) A 'simple' verb construction involving reduced/bound subject marking preceding the verb root (in Mawes Aas'e, Sezo, and Ganza); this is the basis of the realis (non-future and/or past across these three languages); and 2) A 'complex' verb construction involving subject marking following the lexical root with the addition of a bound-auxiliary element following (in Mawes Aas'e, Sezo and Hoozo); this is the basis of the irrealis (future, negatives, counterfactuals and more, see Ahland 2014 for Mawes Aas'e) At this point, given the available data, it's not clear what the source of Ganza's /-bô/ DECL marker is. It may well be the case that the bilabial itself is an old reflex of the same etymon that gave rise to the existential verb/non-past auxiliary in MA. If that were the case, then all members of the Mao group could be said to show a similar complex verb construction with subject marking following the lexical stem and an auxiliary (or at least an erstwhile auxiliary) following that.

#### 4.4. The Grammaticalization of Verbal Aspect from Clause Chains and Serializations

The Mao languages show historical links with one another in the grammaticalization of certain verbal aspectual domains. All the Mao languages, like Omotic in general, exhibit quite rigid verb-final (OV) systems. Typologically, verb-final systems often grammaticalize aspectual material in  $V_1 + V_2$  constructions, where the  $V_2$  is often a closed class of auxiliary-like forms and the  $V_1$  is the lexical/content verb (see Dryer 1992:100). Two other relevant features in many OV systems are clause chaining and verb serialization. The internal evidence in the Mao languages suggests that these languages are employing similar pathways (involving clause chaining and verb serialization) to build verbal aspect constructions and in some cases, the choices of source lexical verbs are clearly cognate. In the Mao languages, some constructions are formed with the more grammaticalized verb (semantically bleached, member of a closed class) in the  $V_1$  position while others are formed with the more grammaticalized verb in the  $V_2$  position.

In Mawes Aas'e, four aspectual markers are briefly illustrated below (107-110): durative, completive, and two different perfect aspect markers.<sup>26</sup> These aspectual markers appear to be related to

<sup>26</sup> No difference in function in the two perfect forms has been observed. All speakers I have worked with use both of these and appear to be able to interchange them.

existing lexical verbs (which are provided above each example).<sup>27</sup> Note that only the durative aspect /kò-/ is positioned before the lexical verb stem; all other aspectual markers follow the lexical verb stem.

Durative: kò- (ha-kòw-á 'sit')

- (107) p'íj-kuw-íj ha-kò-jets'-and-á  
 child-DU-NOM AFF-DUR-run-NSG-DECL  
 'The two children ran for a while.'

Completive: -ts'e:l (ha-ts'e:l-á 'finish')

- (108) ha-jé:ts'-ts'e:l-á  
 AFF-run-COMPL-DECL  
 'S/he finished running.'

Perfect 1: -ti (ha-tì-á 'be.behind')<sup>28</sup>

- (109) hì-mí-à:  
 2SG-eat-INTR  
 'Did you eat?'

e: ha-tí-mí-ti-á  
 yes AFF-1SG-eat-PF-DECL  
 'Yes. I have eaten.'

Perfect 2: -kòt' (ha-kòt'-á 'have/put')

- (110) íj kjat'-nà ha-kí-kòt'-á  
 DEF house-ACC AFF-come-PF-DECL  
 'S/he has come to the house.'

The constructions above appear to be the result of verb serialization (or perhaps even clause chaining), where utterances with multiple verbs arranged in a meaningful event order have collapsed over time into single verb forms with one verb maintaining its lexical meaning and the other(s) function aspectually but are otherwise semantically diminished.

Two of the aspectual domains above (the durative and the perfect) can be observed across the Mao group (Table 8, below). A form which appears to be cognate with Mawes Aas'e's durative (107) is observed across the Mao group as a progressive in the other languages. In all instances, this form precedes the lexical verb stem. A form which may be cognate with Maws Aas'e's /-ti/ perfect form (109) is also observed across the Mao group. This form is found following the lexical verb stem in Mawes Aas'e, Hoozo and Ganza but is positioned before the lexical stem in Seezo. Finally, it's worth noting that the Seezo forms all end with a [n] consonant. The positioning of these forms as well as Seezo's final [n] call for explanation.

<sup>27</sup> That said, speakers of the language do not in all cases agree that the bound aspectual form is in any way linked to the hypothesized sources identified here.

<sup>28</sup> Both perfect forms imply continued relevance of the past event: in (117), the interlocutor implies that S/he is not hungry and in (118) there is a clear implication (according to reported speaker intuition) that the person who came is still present at the house.

