Michael Ahland*

The evolution of the Mawes Aas'e (Omotic-Mao) pronouns: evidence for Omotic Lineage

https://doi.org/10.1515/jall-2024-0005
Received November 22, 2024; accepted February 12, 2025

Abstract: Omotic-Mao pronouns have been deeply problematic for reconstruction, leading some scholars to suggest the forms are the result of borrowing or interference. This paper explores new evidence from the participant-reference systems in the four Mao languages (Mawes Aas'e, Ganza, Seezo, and Hoozo) to show that the Mawes Aas'e pronouns, which are the most divergent of the group, are likely the result of complex internal developments. Developments include the innovation of a dual opposition from an inclusive/exclusive distinction, fusion of reduced subject-marking enclitics with their most frequent host (an affirmative marker), the formation of new free pronouns on the basis of these host + enclitic fusions with additional, augmenting morphology to mark number, and the grammaticalization of new 3rd person pronouns from a demonstrative base with number suffixes. Evidence is both internal and comparative and supports an Omotic classification for these languages.

Keywords: Omotic languages; pronoun development; subject-marking; historical linguistics; morphosyntax

Abstract: የኦሚዊ ማኦ ቋንቋዎችን ተውላጠ ስሞች ውስብስብነት የጋራ ምንጫቸውን እንደገና መልሶ ለማዋቀር እጅግ አስቸጋሪ ሆኖ ከመቆየቱም በላይ አንዳንድ ሊቃውንት የቋንቋዎቹ ተውላጠ ስሞች የተውሶ ወይም የሌሎች ቋንቅቋዎች ተጽእኖ ውጤቶች ናቸው የሚል ሐሳብ እንዲሰንዝሩ ምክንያት ሆኗል። ይህ ጥናት ከአራቱ የኦሚዊ ማኦ ቋንቋዎች (ከማዌስ ኣጼ፣ ከጋንዛ፣ ከሴዞ እና ከሆዞ) መካከል የማዌስ ኣጼ ተውላጠ ስሞች ከሌሎቹ የቡድኑ አባል ቋንቋዎች ተውላጠ ስሞች በጣም የተለዩና የውስብስብ የውስጠ ቋንቋ ለውጦች ውጤት መሆናቸውን በሌሎች ቃላት ላይ የሚታዩ የባለቤት ወይም የሰሳቢ አጸፋ አመልካቾች ማስረጃነት ያስረዳል። ቋንቋው ካካሂዳቸው የውስጠ ቋንቋ ለውጦች ወይም እድገቶች መካከል የጥንድ ቁጥር አመልካች ተውላጠ ስሞች ከአንደኛ መደብ አካታች/ኢአካታች ብዙ ቁጥር ተውላጠ ስሞች እንደ አዲስ መፈጠራቸው፣ ያጠሩ (በቅርጻቸው ያነሱ) የባለቤት አመልካች ተውላጠ ስሞች በአብዛኛው አስጠጊዎቻቸው ወይም ተሸካሚዎቻቸው ከሁኑት (ከሐተታዊ አረፍተ ነገር አመልካች) ምላዶች ጋር መዋሃዳቸው ውይም መጣበቃቸው፣ አስጠጊና ተጠጊ (ተሸካሚ + ተለጣፊ) ምእላዶች እንዲሁም ሌሎችን የቁጥር አመልካች ምእላዶች ተዋህደው አዳዲስ ነጻ ተውላጠ ስሞችን መፍጠራቸው፣ እንዲሁም የሶስተኛ መደብ ተውላጠ ስሞች በቁጥር

***Corresponding author: Michael Ahland**, California State University, Long Beach, USA,
E-mail: michael.ahland@csulb.edu. https://orcid.org/0000-0001-5433-1989

አመልካች ምእላዶች አማካይነት ከጠቋሚ መስተአምር (ከአመልካች ተውላጠ ስም) መፈጠሩ ይገኙባቸዋል። እነዚህ ውስጣዊና አወዳዳሪ መረጃዎች የቋንቋዎቹን አሚዊ የዘር ግንድ አባልነት የሚያጠናክሩ ናቸው።

1 The challenge of Mao pronouns

Mawes Aas'e (also known as Northern Mao)[1] is an endangered language of western Ethiopia and is widely understood to be one of four Mao languages (Mawes Aas'e [myf], Seezo [sze], Hoozo [hoz], and Ganza [gza]) (Bender 2003:3). Mawes Aas'e and the other Mao languages have posed a problem for historical reconstruction and genetic classification: Before Bender arrived at his ultimate Afroasiatic-Omotic-Mao classification (2000 and 2003), some scholars considered that Mawes Aas'e (MA) might be Nilo-Saharan (Grottanelli 1940; Greenberg 1963:130). Bender, himself, considered the possibility of a mixed lineage with Koman languages (Bender 1996:158; 2000:184). And even after settling on his Afroasiatic classification, Bender noted that the Mao pronominal systems show "much innovation" when compared with other Omotic languages and still offered significant challenges for reconstruction (2000:199). Zaborski, in particular, continued to object to the notion that the Mao pronominal forms were Afroasiatic at all, arguing instead for a Nilo-Saharan classification (Zaborski 2004).

More recent work has shown that MA's paradigm is even more divergent than first suspected: in addition to the other differences, MA is the only one of the Mao languages to have developed a dual opposition (Ahland 2012; Girma Mengistu 2007). And of its nine pronouns, only two are transparently cognate with corresponding forms in other Mao languages (Ahland 2013; 2015).

Still today, there is no clear consensus for the genetic position of the Mao languages. Even the internal structure of most of Omotic is still a matter of some debate. Theil summarizes consensus among scholars as centering on a smaller subset of languages of so-called Central Omotic: including Ometo, Gonga, Bench, Ts'aara, and Yemsa as being clearly related to one another, though without agreement on the actual subgrouping (Theil 2023:900). Theil notes that this leaves three other groups of languages (Aroid, Dizoid, and Maoid [Mao]) in an "uncertain status" as to one another and the Central Omotic languages (Theil 2023:900).

This paper traces how such divergence in pronominal forms appears to have developed within the Mao group and more specifically within MA. Evidence is drawn from comparative examination across the Mao group and the Omotic family more generally as well as from internal reconstruction of developments in MA's wider

1 In the literature, Mawes Aas'e has also been frequently referred to by the toponyms Bambassi and/or Diddessa.

participant reference system. Interesting features of the MA pronoun development include the following: 1) the development of a dual versus plural opposition across all persons in the paradigm, 2) the development of four new free pronouns via an augmentation of a set of host + enclitic subject-marking pronominals, and 3) an entirely new third person series deriving from a demonstrative with number suffixes.

The discussion begins with an overview of the Mao group's free pronouns and related bound participant-reference subject markers (Section 2). Section 3 focuses on the positioning of bound pronominals in the Mao subgroup as well as in wider Omotic. Section 4 begins with the Proto-Mao state and offers a historical scenario in an attempt to account for the developments that have resulted in today's MA forms, both free pronouns as well as bound pronominal subject-markers. Section 5 explores the implications of all these data and the historical scenario–both theoretical and comparative, arguing for the inclusion of the Mao languages within Omotic.

2 The Mao pronominal forms

The discussion of Mao pronominal forms is divided between the free pronoun forms (Section 2.1) and the bound pronominals which function as obligatory subject-marking devices (Section 2.2).

2.1 Free pronominals in Mao group

We begin by exploring the divergence of MA pronouns relative to the other Mao languages and of the Mao languages relative to Bender's reconstructions of Proto-Omotic.[2] Table 1 illustrates the free pronoun forms for the Mao languages as well as Bender's reconstructions for the Mao subgroup and for Proto-Omotic.

Let's begin with a brief discussion of the data in Table 1. First, only MA has a dual series.[3] A dual opposition is rare in Omotic; apart from MA, only the distantly-related

2 Bender's reconstructions of Omotic and Mao pronominals are admittedly out-of-date because a great deal of documentary work has been accomplished since 2003. That said, given that Bender's reconstructions are the only ones attempted for Omotic-Mao, in particular, they are provided here for comparative discussion. Bender's Mao data were based on wordlists and collections of grammatical paradigms gathered by himself and a handful of other scholars (e.g. Siebert et al. 1994; Bender 2000:183–4; Reidhead 1947:15–16) and reported by Bender (2000:183-4)).

3 The presence of dual forms in the Didessa variety of MA was first reported by Girma Mengistu (2007).

Table 1: Free pronouns in the Mao languages*.

	MA	Ganza	Seezo	Hoozo	Proto-Mao	Proto-Omotic
1SG	**tí-jé**	**tì**:	**hà**:-	**ná**	***ti-**	***ta**
2SG	**hì-jè**	**jé**:	**hín-**	**hí**	***hi-ja**	***n / j-**
3SG	**íʃ-è / ít-é**	**kjánâ** M **kî**: F	**hán-**	**ʔá** M **ʔé** F	–	***is / b-**
1DU	**han-é**					
2DU	**háw-é**					
3DU	**íʃ-kuw-e**					
1PL	**hambèl-è**	**mù**:	**dà**:- excl. **dól-** incl.	**nú**	–	***nu**
2PL	**hàwèl-è**	**nàm**	**nám-**	**dó**	***nam**	***int**
3PL	**íʃ-kol-è**	**kû**:	**hél- / jél-**	**ʔínə́**	–	***ist / b-**

*The data in Table 1 are from various sources: Mawes Aas'e (Ahland 2012:377; Girma Mengistu 2007); Ganza (Ahland fieldnotes from 2014; Smolders 2015), Seezo (Girma Mengistu 2015); Hoozo (Getachew Kassa 2015); Proto-Mao (Bender 2000:196) and Proto-Omotic (Bender 2000:223).

Dizin language exhibits a dual opposition (Beachy 2005:53). In the MA data, the terminal vowels,[4] which appear on all nominals (see Ahland 2012:313–324), have been separated by a hyphen in Table 1. These terminal /-**e**/ vowels should not be included in pronoun comparisons; they are included here as a means to indicate the full tonal melody of the free pronoun forms.[5] The plural and dual nominal suffix is also parsed for the 3rd person non-singular forms in MA. The Ganza and Hoozo forms exhibit a gender distinction in 3rd person singular.[6] The pronominal forms in Seezo are bound roots, as indicated with the suffixed hyphen; these forms cannot occur on their own without an appropriate case suffix (Girma Mengistu 2015:247). Seezo also exhibits an inclusive versus exclusive opposition in 1st person plural; clusivity distinctions in 1st person plural are also noted for a few other Omotic languages outside the Mao group: Benchnon, Zayse, Koorete and Zargulla (Azeb Amha 2017:828).

Among the Mao languages, MA is highly innovative, with only the 1SG and 2SG pronouns clearly corresponding to some of the other Mao languages. MA's 3rd person series is also divergent from the other Mao languages. It is possible that this series could be a retention of an older base form, given Bender's reconstruction of the /***is**/ and /***ist**/ forms, which are attested in multiple, but not all, branches (2000:223). However, the similarity to Bender's reconstruction may be accidental as the MA 3SG pronoun is very similar to a demonstrative (/**íʃé**/), and the dual and plural

4 Terminal vowels are a widespread Omotic phenomenon. For MA, see Ahland (2012:194–195).

5 The terminal vowels are toneless and receive their surface tone from the nominal/pronominal root to which they attach (Ahland 2012:194).

6 Such a distinction is not at all unusual for Omotic languages (cf. Azeb Amha 2017:823).

forms take the same DU and PL suffixes found on other nominals (including demonstratives)–see discussion in Section 5.2.6, below. The morphological transparency and complexity of the 3rd person series in MA suggests that the series may be a more recent grammaticalization within MA (Ahland 2012:287).

The real mystery in Table 1 is that MA's 1st person and 2nd person non-singular forms (i.e. dual and plural) are strikingly distinct from the other Mao languages–and from all other Omotic languages as well. First, each of these forms begins with the sequence **[ha]**, carrying various tones.[7] Second, the first and second person plural forms also contain the sequence **[el]**. These similarities across MA's 1st and 2nd person nonsingular forms suggest some internal developments in the paradigm. But before discussing the specific internal developments, we must first consider the bound pronominal forms associated with the expression of subject marking.

2.2 Bound pronominals in Mao group

Three of the four Mao languages (Mawes Aas'e, Ganza, and Seezo) exhibit bound pronominal forms that function as obligatory subject markers. In most instances, at least, the bound pronominals are similar in shape to the corresponding free pronouns. Hoozo is the only Mao language to exhibit no reduced or bound pronominal forms (Getachew Kassa 2015:99 & 130). In Hoozo, free/full pronouns are required for expression of the subject.

In the Mao languages, these bound pronominal subject markers are found in various positions relative to verb type. In MA and Seezo, they precede the verb (prefixed or procliticized, respectively) in some constructions (e.g. realis non-future) while in other constructions (e.g. irrealis future constructions), the bound forms follow the lexical verb roots in what are synchronically suffixes/enclitics.[8] In Ganza, bound pronominals can be found as enclitics attaching to a range of elements within the clause. Preverbally in realis constructions, they attach most frequently to a /**ha**/ affirmative marker host (derived from an old demonstrative) as well as free pronouns and other NPs. Postverbally in irrealis constructions, they encliticize to the final verb. The forms and distributions of the Mao bound pronominals are described for each language, independently (Sections 2.2.1–2.2.3).

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7 In the MA data, high tone is marked with the acute accent diacritic while low tone is marked with the grave accent. A contrastive mid tone is indicated by the lack of tonal diacritic over the vowel.

8 In some analyses of Mawes Aas'e and Seezo (cf. Ahland 2014:10–11; and Girma Mengistu 2015:216, respectively), the suffixes have been analyzed as having derived from prefixes which attached to utterance-final auxiliary verbs, following subordinate verbs. These subordinate verbs and subject-marked auxiliaries then collapsed into a single verbal word, producing the suffixes found today.

2.2.1 Mawes Aas'e

MA has three sets of bound pronominals[9] which mark the person and number of subjects: a set of prefixes which occur on the realis verb, a set of suffixes which occur on the irrealis non-future negative verb, and a second set of suffixes which occur on the irrealis future verb (on both the affirmative and negative verbs). These bound pronominals and their corresponding free pronoun forms are provided in Table 2.

The prefixes, which are found on realis verbs (column 2), bear the clearest resemblance to the free pronoun forms (compare column 1 in Table 2 with examples 1–9, below). The primary distinctions include the presence of the terminal nominal vowel [-**e**] on all free pronouns, the [-**el**] plural suffix on the 1st and 2nd plural free pronouns, and the fact that the 3rd person series is zero-marked as a prefix (ex. 3, below) while the (3rd person) non-singular forms are marked with a suffix /-**and**/ following the verb stem (4).

There is a non-obligatory /**ha**-/ AFF (affirmative) prefix that very frequently appears on affirmative realis verbs with 1SG and 3rd person subjects (1–4).[10] The /**ha**-/ is also included in the base (3SG) realis form which is used as the citation form.

Table 2: Free pronouns and subject markers on Final verbs in Mawes Aas'e

Free pronouns		Realis verb Prefixes	Irrealis verb Non-future (negative) suffixes	Irrealis verb Future (affirmative and negative) suffixes
1SG	**tí-jé**	**tí-**	**-tí**	**-t́**
1DU	**han-é**	**haɲ́-**	**-ɲ́**	**-ɲ́**
1PL	**hambèl-è**	**haɱ̀-**	**-ɱ̀**	**-ɱ́**
2SG	**hì-jè**	**hì-**	**-hì**	**-èm**
2DU	**háw-é**	**háw-**	**-ẃ**	◌́ (H tone)
2PL	**hàwèl-è**	**hàw-**	**-ẁ**	◌̀ (L tone)
3SG	**íʃ-è**	**Ø-**	**-Ø-**	**-ɱ̀**
3DU	**íʃ-kuw-e**	**Ø- /-and/**	**-Ø- /-and/**	**-ɱ̀ /-and/**
3PL	**íʃ-kol-è**	**Ø- /-and/**	**-Ø- /-and/**	**-ɱ̀ /-and/**

(Table 2 is from Ahland 2014:63).

9 In MA, the bound pronominal markers are required on all final finite verbs. Like other Omotic (and thus Mao) languages, MA exhibits a rather rigid OV typology in syntax where the final verb is the most finite and receives the full range of inflectional markers such as tense, aspect, and subject marking (cf. Ahland 2012:425–428).

10 The details of the distribution of the /**ha**-/ AFF prefix are discussed in detail in Section 3.1 and will figure prominently in the argumentation offered in this paper.

(1) **(ha-)tí-pè**:**ʃ-á** 1SG
AFF-1SG-slap-DECL
'I slapped (it).'

(2) **(ha-)tí-gùnz-á** 1SG
AFF-1SG-be.sad-DECL
'I am sad.'

(3) **(ha-)gùnz-á** 3SG (citation form of all verbs)
AFF-be.sad-DECL
'He/she is sad.'

(4) **(ha-)gùnz-and-á** 3DU/PL (Non-Singular)
AFF-be.sad-NSG-DECL
'They (DU/PL) are sad.'

On realis verbs with 1st and 2nd person non-singular subjects (i.e. 1DU, 1PL, 2DU and 2PL), the subject prefix begins with a **[ha]** sequence and no additional /**ha**-/ affirmative prefix can be affixed to the verb (5–8, below). This sequence **[ha]** is always present on the 1st and 2nd non-singular person realis prefixes and is also found on the corresponding free pronouns (Table 2).

(5) **(*ha-) han-gùnz-á** 1DU
1PL-be.sad-DECL
'We (DU) are sad.'

(6) **(*ha-) ham-pè**:**ʃ-á** 1PL
1PL-slap-DECL
'We (PL) slapped (it).'

(7) **(*ha-) háw-gùnz-á** 2DU
2DU-be.sad-DECL
'You (DU) are sad.'

(8) **(*ha-) hàw-pè**:**ʃ-á** 2PL
2PL-slap-DECL
'You (PL) slapped (it).'

It will be demonstrated in Sections 5.1.2 and 5.2.3 that the **[ha]** sequence which is today part of these subject markers and their corresponding free pronouns is etymologically connected to the /**ha**-/ affirmative prefix through an earlier stage of development.

The 2SG subject marker on realis verbs is /**hì**-/, corresponding to the pronoun /**hìj-è**/. The /**ha**-/ prefix is never attested preceding the /**hì**-/ subject marker.[11]

(9) **(*ha-) hì-pè:ʃ-á** 2SG
2SG-slap-DECL
'You slapped (it).'

MA irrealis verbs, on the other hand, carry bound pronominal suffixes. The first paradigmatic set is similar to the realis prefix form and is used for the irrealis non-future negative verb (column 3 of Table 2). The second set exhibits a more divergent paradigm (column 4 of Table 2); this paradigm is found on the irrealis future verb (regardless of polarity). Neither of the subject-marking suffix paradigms includes any **[ha]** sequence associated with any person-subject. Each set is further discussed and illustrated below.

The irrealis non-future negative verb, like all negative verbs, never carries the /**ha**-/ affirmative prefix. Any attempt to use the /**ha**-/ prefix on negative verbs results in ungrammaticality (Ahland 2012:393–394). Other features of the MA negative verb include the use of the infinitive verbal stem (marked as such by tonal melody), a negative suffix, the subject-marking suffix and then a bound auxiliary (cf. Ahland 2012:355–374). Examples (10–13) illustrate the 1st person (SG, DU, PL) and 2SG suffixes.

(10) **tjám-á-tí-bíʃ-↓á** 1SG
count:INF-NEG-1SG-NPST:AUX-DECL
'I did not count.'

(11) **tjám-á-n-bíʃ-↓á** 1DU
count:INF-NEG-1DU-NPST:AUX-DECL
'We (DU) did not count.'

(12) **tjám-á-m-bìʃ-á** 1PL
count:INF-NEG-1PL-NPST:AUX-DECL
'We (PL) did not count.'

(13) **tjám-á-hì-bìʃ-á** 2SG
count:INF-NEG-2SG-NPST:AUX-DECL
'You did not count.'

11 Perhaps this is due to a laryngeal co-occurrence restriction (see Ahland 2012:62); generally, this restriction results in loss of the initial **[h]** of the /**ha**-/ affirmative prefix before verb stems beginning with **[h]**. It may be the case that this same restriction is involved with the limits on /**ha**-/ distribution before the 2SG /**hì**-/ form.

The 2DU and 2PL suffixes are illustrated in (14–15), respectively. The dual/plural distinction in 2nd person is expressed by a tone difference realized on the bound auxiliary (high tone for DU and low tone for PL).

(14) **tjám-á-w-bíʃ-á** 2DU
count:INF-NEG-2DU-NPST:AUX-DECL
'You (DU) did not count.'