**Table 8: Correspondence Set of Grammaticalized Aspect Forms Across Mao Group**

	<b>Mawes Aas'e</b>	<b>Seezo</b>	<b>Hoozo</b>	<b>Ganza</b>
<b>Durative / Progressive</b>	kò- DUR	kón- PROG	kó- PROG	gara- PROG
<b>Perfect/Past</b>	-ti PF	kán- PF ~ tán- PF	-ti PST	-ta PF

Example (111-113) below show a very similar pattern to the Mawes Aas'e form above (in 107). Unlike Mawes Aas'e, these constructions have been analyzed in each instance as progressives (an aspectual domain not dissimilar to durative: both are clearly imperfective in nature).<sup>29</sup> The position of these progressive markers, like Mawes Aas'e's durative is preceding the lexical verb stem and as is the case in Mawes Aas'e this is the only aspectual domain that is positioned before the lexical verb. The data below are from each of the other Mao languages: Seezo (111), Hoozo (112) and Ganza (113).

(111) mùnt'ás-ʃ      **kón**-ʃò-á:  
Munt'as-NOM PROG-walk-DECL  
'Munt'as is walking.'  
(Seezo data adapted from Girma Mengistu 2015:134)

(112) ná **kó**-má-tí-ì  
1SG PROG-eat-PST-REAL  
'I was eating.'  
(Hoozo data from Getachew Kassa 2015:229)

(113) suk-sa = di      **gàrá**-háv-bò  
store-LOC = 1SG PROG-go-DECL  
'I am going to the store.'  
(Ganza data from Ahland fieldnotes)

The progressive forms may be cognate with one another and each is clearly related to the verb for 'sit'; the corresponding verbs for 'sit' in each of the Mao languages are illustrated below: Mawes Aas'e (114), Seezo (115), Hoozo (116) and Ganza (117).

(114) es-ìʃ      ha-kòw-á  
person-NOM AFF-sit-DECL  
'A person sat.' (Ahland 2012:414-6;441-4 for 'sit' as durative source)

(115) jé      má-ʃ      kò-á:  
DEF man-NOM sit-DECL  
'The man sat.'  
(Seezo data adapted from Girma Mengistu 2015:133; cf. 2015:208 for 'sit' source)

<sup>29</sup> Mawes Aas'e does have both past and non-past progressive constructions in addition to the durative discussed here.

(116) ?á kòb-tí-ì  
 3SG.M sit-PST-REAL  
 'He sat.'  
 (Hoozo data adapted from Getachew Kassa 2015:357)

(117) hà = gá gàrá-bò  
 AFF = 3SG.M sit-DECL  
 'He sat.'  
 (Ganza data from Smolders 2016)

In Table 8, the durative/progressive aspect precedes the lexical verb stem across the Mao group, but the perfect/past form follows the lexical verb stem in all but Seezo. The discussion will return to the Seezo forms in particular, below. But first let's look at the other three: the Mawes Aas'e Perfect /-ti/ (in 118) appears to be cognate with a past tense marker in Hoozo (119) and with the perfect aspect in Ganza (120).

(118) es-ìj ha-mí-ti-á  
 man-NOM AFF-eat-PF-DECL  
 'A man has eaten.'

(119) ná má-tí-ì  
 1SG eat-PST-REAL  
 'I ate.'  
 (Hoozo data from Getachew Kassa 2015:229)

(120) hà = dí má'á-tá-bò  
 AFF-1SG eat-PF-DECL  
 'I have eaten.'  
 (Ganza data from Smolders 2015a)

Getachew Kassa, in his grammar of Hoozo, specifically mentions that he believes the verb 'disappear' to be the source for the Hoozo past tense marker (2015:228). Example (121) provides an example of this verb with the past tense marker as well.

(121) sukara tí-tí-ì  
 sugar disappear-PST-REAL  
 'The sugar disappeared.'  
 (Hoozo data from Getachew Kassa 2015:159)

While the verb 'disappear' in Mawes Aas'e is /ha-ò:s-á/ and is not cognate with the /-ti/ form, the verb 'be.behind' is possibly cognate with the form, based on congruences in both form and meaning (122). Anteriority, which is a central feature of perfect is congruent with the notion of 'behind' and perhaps even 'no longer seen'.

- (122) es-íʃ          ha-tí-á  
 man-NOM AFF-be.behind-DECL  
 'A man was behind (it).'

Let's return now to that final Seezo consonant [n] which appears on these forms. The presence of a sound which appears on the grammaticalized form is obviously more problematic than the loss of a sound from the source structure to the grammaticalized form (as in the loss of the final [b] in the Hoozo example (compare 124 to 120). One key to understanding how these forms developed includes accounting for that final Seezo [n] as well as considering the position of the form relative to the lexical verb stem. First, we must recall that the Seezo word for 'sit' (115) does not exhibit the final [n] that shows up on the grammaticalized progressive aspect prefix (119). This [n] is quite clearly related to the medial verb suffix (/n/), as has been suggested by Girma Mengistu (2015:208). Consider the clause chain involving 'sit' in (123) where the /n/ is the CVB1 suffix.