(15) **tjám-á-w-bìʃ-á** 2PL
count:INF-NEG-2PL-NPST:AUX-DECL
'You (PL) did not count.'

When subjects are 3rd person, a different negative suffix and bound auxiliary (in this case a copula) are used. As with the realis subject prefixes, the 3rd person is zero marked for the 3SG (16) and the DU and PL are expressed as non-singular through the /-**and**/ suffix (17).

(16) **tjám-wé-jà** 3SG
count:INF-NEG-COP
'S/he did not count.'

(17) **tjám-ánd-wé-jà** 3DU/PL
count:INF-NSG-NEG-COP
'They (DU/PL) did not count.'

It's important to highlight that while the subject-marking paradigm associated with the irrealis non-future negative exhibits consistent correspondence to the forms found in the realis subject prefixes, there is no hint of any **[ha]** sequence on the 1st and 2nd person non-singular forms, as is found on the realis prefixes and also on the free pronouns (Table 2, above).

The more divergent subject-marking paradigm associated with the irrealis future forms is illustrated below (18–25). The details of this divergence are not central to the argument in this paper (but they do play a role), so they are summarized only briefly here. In short, there is an intrusion of an **[m]** in 2SG and 3rd person suffixes in the irrealis future paradigm. This has been shown to be the result of perturbations from a preceding future suffix (/***gàm**/) which had a final **[m]** and which immediately preceded the bound pronominals (see Ahland 2014 for the details). Essentially, while the final **[m]** was lost before stops such as /-**t́**/ 1SG, /-**ń**/ 1DU, /-**m̀**/ 1PL, and before /**w**/ in 2DU (/-**ẃ**/) and 2PL (-/**ẁ**/), due to phonotactic constraints, the **[m]** remained in other environments (see examples 21, for 2SG, and 24–25, for 3rd person, below) and entered the paradigm, being reanalyzed as part of the bound pronominal itself.

(18) **(ha-)pè:ʃ-gà-t-bíʃ-á** 1SG
AFF-slap-FUT-1SG-NPST:AUX-DECL
'I will slap (it).'

(19) **(ha-)pè:ʃ-gà-n-bíʃ-á** 1DU
AFF-slap-FUT-1DU-NPST:AUX-DECL
'We (DU) will slap (it).'

(20) **(ha-)pè:ʃ-gà-m-bìʃ-á** 1PL
AFF-slap-FUT-1PL-NPST:AUX-DECL
'We (PL) will slap (it).'

(21) **(ha-)pè:ʃ-gè-m-bìʃ-á** 2SG
AFF-slap-FUT-2SG-NPST:AUX-DECL
'You will slap (it).'

In a later development, the 2DU and 2PL eventually weakened, resulting in compensatory lengthening of the vowel on the future suffix. The tone of the future suffix serves as the DU versus PL number distinction (22–23).

(22) **(ha-)pè:ʃ-gă:-bíʃ-á** 2DU
AFF-slap-FUT:2DU-NPST:AUX-DECL
'You (DU) will slap (it).'

(23) **(ha-)pè:ʃ-gà:-bìʃ-á** 2PL
AFF-slap-FUT:2PL-NPST:AUX-DECL
'You (PL) will slap (it).'

(24) **(ha-)pè:ʃ-gà-m-bìʃ-á** 3SG
AFF-slap-FUT-3-NPST:AUX-DECL
'S/he will slap (it).'

(25) **(ha-)pè:ʃ-and-gà-m-bìʃ-á** 3DU/PL (NSG)
AFF-slap-NSG-FUT-3-NPST:AUX-DECL
'They (DU/PL) will slap (it).'

2.2.2 Ganza

Ganza's pronouns exhibit relevant SG and PL categories across 1st, 2nd, and 3rd persons as well as binary gender distinctions in 3SG (Table 3).[12] Ganza's bound

12 The Ganza data here are based on work by Smolders (2015, 2016) as well as the unpublished work by Hofmeister (2010) and my own fieldwork in 2014. Smolders' work was focused on Ganza as spoken by communities within Ethiopia (as was my fieldwork), while Hofmeister's work was based on Ganza

pronominals are all clitic forms which attach to a variety of hosts (preverbally) as well as the verb itself in future and negative verbal constructions.[13] Ganza's free pronouns and bound pronominals are provided in Table 3.

Throughout this section, data that are not cited have been taken from the author's own fieldnotes. The sources of all other data are cited accordingly.

Ganza's bound prononominal distribution is relative to non-future versus future tense domains on verbs as well as polarity within non-future tense verbs. Table 4, below, summarizes the full range of distributional possibilities identified thus far.

In non-future affirmative verbs, the bound pronominal person clitics can attach as enclitics to several hosts (all of which precede the verb); these include the affirmative marker /**hă**/, overt nouns (NPs), and overt (full) co-referential pronouns. Ganza's person clitics can also procliticize to the verb in affirmative non-future constructions. Interestingly, negative non-future tense verbs do not take pronominal clitics at all. Rather, they require the full overt pronoun. The future tense verb constructions position the bound pronominal clitics after the verbal root; in these constructions, the clitcs are found encliticized to the future tense suffix on the verb itself. Examples of all these distributional distinctions are illustrated and discussed below.

Table 3: Free pronouns and bound pronominal subject markers in Ganza*

Free pronouns		Bound pronominal clitics (toneless)
1SG	**tì**:	**=di** [**=li, =si, =ʃi, =ri, =ti**]
1PL	**mù**:	**=mu**
2SG	**jé**:	**=na**
2PL	**nàm**	**=ma**
3SGM	**kjánâ**	**=ga** [**=ka**]
3SGF	**kî**:	**=gi** [**=ki**] F
3PL	**kû**:	**=gu**

*These clitics are most frequently enclitics (as indicated in Table 3), but there are instances in my fieldnotes and also in Joshua Smolders' notes that they can also procliticize to the beginning of the verb, as noted below. (The data in Table 3 are taken from Smolders 2016.).

language as spoken by communities across the border in Sudan. All this recent work is clearly congruous: the data all fit together and represent a single language. Paris Reidhead's 1947 work on Ganza in Sudan shows very different patterns. I do believe Reidhead's Ganza is related to the language as represented by Smolders and Hofmeister, but the data are clearly not exactly the same. In Reidhead's data, enclitics are hosted by a number of TAM forms not found in the more recent data.

13 While Ganza's clitic pronominals are most frequently found as enclitcs, there are at least a few instances where they apparently procliticize to the verbal word (see 45–48, below).

Table 4: Distribution of bound pronominals in Ganza.

Non-future tense verbs		Future tense verbs
Affirmative	**Negative**	
hă AFF as host NP as host Free pronoun as host Procliticized to verb	None	Encliticized following Future tense suffix

Let's begin with the affirmative non-future tense verbs and their four possibilities. The most frequently attested preverbal host for Ganza's clitic pronominals is Ganza's affirmative form /**hă**/; this is, of course, very likely cognate with MA's /**ha**-/ AFF prefix and the form **[ha]** that has entered into MA's pronominal inventory. While Ganza's affirmative form is not bound as a prefix, it does precede bound pronominal markers of subject person in a preverbal position.[14] Examples (26–32) illustrate the behavior of Ganza's pronominal enclitic subject markers in non-future, affirmative utterances where they are hosted by the /**hă**/ form.

(26) **hà=dí** **kwá↓á-bô**
AFF=1SG come-DECL[15]
'I came.' (Smolders 2016)

(27) **hà=mú** **kwá↓á-bô**
AFF=1PL come-DECL
'We came.' (Smolders 2016)

(28) **hà=ná** **kwá↓á-bô**
AFF=2SG come-DECL
'You came.' (Smolders 2016)

(29) **hà=má** **kwá↓á-bô**
AFF=2PL come-DECL
'You (PL) came.' (Smolders 2016)

14 It's also important to note that Ganza's affirmative marker shows a distribution very similar to MA relative to utterance (mood/modality) construction types.

15 Smolders, in his notes, glosses the /-**bo**/ suffix as a copula. It does seem likely that the source was a copula or existential verb, but the distribution of this suffix appears to be limited to declarative utterances; it does not appear in any interrogatives or imperatives in any of the data I have encountered thus far.

(30) **hà=gá** **kwá↓á-bô**
AFF=3SG.M come-DECL
'He came.' (Smolders 2016)

(31) **hà=gí** **kwá↓á-bô**
AFF=3SG.F come-DECL
'She came.' (Smolders 2016)

(32) **hà=gú** **kwá↓á-bô**
AFF=3PL come-DECL
'They came.' (Smolders 2016)

While the AFF + enclitic complex is always preverbal, it is not always immediately so. There are examples in my data of instances where intervening material is clearly present between the host + clitic and the verb (as in 33). This example, with an intervening overt subject NP, shows that the host + clitic can be positioned outside the verb phrase.

(33) **hà=gá** **ási=↓dí** **ákúm-bô**
AFF=3SG.M person=DEF[16] good-DECL
'The person is good.' (Smolders 2016)

In instances where there is no overt NP (as in 33) and when the host + enclitic complex is not immediately preverbal, the full/free pronoun appears to be required (34–37).

(34) **tì**: **hà=dí** **ìntó?** **ʃó?ò-bò**
1SG AFF=1SG here sleep-DECL
'I (FOC) slept here.' (Smolders 2016)

(35) **hà=má** **nàm** **ʃjá-bò**
AFF=2PL 2PL know-DECL
'You all (FOC) know (it).' (Smolders 2016)

(36) ***hà=dí** **ìntó?** **ʃó?ò-bò** (compare to (34))
AFF=1SG here sleep-DECL

(37) ***hà=má** **ʃjá-bò** (compare to (35))
AFF=2PL know-DECL

16 The analysis that the /-**di**/ here on the noun 'person' is a definite marker is tentative and is discussed in Ahland 2019. The form itself is related to a distal demonstrative /**ìtí**/ and is not directly a part of the bound/reduced subject participant-reference system.

Ganza's pronominal clitics can also be hosted by overt nouns/NPs. This is particularly common in interrogative utterances, where the affirmative prefix is not found (38). In (38), the host is a full case-marked object pronoun.

(38) **kjáˈná-l=mà** **páʃí**
3SG.M-ACC=2PL hit
'Did you hit him?' (Smolders 2016)

Alternatively, in some polar interrogatives, /**ha**/ appears in the same position as the host /**wǎ**/, which has been found as a subject marking host only in interrogatives thus far.

(39) a. Question
wà=ná **jàŋgú-jè**
INTR=2SG cook-COP
'Are you cooking?'
b. Answer
hà=dí **jàŋgú-bò**
AFF=1SG cook-DECL
'I cooked.'

(40) a. Question
wà=gá **kwâ**:
INTR=3SG.M come
'Did he come?'
b. Answer
hà=gá **kwâ**:**-bò**
AFF=3SGM come-DECL
'He came.'

Polar interrogatives in Ganza can take the /**ha**/ form (as they can in similar constructions in MA, where the expected answer is affirmative).

(41) **hà=gá** **pâj ?**
AFF-3SG.M be.heavy
'Is it heavy?'

(42) **hà=gá** **páj-bò**
AFF-3SG.M be.heavy-DECL
'It is heavy.'

Example (43) shows a preverbal NP object serving as the host for the pronominal clitic in a declarative utterance–illustrating the possibility for hosts (other than /**hǎ**/) in declarative sentences as well.

(43) **màkí-l=gà** **ká↓pá-tá-bô**
daughter-ACC=3SG.M take-CAUSE-DECL
'He gave (his) daughter away (in marriage).' (Smolders 2016)

In affirmative non-future verbal construction, there are also instances where the pronominal clitic in Ganza is hosted by a co-referential, free pronoun (encoding the same person, number, gender and case information). In example (44), the 3SG.F pronoun hosts the 3SG.F enclitic, while the /**hă**/ AFF marker is phonologically bound to the beginning of the verb.[17]

(44) **kí=gì** **ìntó?** **hà=kwâː-bò**
3SG.F=3SG.F here AFF=come-DECL
'She came here.'

Finally, and perhaps most perplexing of all, there are at least a few instances in my own notes (and also in Smolders' fieldnotes), where the person clitics have procliticized to the verb (45–46).

(45) **ìtí** **màlá=↓dí** **wá↓sí** **ga=k'áː-bô**
DIST.M little.child=DIST.M meat 3SG.M=eat.meat-DECL
'That little child, he ate (the) meat.' (Ahland 2019)

(46) **ìtí** **bwànzà** **wàlòm** **kàlmàn=dì** **ga=ákúm-bô**
DIST.M young.man brother.in.law camel=DIST.M 3SG.M=good-COP
'That young man's brother-in-law's camel is good.' (Smolders 2016)

Evidence that these forms are procliticized is based on speakers' word-boundary pauses in hyperarticulated speech as well as asking speakers to repeat words (through questioning) and the procliticized form is provided with the verb.

My fieldnotes also contain a few instances where the affirmative marker is included with the person clitic and both are together bound to the beginning of the verb (47) and in some of these cases, phonological reductions in the person clitic are clear (48).

(47) **hà=dí=úrí-bô**
AFF=1SG=call-DECL
'I called.'

(48) **hà=w=úrí-bô** (**hă=gu** AFF=3PL > **hà=w**)
AFF=3PL=call-DECL
'They called.'

17 Hoffmeister's Ganza data corroborates the use of both the /**ha**/ form and the full pronoun as hosts for the person clitics (Hofmeister 2010).

It's worth noting that the phonologically reduced subject-marking complex (**hă=gu** AFF=3PL > **hà=w**) which precedes the verb in example (48) is strikingly similar to the 2DU and 2PL subject marking forms found in Mawes Aas'e (/**háw**-/ and /**hàw**-/, respectively)–see Table 2, above. Presumably, these four different positional/hosting distinctions for the person clitics in non-future verb constructions involve some pragmatic conditioning. But at this point, no fully interlinearized texts are available in Ganza, so analysis of pragmatics is not possible at this time.

Bound pronominal clitics are prohibited in negative non-future verb constructions. They have not been found in any negative non-future constructions and were not acceptable to speakers when attempted. Rather, speakers prefer the overt, free pronoun and position it preverbally (49).[18]

(49) **nàm** **kwâ-án-bô** *=**mu** 1PL clitic is prohibited
1PL come-NEG-DECL
'We didn't come.'

While Ganza's affirmative non-future constructions (above) generally encliticize person clitics to hosts positioned preverbally, future tense verb constructions position these clitics after the verbal root, following the future tense suffix. In (50–52), the affirmative future form of the verb is formed with subject clitics positioned after the future tense suffix, before the declarative suffix.[19]

(50) **kwá**:**gàn** **kwâ**:**-s=gà-bō**
tomorrow come-FUT=3SG.M-DECL
'He will come tomorrow.' (Smolders 2016)

(51) **kî** **kwá**:**gàn** **hà=kwâ**:**-s=gì-bō**
3SGF tomorrow AFF=come-FUT=3SG.F-DECL
'She will come tomorrow.' (Smolders 2016)

(52) **kwá**:**gàn** **hà=kwâ**:**-s-sì-bō**
tomorrow AFF=come-FUT-1SG-DECL
'I will come tomorrow.' (Smolder 2016)

18 The use of a full, preverbal pronoun in the negative non-future is corroborated with the data presented in Reidhead (1947:22)–the earliest description of the language.

19 While the future verb construction appears to be frozen in form today (and the person 'clitics' appear to be full suffixes, unable to move from their assigned position in the verbal construction), they were quite certainly moved to this edge of the verb through the same enclitization that they exploit attaching to their preverbal hosts.

The negative future tense verb also positions the bound person clitics after the future tense suffix (53).[20]

(53) **kwâ-án-s-ná-bô** using =**ná** 2SG clitic
come-NEG-FUT-2SG-DECL
'You won't come.'

After examining subject marking in Seezo, the discussion will again return to Ganza, as the affirmative marker in Mawes Aas'e and Ganza are carefully examined.

2.2.3 Seezo

Seezo's pronouns exhibit SG versus PL opposition across 1st, 2nd, and 3rd person categories; the 1PL category is subdivided by clusivity, showing the only inclusive versus exclusive distinction found in the Mao languages (Girma Mengistu 2015:216). Seezo's bound pronominals have been described as proclitics (Girma Mengistu 2015:216). Table 5, below, provides the full set of subject-marking clitics as well as the full pronouns (bound roots in Seezo) for comparison.

Table 5: Free pronouns and bound pronominals in Seezo*

Bound root pronouns		Bound pronominal clitics
1SG	**hà**:-	**hà=**
1PL.EXCL	**dà**:-	**dà=**
1PL.INCL	**dól-**	**dól=**
2SG	**hín-**	**hín=**
2PL	**nàm-**	**nàm=**
3SG	**hán-**	**Ø** (main/final verbs) **hí=** (dependent verbs)
3PL	**hél-**	**hél=**

* The data in Table 5 are taken from Girma Mengistu (2015:216).

Apart from phonological boundedness, the only differences between the full pronouns and the clitics involve the lack of vowel length in the 1SG and 1PL.EXCL forms as well as unique 3SG forms (a zero on main or final verbs and the form /**hí**= / on dependent verbs, cf. Girma Mengistu 2015:216). Girma Mengistu describes the distribution of the clitics relative to realis/irrealis category: "When they occur with the realis verb, they are procliticized to the verb root. But when they occur with the irrealis verb

20 The positioning of bound person clitics following the future tense suffixes in negative future tense constructions is also attested in data presented in Reidhead (1947:22).

form, they are procliticized to tense marking auxiliaries" (2015:216).[21] It is important to note then, that on the irrealis verbs, the subject clitics follow the verb root (as is the case with Mawes Aas'e and Ganza). This distribution is summarized in Table 6.

Table 6: Distribution of bound pronouns in Seezo.

Realis verbs	Irrealis verbs (negative non-future or negative/affimative future)
Procliticized to lexical verb	Procliticized to auxiliary (following lexical verb root)

Examples (54–55) illustrate the proclitic subject markers on realis verbs, while examples (56–58) illustrate the subject markers procliticized to the auxiliary (following the lexical verb root) in the irrealis verbal construction.

(54) **jé-má**:**-kó**:**b-ʃ** **búná** **kòn-hél=pàʃ-á**:
DEF-man-PL-NOM coffee PROG-3PL=plant-DECL
'The men are planting coffee seedlings.' (Girma Mengistu 2015:216)

(55) **dá=ʔàns** **dà=ʃèn-bùgùl-á**:
1PL.EXCL=gold 1PL.EXCL=trade-throw.away-DECL
'We (excl.) sold our gold.' (Girma Mengistu 2015:204)

(56) **jé-má**:**-kó**:**b-ʃ** **búná** **pàʃ-hél=j-á**:
DEF-man-PL-NOM coffee plant-3PL=FUT-DECL
'The men will plant coffee seedlings.' (Girma Mengistu 2015:216)

(57) **dá=ʔàns** **ʃĭ~ʃèn-bùgùl-dà=j-á**:
1PL.EXCL=gold RDP~trade-throw.away-1PL.EXCL=FUT-DECL
'We (excl.) will sell our gold.' (Girma Mengistu 2015:205)

(58) **jé-ʃá**:**-tú**:**-ʃ** **jé-gònz-kínd-ké-k'é**:**-hél=j-á**:
DEF-woman-PAUC-NOM DEF-corn-grind-NEG-NEG-3PL=FUT-DECL
'The few women will not grind the corn tomorrow.'
(Girma Mengistu 2015:204)

21 This unified proclitic analysis across Seezo verb forms is analogous to the analysis that was suggested previously for Mawes Aas'e (see Ahland 2013; 2014): the subject-markers were argued to be prefixal only and can follow a verb root only when they prefix to a final auxiliary verb, which itself follows the lexical verb root. In the earlier publications mentioned above, it was assumed that the position of the subject markers on the irrealis verb in Mawes Aas'e was due to prefixation on a final auxiliary verb. A wider examination of the data across the Mao and Omotic languages suggests that these languages show a clear alternation involving some verbal constructions requiring subject marking enclitics while others position the subject markers before the verb.

3 The positioning of bound or reduced pronominals in Omotic-Mao and wider Omotic

The bound pronominal patterns across Mao presented in Section 2.2 show an opposition with respect to positioning preverbally and postverbally. In the cases where the verb is affirmative and non-future (corresponding to realis in these languages), the subject markers are positioned preverbally: as a prefix to the verb in MA; as a host + enclitic complex or (more rarely) as a proclitic to the verb in Ganza; and as a proclitic to the verb in Seezo. On verbs that are future tense (regardless of affirmative/negative polarity) or on verbs that are non-future and negative (in MA and Seezo), the subject markers are positioned after the verb root. Figure 1 summarizes this pattern across the Mao languages.[22]

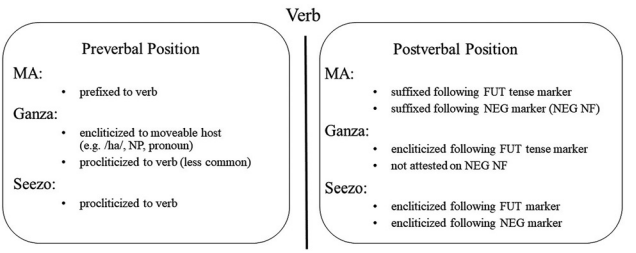

Figure 1: Distribution of bound pronominal subject marking distribution in Mao.