- (123) jé-má-tú:-ʃ                      kjà:-kjáʃʃ-té                      **kò:-n**  
 DEF-man-PAUC-NOM house-bottom-LOC sit-CVB1

kàns          kón-hel = ?ègg-á:  
 granary PROG-3.NSG = make-DCL  
 'The few men sat under the tree and are making a granary.'  
 (Seezo data adapted from Girma Mengistu 2015:208)

In short, it appears that Seezo's verb root 'sit' fused with the /n/ converb suffix before its grammaticalization as an aspectual prefix, resulting in the fully-fused form /kón-/ for marking the progressive.<sup>30</sup> Interestingly, the durative aspect in Mawes Aas'e can also be expressed by a semantically bleached medial (non-final) verb /kó-in/ which takes the /-in/ same-subject medial suffix (itself cognate with Seezo's CVB1 form). In (124), below, the Mawes Aas'e durative is expressed through what is now a semantically empty (i.e. doesn't mean 'sit') medial verb with the SS suffix; compare the durative in (11) with the medial lexical verb 'sit' in (125).

- (124) ì:m-íʃ          hí-òs-íʃ                      kó-in          ha-tí-wó:l-á  
 cow-NOM 3SG-disappear-DS DUR-SS AFF-1SG-want/search-DECL  
 'The cattle disappeared, and I searched for them for a while.'

- (125) kòw-ín          tí-mí-á                                      lexical 'sit' as medial verb  
 sit-SS          1SG-eat-DECL  
 'I sat and ate.'

The same phenomenon impacted the development of perfect aspect in Seezo as well, as suggested by Girma Mengistu (2015:210). The medial verb form 'come' (126) appears to be the source of the perfect marking in Seezo (127).

<sup>30</sup> The reason for the tone change from L to H on the aspectual prefix is not clear, but such changes are not particularly unusual in grammaticalization in medial and converb forms in other Mao languages, especially Mawes Aas'e (see 127 above).

(126) ʔòwwá-ʃ kwá:-n jé-dù:l-à ʔát-á:  
fox-NOM come-SS DEF-hyena-ACC ask-DCL  
‘The fox came and asked the hyena.’  
(Seezo data from Girma Mengistu 2015:319)

(127) hà:-ʃ há = k’às’ kán-hà = hàmp-á:  
1SG-NOM 1SG.POSS = work PF-1SG = finish-DCL  
‘I have finished my work.’  
(Seezo data from Girma Mengistu 2015:211)

In (126), the medial verb /kwá:-n/ ‘come’ simplified through the loss of the [w] and the length on the vowel and fused with the erstwhile converb suffix while collapsing as a prefix onto the final verb (positioning these forms before the lexical stem). The collapse of clause chains (and in some cases, serial verbs, e.g. /ti/ perfect) in the development of aspect also provides an explanation for today’s order of morphology where some forms (e.g. durative/progressive) are positioned before the lexical verb root while others (e.g. completive, perfect, past, etc.) in the other Mao languages are positioned after the lexical verb root. It appears that event sequence, as would have been indicated in the erstwhile clause chains, played a role in morphological positioning within the verbal word.

In the Northwest Omoto Omotic language of Wolaitta, multiple types of verbal compounding have been reported (Azeb Amha and Dimmendaal 2006b). One particularly relevant asymmetrical type involves the presence of V<sub>1</sub> + V<sub>2</sub> verbal compounding where the V<sub>1</sub> is a converb and V<sub>2</sub> is selected from a small, closed class of verbs that can express aspect. The pattern where the V<sub>2</sub> is the more grammaticalized (e.g. a semantically bleached member of a closed class) is not uncommon in OV typologies where auxiliaries tend to follow the lexical (content) verb (Dryer 1992:100). It should be noted, however, the pattern Dryer is examining does not involve a lexical/content verb in a converb form, as is the case in Wolaitta. In Wolaitta’s case, unlike the data from the Mao languages above, the converb forms are not phonologically collapsed into the following verb. Rather, they remain independent phonologically but semantically encode only a single event (in conjunction with the second aspectual verb). Another important difference is that in the Mao pattern the asymmetry is two-fold. Some constructions, like the progressive/durative, involve a medial/converb form that expresses aspect (that is, the V<sub>1</sub> expresses aspect, see examples 107 and 127). And in other constructions, like the perfect (in the case of Mawes Aas’e (118) and Ganza (120)) and past (Hoozo (119)), it is the V<sub>2</sub> which expresses aspect. This phenomenon in Mao languages is very likely tied to the order of events in the source constructions, previous to the grammaticalization of these aspectual constructions.