Data supporting these relative positions can be found throughout Section 2.2: where realis and non-future verbs co-occur with preverbal subject markers and irrealis and future verbs co-occur with postverbal subject markers (Mawes Aas'e: examples 1 & 5 vs. 10–11; Ganza: 43–44 vs. 50–51; and Seezo: 54–55 vs. 56–57).[23]

22 In Ganza, while the enclitics move freely in the preverbal position associated with realis/non-future verbs, the enclitics following the verb are contained inside the verbal morphology and frozen in position today. This is due to a collapse of additional morphology (e.g. the /-**bo**/ form) onto the future verb forms. This /-**bo**/ was perhaps an old auxiliary: collapse of auxiliaries has been argued for in MA (Ahland 2014), and in Seezo (Girma Mengistu 2015) as well. Interestingly, in Reidhead's older 1947 data, the future forms do not show any auxiliary or other morphology following the enclitics. As noted above, however, Reidhead's Ganza shows many differences from the available recent work.

23 It is important to note that the wording for the postverbal domains in Seezo in Figure 1 is based on my own analysis. Girma Mengistu's analysis is that the subject markers are always procliticizing and when they are postverbal, they are procliticizing to the following auxiliary (Girma Mengistu 2015:192)– incidentally, this is the same analysis I previously suggested for the development of the future irrealis verb in MA (see Ahland 2014). This analysis for MA is no longer supported by the available data, however, and I suspect the same was likely true for Seezo, given the larger Omotic pattern.

This preverbal and postverbal pattern is not particularly unusual in Omotic. There is clear evidence across Omotic of varied placement of subject marking forms and other reduced/bound pronominals, with cognate forms in the same language acting as proclitics in one instance and as enclitics in another.

In the most general terms, the expression of the subject grammatical relation with various types of reduced/bound pronominals is highly varied across Omotic (Azeb Amha 2012:462). In fact, across the Omotic family, no fewer than five subject marking patterns can be observed (Ahland 2022).

1. subject marking suffixes
2. subject marking prefixes
3. both suffixes and prefixes, relative to verbal construction;
4. multiple sets of non-bound, reduced pronominal forms positioned relative to other pressures (e.g. continuity, discontinuity, focus, etc.);
5. and bound subject marking that moves through the clause relative to other pressures (most typically focus).

Figure 2, below, illustrates the distribution of verbal subject marking patterns mapped onto Bender's genetic tree (2003:1).[24]

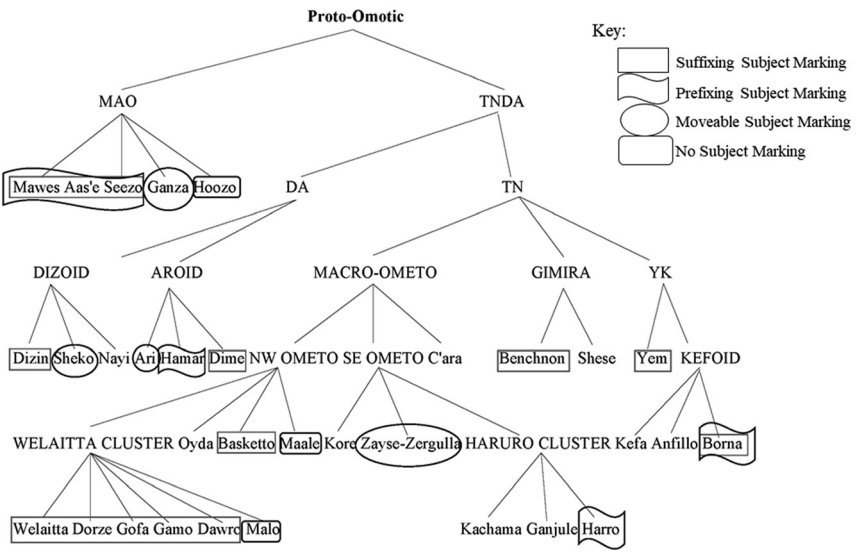

Figure 2: Subject marking patterns across Omotic (from Ahland 2022).

24 Again, Bender's tree is used here because it includes the Mao languages within Omotic and allows for an easy-to-see diagram across the family. In some cases, individual names of languages have been updated, but the subgrouping is the same as in Bender's original tree (2003:1).

The five patterns are represented with 4 shapes: languages with subject suffixes (rectangle); languages with subject prefixes (wave); languages with moveable subject marking (oval); languages with no reduced/bound forms for marking subjects (rounded rectangle); languages which exhibit both suffixes and prefixes relative to verbal construction are marked with both rectangle and wave.[25] Finally, a few languages remain unclassified with respect to subject marking on account of scant data. Importantly, in Figure 1, no distinction is made between affix or clitic.[26] What's most important here is to note the preverbal versus postverbal position and the presence of synchronically movable subject markers.

Important observations can be made from Figures 1 and 2. First, there is no single overwhelming pattern observed across Omotic which could be assumed straightforwardly to belong to Proto Omotic. Rather, diversity is the rule. And in the small Mao branch (which was itself an early split) all the patterns are attested in just those four languages. The three major branches of Omotic (according to Bender 2003:1),[27] the Mao, DA and TN subgroups, each include languages of the suffixing, prefixing, and moveable subject marking types.

Azeb Amha notes that moveable subject marking (so-called 'displaced subject markers') have been found in multiple subgroups of Omotic which are not geographically contiguous (2012:466). Hellenthal's 2010 description of the Sheko language (Omotic-TNDA-DA-Dizoid) provides clear examples of moveable subject marking clitics (outside of the Mao group) which may attach to either side of the verbal root as well as to non-verbal elements.[28] The placement is conditioned by focus (Hellenthal 2010:433). Example (59–60) illustrate preverbal (procliticized) and postverbal (encliticized) attachment to the verb. In the latter example, the verb is clearly in focus–indicated with underlining in the English translation.

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25 The subject marking data in Figure 2 is gleaned from Azeb Amha's overviews of the Omotic family (both 2012 and 2017) as well as Ahland (2012), Bikila Ashenafi Mamede (2018), Getachew Kassa (2015), Girma Mengistu (2015), Hellenthal (2010), Hirut Woldemariam (2003), Hofmeister (2010), Rapold (2006), Smolders (2015; 2016).

26 For instance, Seezo has both procliticizing and encliticizing forms (see Girma Mengistu 2015); it is represented here as prefixing and suffixing only for the sake of space.

27 Again, Bender's classification is primarily because it is the most widely known classification that has incorporated the Mao languages within Omotic.

28 Other clear examples (with discussion) can be found in Azeb Amha's discussion of 'displaced' subject markers (2017:835-837). Rapold has shown that in Benchnon, verbs in some constructions carry subject-marking suffixes, but the language also exhibits a complex set of four reduced pronominal subject paradigms which are sensitive to discourse functions, including topic continuity, discontinuity and multiple types of focus (Rapold 2006:341–370).

(59) V
ń=t'ùùs-k-ə
1PL=know-REAL-STI
'We know it.' (Hellenthal 2010:433)

(60) V
t'ùùs=ń-k-ə
know=1PL-REAL-STI
'We know it.' ('We DO know it.') (Hellenthal 2010:433)

Hellenthal also shows these subject-marking clitics also attach to interrogative (wh-) words and other focused elements including NPs (61).

(61) V

gōnà	**yír=íʃì**	**ye-kǹ**	**mààkù**
yesterday	what=3PL	2SG-DAT	tell

'What did they tell you yesterday?' (Hellenthal 2010:435)

The discussion on the Mao developments below assumes that the moveable subject marking pattern was present in Proto-Mao and may have been inherited from Omotic itself, given the presence of such patterns in disparate parts of the family. Regardless of when it developed, it is here asserted that older moveable subject marking was the state which led to the various synchronic patterns we see across Mao languages today.

4 A historical scenario

The discussion below identifies and illustrates a historical scenario for the development of the Mawes Aas'e pronominals, from the Proto-Mao state to present day. Where possible, observations on developments in the other Mao languages are also offered. The scenario below differs from what has been suggested previously (especially, Ahland 2012:238–255, 2013, 2014), where it was assumed that 1st and 2nd non-singular pronouns developed from verbal prefixes via degrammaticalization (specifically, deinflectionalization involving debonding).[29] The reason for the re-thinking of previous work is centered on findings from my 2014 fieldwork on Ganza (which was also substantiated by fieldwork by Joshua Smolders in 2015). The findings in Ganza (especially the moveable preverbal host + enclitics) are crucial in helping us to posit a reasonable Proto-Mao pronominal state that fits with what we know about the rest of Omotic and that could give rise to the patterns we find today.

29 The issue of degrammaticalization is discussed in the conclusion (Section 5).

Table 7, below, summarizes the pertinent data illustrated in Section 2: free pronouns, corresponding bound subject markers, and Bender's reconstructions, where available, across the Mao languages.[30]

Table 7: Mao free and bound Pronominals.

	MA	Ganza	Seezo	Hoozo	Proto-Mao	Proto-Omotic
1SG pro	**tí-jé**	**tì**:	**hà**:-	**ná**	***ti-**	***ta**
1SG sbj	(**ha-**)**tí-**	(**hă**) **=di**	**hà=**			
2SG pro	**hì-jè**	**jé**:	**hín-**	**hí**	***hi-ja**	***n / j-**
2SG sbj	**hì-**	(**hă**) **=na**	**hín=**			
3SG pro	**íʃ-è / ít-é**	**kjánâ** M **kî**: F	**hán-**	**ʔá** M **ʔé** F		***is / b-**
3SG sbj	(**ha-**)**Ø-**	(**hă**) **=ga** M (**hă**) **=gi** F	**Ø=**			
1DU pro	**han-é**					
1DU sbj	**han-**					
2DU pro	**háw-é**					
2DU sbj	**háw-**					
3DU pro	**íʃ-kuw-e**					
3DU sbj	(**ha-**)**Ø-**					
1PL pro	**hambèl-è**	**mù**:	**dà**:- excl. **dól-** incl.	**nú**		***nu**
1PL sbj	**ham-**	(**hă**) **=mu**	**dà=** excl. **dól=** incl.			
2PL pro	**hàwèl-è**	**nàm**	**nám-**	**dó**	***nam**	***int**
2PL sbj	**hàw-**	(**hă**) **=ma**	**nàm=**			
3PL pro	**íʃ-kol-è**	**kû**:	**hél- / jél-**	**ʔínə**		***ist / b-**
3PL sbj	(**ha-**)**Ø-**	(**hă**) **=gu**	**hél=**			

*The data in Table 7 are from various sources: Mawes Aas'e (Ahland 2012:377; Girma Mengistu 2007); Ganza (Ahland fieldnotes from 2014; Smolders 2015), Seezo (Girma Mengistu 2015); Hoozo (Getachew Kassa 2015); Proto-Mao (Bender 2000:196) and Proto-Omotic (Bender 2000:223).

While the pronominal categories (e.g. number, gender, and clusivity) and the positioning of the forms (e.g. prefixes/suffixes, proclitics, enclitics, and even the lack of bound pronominals, e.g. Hoozo) show substantial diversity across the Mao languages, a number of important generalizations can be made. First, the 1SG pronominals in MA and Ganza are quite clearly cognate. Seezo and Hoozo exhibit divergent forms here (see Section 4.1.1). The 2SG free pronouns may be cognate

30 For MA, it's only the preverbal, realis subject markers that are of central importance. Therefore, only the preverbal subject markers are included in Table 7.

across all four of the Mao languages; while the **[n]** form, in Ganza's bound subject marker and in both the Seezo forms, doesn't fit with the other Mao languages, it does corroborate with Bender's 2SG reconstruction for Proto-Omotic (Bender 2000:223).[31] But beyond these 1SG and 2SG forms, the MA pronouns and subject markers are wildly divergent. As for the forms in the other Mao languages, Ganza's and Hoozo's 1PL forms could be related (e.g. a nasal + **[u]** vowel), as could Ganza's and Seezo's 2PL forms. Generally speaking, however, these forms show great diversity for a subgroup.

The discussion below begins with the hypothesized proto-Mao pronominal state, including new reconstructions, where possible, and important innovations involving the intrusion of a ***ha** form into the pronominal paradigm (Section 4.1.2). The discussion then turns to the internal developments in MA including the development of a dual opposition, the augmentation of pronominal forms with additional morphological material (the /**ha**-/ from an old demonstrative, the /-**el**/ a plural suffix, and the /-**e**/ terminal vowel for nominals), resulting in the forms we see today (Section 4.2).

4.1 A hypothesized Proto-Mao pronominal state

Given Azeb Amha's observation that moveable subject marking is found in multiple non-contiguous subgroups of Omotic (2012:466), and given the Mao patterns discussed in Sections 2.2 and wider Omotic patterns in Section 3, it is at least possible that moveable subject marking forms were an early Omotic development.[32] Furthermore, across the three Mao languages that employ subject marking pronominals, there is strong evidence that subject markers were moveable and that the subject enclitics attached to preverbal hosts in realis/non-future constructions and attached to the lexical verb in irrealis/future constructions. Independent development of these features in the three sister languages is highly unlikely. Moveable subject marking is exactly the sort of system that would give rise to the preverbal versus postverbal placement of the subject markers we find in these languages today (see Figures 1 and 2, above), and Ganza's enclitics have maintained their moveability (in their realis/non-future preverbal position) still today. It is far more likely that this moveability in Ganza is a retention rather than an innovation, given the patterns found elsewhere in Omotic.[33]

31 It's important to note that Bender's Ganza data in the 2000 publication was from Reidhead 1947; the Ganza 2SG form is /**ye**/ in these publications.

32 At the very least, it seems more likely that the non-contiguous, sporadic examples of subject marking moveability in Omotic is today a relic of what may have been a more widespread system–an alternative being that these are all independent innovations.

33 Again, as discussed in the introduction, the membership of the Omotic family and its internal subclassifications is a matter of great debate, but it is worth noting that according to Bender's

Given the preponderance of multiple pronominal paradigms within single Omotic languages[34] the Proto-Mao (PM) state likely included two sets of pronominals: a free, full pronoun set and a set of enclitics that were far more frequent in use due to being obligatory markers of subject. This is the sort of system found in three of the Mao languages today. If we set MA aside for the moment and consider only Ganza and Seezo, the general pattern is one where the enclitics match quite closely with the corresponding free forms.[35] In MA, matches can also be seen, but the pronouns have additional morphological material, as noted above.

4.1.1 Proto-Mao pronominal reconstructions

Bender's pronominal reconstructions for the Mao group (for 1SG, 2SG and 2PL) still work well (Bender 2000:196), despite the new data that are available today from the new Mao reference grammars and other published research. For 1SG, the /***ti**/ in Bender's Mao reconstruction is attested in both MA and Ganza and is close to the /***ta**/ in his Proto-Omotic. The 2SG form /***hi** / **j**/ is also Bender's Mao reconstruction. With respect to 2SG, only Ganza's 2SG subject enclitic is divergent, with /=**na**/. But it's worth noting that Seezo also exhibits an **[n]** in 2SG: /**hín**/ for the Seezo pronominals. Perhaps the **[t]** form for 1SG and these **[n]** forms are a reflex of an older system which is related to the TN group (so named because of the 1st and 2nd pronominal consonants, see Bender 2000:223). My suggestions for Proto-Mao pronominals are provided in Table 8.

Table 8: Tentative reconstructions for Mao pronominals (free / bound)*

	SG	PL
1	***ti** / * **=ti**	***nú** / * **=nu** inclusive ***mù** / * **=mu** exclusive
2	***hi / j** * **=hi / j**	***nam** / * **=nam**

*As noted in the text above, the pronoun reconstructions for 1SG, 2SG, and 2PL are Bender's reconstructions (2000:196). 1PL is my own.

classification, the Mao group is an early split from Proto-Omotic: all the other Omotic languages subgroup under his TN/DA group (Bender 2003:1). If the Mao group were an early offshoot, it is possible that they preserve some archaic heterogeneity in early features which are today found only sporadically across the rest of the family. Of course, this is speculation at this point.

34 Benchnon is a prime example of a more complicated system with multiple pronominal paradigms (see Rapold 2006:332-370).

35 Only in Ganza's 2SG and 3SGM, do we find divergent forms in the bound subject markers (compared to the full pronouns).

In Table 8, no pronominals are posited for 3rd person. In looking across the Mao languages, it is clear that 3rd person is achieved through grammaticalization of language-internal demonstratives and given the lack of any clear pattern across the group, I assume a variety of demonstratives may have taken on this function over the years.[36] It is likely, also, that these demonstratives would have expressed a masculine versus feminine gender distinction as is maintained today in both Hoozo and Ganza (see Table 7) and across many non-Mao Omotic languages.

The 1st and 2nd person plural forms are where we find the greatest divergence and challenges for reconstruction. There is evidence for two Proto-Mao forms in the 1PL. First, Bender's reconstruction for Proto-Omotic /***nu**/ does appear to have a reflex in at least two (possibly three) of the Mao languages (Bender 2000:223): Hoozo's 1PL form /**nú**/ and also the **[n]** in MA's 1DU /**hané**/. The data in both Hoozo and MA suggest this 1PL form carried a H tone: /***nú**/ Proto-Mao 1PL form. Sound change evidence suggests that the Proto-Mao alveolar nasal in 1PL was also possibly inherited to Seezo as well (see Table 9 and the surrounding discussion below). The second 1PL form (/***mù**/) is my own reconstruction. I reconstruct this due to the bilabial nasals and low tones found in Ganza's /**mù**/ 1PL form, as well as the base **[m̀]** consonant in MA 1PL: /**hambèlè**/.[37] The respective H and L tones of these forms are seen reflected across the Mao group consistently (Figure 3).

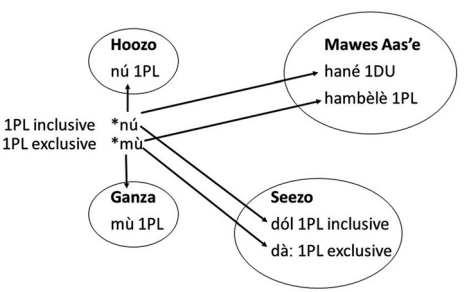

Figure 3: Reflexes of Proto-Mao 1PL forms across Mao group.

As can be seen in Figure 3, I argue the 1PL proto-forms expressed an inclusive versus exclusive distinction; my assumption here is that the inclusive/exclusive distinction reflected in Seezo's 1PL today is a retention. While MA's dual distinction is

36 For the demonstratives for all four of the Mao languages in one location, see Ahland 2019:196. In MA, 3rd person free pronoun base is marked by the /**íʃé**/ distal demonstrative, with dual/plural and TV suffixes. In Ganza, the demonstratives /**ìgì**/ distal feminine and /**ùgù**/ distal plural are clear sources for the pronominals/enclitics; In Seezo, the proximal demonstrative /**hèt'**/ may be related to the 3PL /**hél**/ form, with the **[l]** from the old Mao plural [**-el**], also seen in MA's 1st and 2nd plural forms and the **[l]** in Seezo's 1PL form.

37 Please note that Section 4.2 will detail the augmentation of pronominal forms with the /**ha**-/, /**-el**/, and /**-e**/ morphological forms. These forms intruded and cannot be reconstructed for the Mao system.

very unusual in Omotic, clusivity distinctions have been noted in multiple languages of different subgroups of the TN branch of Omotic: Koorete, Benchnon, Zayse, Zargulla (Azeb Amha 2017:828). Perhaps the /***nú**/ form was actually a minimal inclusive (i.e. an inclusive that does not include a 3rd person: including 1 + 2 but not 1 + 2+3) as a precursor to MA's dual distinction.[38] The /***mù**/ exclusive is the source for MA's PL. The full discussion detailing the MA developments from Proto-Mao to today are provided in Section 4.2. Given the fact that each of the Mao languages shows radical divergence in 1PL, this two-form reconstruction provides a tenable solution that brings the group together.

While the focus of this paper is on the developments in MA, discussions of possible changes in each of the languages are mentioned briefly here. First, any clusivity associated with Proto-Mao 1PL was clearly lost in both Ganza and Hoozo, with each exhibiting only single (albeit different) forms for 1PL today (Figure 3).