## 5. Final Thoughts

The two-fold focus above is intended to highlight the presence of Omotic features within the Mao group as well as to explore a number of internal developments within the group. Such an examination calls for descriptive argumentation with ample illustrative examples since this branch of Omotic has only recently begun to be documented with large works on phonology and morphosyntax.<sup>31</sup> This work is just one examination of selected features that provide links between the Mao group and the Omotic family.

There is much more than could be said to further establish and characterize the relationship between Omotic and the Mao group, and of course, an exploration of selected structures cannot take the place of careful and methodical comparative reconstructions. The issue with reconstructions involving these languages in the past has been in part that the data were so scant that finding cognate forms and

<sup>31</sup> In Azeb Amha’s 2012 examination of the Omotic languages, the Mao languages were not included (the work was written before any Mao grammars were available), but by the time of her 2017 work on Omotic, many mentions of Mawes Aas’e (Northern Mao) can be found throughout.

distinguishing between cognate forms with some innovations and forms that are outright borrowings was very difficult.

One such example of a historical reflex that has been at times attributed to contact involves the Mao pronominal system. There is an old Omotic demonstrative /ha/ which is attested across the family (see Bender 2000:206 for a Omotic reconstruction). This old demonstrative and its developments inside the Mao languages is the subject of a forthcoming article. The gist of the argument is that the /ha/ is the source of the affirmative markers /ha-/ and /hã/ in Mawes Aas'e and Ganza, respectively. And then through the /ha/'s association as a host for pronominal subject enclitics, the form [ha] entered into the participant reference system itself. Internal developments and corroborating evidence shows that the 1st and 2nd person non-singular pronouns (i.e. dual and plural) all include a fused, non-etymological [ha]--non-etymological in terms of the pronominal system (see Table 7, above). The development was sparked by widespread innovations in the free pronoun system, where new free pronouns developed through augmentation from the reduced, bound pronominal forms as the dual vs. plural opposition developed. The same /ha/ form also intruded into Seeso's pronominal inventory, as a new 1st person form /hà:/ (see example 105 above). Interestingly, the cognate /ha/ demonstrative in Wolaitta can host gender/number markers (e.g. /ha-gé naʔáy/ 'this boy' and /han-ná naʔíya/ 'this girl' (Azeb Amha 2012:487)). This is remarkably similar to what we see in Ganza (e.g. 117 & 120) and to what I believe was an important feature of the early state of the Mao languages in general.

The point to all this, of course, is that we are only now beginning to uncover the links between the disparate parts of the Omotic family. As more detailed grammatical descriptions are produced, a clearer picture emerges. While the languages share many features, the time-depth of the family is significant and as a result many layers of innovations can obscure comparative work at the lexical level. Mawes Aas'e's pronouns (especially those with the intrusive [ha]) were at one time considered borrowings, perhaps from Bertha (Bender 1996:158; 2000:184,199). And it is understandable that comparative work without grammatical documentation would miss such links. It is indeed exciting to consider what new discoveries relative to the Omotic family, its early development, and the furthest reaches of the group may be uncovered as more of the languages receive the serious attention they deserve. Hayward notably called Omotic the 'empty quarter' of Afroasiatic (2000) because of the lack of documentation of so many languages, and Bender suggested that Mao was the least documented subgroup as well (Bender 2000:180). Much had changed in the last ten years. And in the next ten, a clearer picture is bound to emerge.

## Abbreviations and symbols

↓	Downstep	IRR	Irrealis
1	First person	M	Masculine
2	Second person	F	Feminine
3	Third person	L	Low tone
ACC	Accusative	LOC	Locative
AFF	Affirmative	MED	Medial
ANA	Anaphoric	NEG	Negative
AUX	Auxiliary	NMLZ	Nominalizer
COM	Comitative	NOM	Nominative
COMP	Completive	NPST	Non-past
COP	Copula	NSG	Non-singular (dual/paucal and plural)
CVB	Converb	PASS	Passive
DAT	Dative case marker	PAUC	Paucal
DECL	Declarative	PF	Perfect
DEF	Definite article	PFV	Perfective
DIST	Distal	PL	Plural
DS	Different subject	POSS	Possessive
DU	Dual	PROG	Progressive
DUR	Durative	PROX	Proximal
EXCL	Exclusive	PRS	Present tense
EXIST	Existential verb	PST	Past tense
EXO	Exophoric	PURP	Purposive
FUT	Future	QP	Question particle
GEN	Genitive	REAL	Realis
GER	Gerund	RECP	Reciprocal
H	High tone	REFL	Reflexive
HAB	Habitual	REL	Relativizer
INF	Infinitive	SG	Singular
INS	Instrument	SS	Same-subject medial verb
INTR	Interrogative	TV	Terminal vowel

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