In Seezo,[39] we find a more complicated picture. The tonal pattern of H and L on the inclusive and exclusive, respectively holds, but the morphological shapes of the pronominal forms are perplexing. It appears that the Seezo inclusive form underwent a commonly-attested sound change (**n** > **d**) and that the exclusive 1PL form in Seezo could have assimilated via analogy. Certainly, there is comparative evidence of an (**n** > **d**) sound change attested in Seezo (Table 9).

Table 9: Correspondence set of cognates showing *n > d across Mao.

MA	Ganza	Hoozo	Seezo	Gloss
n	n	n/d	d	
nakʾìʃè	**nóˈkʾáʃ**	**nùʃé**	**dókʾíʃì**	'husband'
ne:ʃe	**nàʃ** (semantic shift: 'child of brother')	**dìjábèʃé**	**dè:ʃi**	'brother-in-law'
nú:ŋkʾ	(no cognate found)	**dòʔí**	**dò:kʾ**	'stand (v)'
nitʾìtʾè	(no cognate found)	(no cognate found)	**dìtʾì**	'paternal uncle'

*The data in Table 9 are culled from various sources: Mawes Aas'e (Ahland 2012); Ganza (Smolders 2015); Hoozo (Getachew Kassa 2015); and Seezo (Girma Mengistu 2015).

38 Cysouw notes that minimal inclusive typically includes only a singular addressee (Cysouw 2003:77); presumably, a marker for a speaker + single addressee would be a reasonable source for a dual distinction.

39 In addition to these forms for Seezo, I should note that the actual semantics of the clusivity distinction are not entirely clear to me. While the inclusive versus exclusive category is clearly established in the grammar (Girma Mengistu 2015), whether or not the inclusive includes a 3rd person reference is not reported.

In Table 9, Seezo cognate words regularly attest the ***n** > **d** change. Hoozo forms show inconsistent participation in the sound change with two cognate forms evidencing the change and the other retaining the older ***n** form. Ganza more consistently retains the ***n** in cognate words. MA does not show the sound change and maintains ***n** in all examples.[40]

The **[ol]** in Seezo's reconstructed inclusive form (Figure 3) could be cognate with the /-**(w)ol**/ plural we find in MA and the /-**el**/ plural that we find in MA's 1PL and 2PL pronouns. It is perhaps surprising to find a possible PL marker associated with the inclusive form within a clusivity set and not with the exclusive form. If the form is related to Seezo's 1PL, then it must have been an internal development and not an externally induced change nor a part of the pronoun that is reconstructable for the whole Mao group. It could also be the case that the MA /-**el**/ plural form could be cognate with Seezo's 3PL /**hél** ~ **jél**/ forms. Finally, it's worth noting that Bender has mentioned an /-**el**/ form in Dizoid languages (along with the MA form) as a plural "fragment" in Omotic (Bender 2000:213).

The 2PL in Mao is clearly innovative when one considers the rest of Omotic. We don't find the expected /**int**/ or /**it**/ forms that Bender notes for other branches of Omotic (2000:223). Bender offered /***nam**/ for Proto-Mao's 2PL, and given that two of the Mao languages exhibit this form (with polar tonal differences), the choice is reasonable (given lack of counterevidence) and even more so, when we come to Ganza's subject enclitic /=**ma**/. The labial-velar approximant **[w]** in MA is perhaps a further weakening of the bilabial, intervocalically.

4.1.2 The *ha enclitic host and paradigmatic intrusion

Today's patterns in Ganza (Section 2.2.2) suggest that these enclitic forms in Proto-Mao would have had a variety of hosts, not only for interrogative or affirmative utterances, but also as a means for establishing focus on different elements (as seen in other Omotic languages, Section 3). Common hosts were likely NPs, pronouns, modal markers (e.g. Ganza's /**wǎ**/ today) and, most importantly, the /***ha**/ affirmative form, derived from a proximal demonstrative / locative noun 'here' that has been reconstructed for much of Omotic (Bender 2000:206).[41]

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40 I have found great difficulty in identifying regular sound changes in Mao vowels. While back vowels tend to correspond to other back vowels, I have not been able to reach any high predictive adequacy with respect to actual vowel quality in historical sound changes. Hoozo's non-cognate example in Table 9 is /**ʔúɸ́é**/ 'uncle' (Getachew Kassa 2015:53) while Ganza's are /**ʔápʰà**/ 'uncle' (Smolders 2015:4) and /**ká˯tí**/ 'stand' (Smolders 2015:14); there's no possibility to see the ***n** > **d** sound change in these forms.

41 In broader Omotic, Bender reconstructs a /**ha**/ demonstrative for the large TN group–most of Omotic (2000:206; 2003:1-3). Reflexes of this /**ha**/ include a proximal demonstrative 'this' and/or the

In MA and Ganza, the /***ha**/ is reflected as an affirmative marker in terms of distribution and function. In MA, the affirmative marker /**ha**-/ is optional (for those person subjects where it has not fused with the realis subject markers)[42] in declarative and hearsay verbal constructions. The /**ha**-/ affirmative is required in polar interrogatives, at least in those where the expected answer is affirmative (see Ahland 2012:474–475). MA's /**ha**-/ is prohibited in content interrogatives, imperatives, jussives and negatives (Table 10).

Table 10: Distribution of MA's /ha-/ prefix relative to utterance types and negative forms.

	/ha-/ is optional	/ha-/ is required	/ha-/ is prohibited
Declarative (realis/irrealis)	+		
Hearsay	+		
Polar Interrogative		+	
Content Interrogative			+
Imperatives			+
Jussives			+
Negatives			+

Unlike MA, Ganza's affirmative marker is not fused with any of the subject enclitics. After careful examination of my own fieldnotes, Hofmeister's texts and manuscript, and Smolders' fieldnotes, I have been able to compile a distributional chart for Ganza's affirmative marker; its distribution is strikingly similar to MA (Table 11).

Without a full grammar of the Ganza language, there simply are not enough data to be sure about when the affirmative marker is optional versus required. It is possible, though, to observe where it is and is not attested in the available data, and this is what Table 11 offers.

locative noun/deictic 'here' (in NW Ometo and SE Ometo, Bender 2000:79, Gimira-Yem-Kefoid language, Bender 2000:138 and Dizoid languages, Bender 2000:145).

42 The fusion of the affirmative /**ha**-/ with the 1st and 2nd person non-singular realis subject markers means that distribution in realis verb constructions must be focused on 1SG and 3rd person subjects (i.e. those person subjects which show no fusion of /**ha**-/ today). On the irrealis verb forms, the /**ha**-/ is not fused with any subject markers (this is because the verb itself was the host, not the /**ha**-/), and the /**ha**-/ distribution on irrealis verbs shows a pattern congruent with an affirmative analysis: able to attach as a prefix to all affirmative irrealis verbs regardless of subject-person and prohibited in all negative irrealis verb constructions (see Ahland 2012:379–394).

Table 11: Distribution of Ganza's /hă/ Relative to Utterance Types and Negative Forms.

	/hă/ Attested	/hă/ Not attested
Declarative (Non-Future/Future)	+	
Polar Interrogative	+	
Content Interrogative		+
Imperatives		+
Jussives		+
Negatives		+

Rather than assuming that MA and Ganza each developed an affirmative marker independently, it is more reasonable to posit that this was part of the Proto-Mao state and the distribution today in these languages is a retention. But to do this, then raises the question about where this /***ha**/ would have gone in Seezo and Hoozo.

There is evidence the /***ha**/ form may have intruded into Seezo as well.[43] It appears that Seezo's pronominal inventory bears the mark of an intrusive **[ha]** form. First, the 1SG pronoun /**hà**:/ and the corresponding enclitic /**hà**=/ are not reconstructable for 1SG for the Mao languages. The form is clearly innovative and, given Ganza and MA, a reasonable hypothesis would be to consider the common historical host for the old subject markers. The 3SG pronoun in Seezo also shows an unexpected intrusion: /**hán**/. Neither of these Seezo pronominals can be reconstructed as part of the pronominal inventory directly. But taken together with MA and Ganza data, intrusion of a historical /***ha**/ host seems reasonable.

While there is no evidence of /***ha**/ intruding into the personal pronoun paradigm in Hoozo (see Table 7), the interrogative pronoun 'who' is /**hà**/ as seen in multiple case forms of the word as well as the one-word utterance /**hàgaba**/ 'who?' (Getachew Kassa 2015:136).[44]

Apart from the Mao group, a suspicious **[ha]** form can be found in pronominal subject marking paradigms in the Omotic-Dizoid languages. In Sheko (a Dizoid-Omotic language, Hayward 2000; Bender 2003), 2SG and 3SG subjects are marked with proclitics /**ha**=/ and /**há**=/, respectively (Hellenthal 2010:323). Bender does not reconstruct these **[ha]** forms as part of the pronominal paradigms or as part of the

43 Certainly, these intrusions of an old demonstrative (or even the plural, mentioned above) are not themselves reconstructable as parts of the pronominal paradigm. They appear to be independent, internal developments. They serve to provide evidence that the pronouns contain elements common to the Omotic family and need not be relegated to interference and borrowing as explanations.

44 It's not known for sure what the other morphological components of this form might be, but the similarity to the 3SG.M in Ganza, seems clear: /=**ga**/ (see Table 7).

subject marking system (2000:223). In Dizin (closely related to Sheko), there are two forms which could be a further simplification of the **[ha]** form seen in Sheko: possessive markers and subject proclitics show the forms /**à**=/ and /**á**=/ for 2SG and 3SG, respectively (Beachy 2005:245).

Apart from the pronominal systems, the form /**ha**/ is found throughout Omotic as the proximal demonstrative 'this' and as the locative noun/deictic 'here': in Macro-Ometo (NW Ometo and SE Ometo) (Bender 2000:79); in the Gimira-Yem-Kefoid languages (Bender 2000:138); and in the Dizoid languages (Bender 2000:145). Bender, in fact, reconstructs /***ha**/ (with variants /***har**-/ in C'ara and /***han**-/ in Kefoid) for the proximal demonstrative and 'here' form in his TN group of Omotic (2000:206)–that's all of Omotic except for Mao, Dizoid and Aroid, according to Bender's classification (2000:206). It is clear that an Omotic source for MA's and Ganza's affirmative marker and the **[ha]** forms is likely, given the many correspondences of /**ha**/ as a demonstrative and locative noun (and as a pronominal form today).

4.2 MA internal developments

Before jumping into the finer details of the historical scenario in MA, we should begin with a brief summary of the developments of the Mawes Aas'e pronouns. Five major developments are included below:

1) the development of a dual versus plural opposition across all persons
2) the augmentation of 1st and 2nd person non-singular forms (dual and plural) including a **[ha]** form on all four pronouns, and an **[el]** form on the plural pronoun forms
3) a 3rd person series constructed with a demonstrative (**íʃé**) and number suffixes for dual and plural
5) the /-**e**/ terminal vowel found on all nominals

As mentioned in the introduction, the development of dual in MA is quite marked in terms of Omotic patterns.[45] In MA, dual is today marked across all nominals (nouns, demonstrative, pronouns, etc.). The historical scenario presented below suggests that dual entered the language in developments related to the 1PL and 2PL bound pronominal subject marking forms (i.e. the speech act participant markers).

Table 7 (and Section 2.2.1) show that MA's first and second person non-singular pronominal forms exhibt the **[ha]** form as do the corresponding free pronouns.

45 To date, dual has been identified in only one other Omotic language: Dizin (Omotic-Dizoid); and in that instance, dual was limited to the pronominal system (Beachy 2005:86; see also Azeb Amha 2017:824).

On verbs, the 1SG bound pronominal may be preceded by the /**ha**-/ affirmative prefix, and verbs with 3rd person subjects (SG, DU, and PL),[46] which are all zero-marked as prefixes, often also carry the /**ha**-/ affirmative prefix.[47] Certainly, the form and distribution of MA's (and Ganza's) affirmative prefix and the intrusive **[ha]** form, which cannot be reconstructed for the 1st and 2nd non-singular pronominals (both free and bound), suggest that these forms are related to one another.

The third development involves the inclusion of the /-**el**/ plural form in the 1st and 2nd person plural pronouns in MA. This plural form is likely related to the Mawes Aas'e plural suffix /-(**w**)**ol**/ and its variant /-**kol**/, which is found on kinship terms and even on MA's 3PL pronoun (see Table 7 and Ahland 2012:239). Contra the case with the **[ha]** sequence, no /-**el**/ form is found on the corresponding bound pronominal plural forms for 1st and 2nd person subject marking in MA.

The fourth development involves the construction of a 3rd person series (SG, DU, and PL) from a distal demonstrative /**íʃé**/.[48] This series is likely a more recent development on the grounds that it involves morphology which is still synchronically viable in the language: the demonstrative is still fully functional and the dual form receives the expected dual suffix /-**kuw**/ found on dual nouns while the plural form receives the /-**kol**/ plural which is found on kinship nouns (the synchronically frequent plural today is the weakened /-(**w**)**ol**/ suffix).[49] The other Mao languages also appear to use demonstrative forms for 3rd person pronominal forms (see Section 4.2.6).

Finally, the fifth development involves the extension of the MA terminal vowel /-**e**/ to all the pronouns. This terminal vowel is found on all nominals in citation form (see Ahland 2012:194 and 2012:313-324). Terminal vowels, in general, are commonly found on basic noun forms across the Omotic languages (Azeb Amha 2017:822).[50] In

46 In fact, it is the affirmative-marked 3rd person realis verb that is the verbal citation form offered by consultants when a verb is requested outside of syntactic context: /**ha**-/ AFF + /**Ø**-/ 3SG + finite verb stem + /-**á**/ DECL (see Ahland 2012:374).

47 MA's 2SG bound pronominal, however, cannot take the /**ha**-/ prefix (see example 9 above). MA does exhibit a robust, synchronic laryngeal co-occurrence restriction that results in deletion of the initial **[h]** in the /**ha**-/ affirmative prefix before verb stems that being with **[h]** (Ahland 2012:62); it may be that this co-occurrence restriction prevented the /**ha**/ from hosting the 2SG marker.

48 This demonstrative is typically used anaphorically in discourse to refer to identifiable events and which is also used as the locative noun 'there'. It is also the source of multiple developments: the 3rd person pronoun, the definite article, and the nominative case marker (see Ahland 2019).

49 It's also worth noting that realis verbs are zero-marked for 3rd person (see examples 3 and 4 above where the verbs with 3DU and 3PL subjects carry the /-**and**/ suffix and no prefix). Subordinate verbs (e.g. relativized verbs, etc.) do carry an older /**hí**-/ prefix–cognate with Seezo's 3SG subject marker on subordinate verbs and possibly with Ganza's 3SG bound pronominal which is modified for the masculine form (in opposition to the feminine).

50 In the case of MA, the terminal vowel is underlyingly toneless and receives its tone from the left–i.e. the morpheme to which it attaches.

the case of MA, the terminal vowel is underlyingly toneless and receives its tone from the left–i.e. the morpheme to which it attaches.

In summation, the two most important observations are: 1) MA's free pronouns are related in shape to the bound pronominal subject markers in 1st and 2nd persons and 2) MA's free pronouns exhibit transparent morphology (e.g. plural marking and terminal vowels) which the bound pronominals lack–that is the free pronouns are constructed forms. MA pronouns contain MA morphology and are the results of internal developments.[51] In fact, the free pronoun forms in Mawes Aas'e which cannot be reconstructed (namely 1st and 2nd person DU and PL and the 3rd person series), exhibit morphological components that very strongly suggest these forms have been constructed–augmented–from bases with additional internal morphology.

The story for the development of MA pronouns really begins not with the free pronouns but with the Proto-Mao state of the subject markers. Because the /***ha**/ was the most frequent host (as is the case in Ganza, where multiple hosts are still in use today), the affirmative form was most closely associated with the subject-marking enclitics. It's also important to keep in mind that these host + enclitics were obligatory as markers of subject. This means they were highly frequent and cognitively salient. Free pronouns would have been used much more rarely–primarily for marking person-objects or when a subject must be marked with emphasis, constrast, or other sorts of focus. The initial developments in MA begin in these frequent, obligatory subject markers inherited from Proto-Mao. Only later, do changes spread to the free pronoun paradigm (we pick up that part of the story in Section 4.2.4).

As a final disclaimer, it should be noted that while these changes are substantiated by evidence, it is not always possible to be completely sure of the relative chronology of some developments. The discussion below attempts to provide a reasonable scenario, bringing these changes together and producing the forms we see today.

4.2.1 Phonological reduction in 1PL and 2PL forms

After MA broke away from Proto-Omotic, the 1st and 2nd person enclitics simplified in shape. For the 1PL forms, this involved the loss of the final vowel with the tones

51 This internal development is important because these pronouns have been used to argue specifically for Nilo-Saharan lineage of the Mao languages. See especially Zaborski (2004:180-181). As with Bender's claims of Nilo-Saharan borrowing in MA (2000:184), Zaborski's work was completed at a time when very little grammatical information about most of the Mao languages was available–only short wordlists with some isolated paradigms.

maintained. For the 2PL, /***nam**/ likely reduced to an intermediate /=**mà**/ (as is maintained in Ganza's 2PL enclitic today, see Table 7) before the final vowel was lost and the bilabial nasal weakened to the approximant **[w]**–again, the tone is maintained (Table 12).[52]

Table 12: Phonological reduction in 1st and 2nd person non-singulars.

	Host + enclitic	**Phonological reduction**
1PL inclusive	**ha=nú**	**ha=ń**
1PL exclusive	**ha=mù**	**ha=m̀**
2PL	**ha=mà**	**ha=ẁ**

These host + enclitic composite forms could move throughout the preverbal domain in realis verb constructions, as has already been established for Proto-Mao. Only the enclitic forms would have been used in irrealis verbal constructions; in those constructions, the verb itself would have been the host.

4.2.2 Development of dual in 1st person and spread to 2nd person

Another important development is the reanalysis of the Proto-Mao 1PL inclusive versus exclusive distinction into one of dual versus plural. The comparative consonant and tonal pattern for the 1PL reconstructions suggests that the H-tone form (i.e. the form associated with inclusive in Proto-Mao and in Seezo) is the one that was reanalyzed as a dual.[53] It's clear that the dual is an innovation in MA and is not a pattern that can be reconstructed for any Omotic subgroup.

In MA, the reanalysis of the 1PL inclusive occurs in the first stage of innovation. There is no formal change–only a meaningful reanalysis to dual number, leaving the historical exclusive as the sole plural form in 1st person (Table 13).

52 Admittedly, there is an issue: why should the 2PL /**ha=mà**/ weaken to /**ha=ẁ**/ while the 1PL exclusive /**ha=mù**/ does not? I have found no internal evidence to suggest why this might be the case. I only have mere speculation: perhaps the fortition (excrescence) of the 1PL's **[m]** > **[mb]** (see Table 16 and surrounding discussion) happened at an earlier stage, thus 'covering' the **[m]** of the 1PL exclusive and preventing weakening while no such covering prevented weakening in the 2PL. Then, when a new 1PL pronoun is constructed, the **[mb]** would be already present. The **[b]** would have to have been lost on the subject marker form as it collapsed into becoming a prefix, though–this could have been motivated by phonotactic constraints since most verbs begin with consonants. Again, this is pure speculation.

53 Again, if the reconstructed inclusive had been the so-called minimal inclusive (i.e. the speaker and a single addresse), then that may have been one of the motivating factors.

Table 13: Dual innovation in 1PL with spread to 2PL.

Stage 1: Innovation in 1st person			Stage 2: Spread to 2nd person		
		New DU vs. PL opposition			New DU vs. PL opposition
ha=ń 1PL inclusive	>	**ha=ń** 1DU	**ha=ẁ** 2PL	>	**ha=ẃ;** 2DU
ha=m̀ 1PL exclusive	>	**ha=m̀** 1PL		>	**ha=ẁ** 2PL

Cysouw notes that crosslinguistically innovation of a dual opposition typically spreads across the person paradigm:

> When there are grammaticalized dual forms in a pronominal paradigm, then it is extremely rare for there to be no dual involving all persons. Dual forms show up across the paradigm, or not at all. There are only very few examples that have a dual only in a part of the pronominal paradigm. Among these few examples, a dual in in the first person is indeed slightly more frequent then other duals, but the total amount of cases is too low to allow for any significant generalizations. (Cysouw 2003:210)

In MA, this tendency for dual to spread across persons holds. In stage 2 (Table 12), the 2PL could then have subdivided, following the same tonal pattern observed in 1st person: H tone for DU and L tone for PL. What's interesting here is that because there was no pre-existing morphological material which could serve as the dual form, the labial-velar approximant root form appears to have been copied from the plural form for the new dual new structure (with the H tone for dual replacing the plural-indicating L tone)–perhaps an analogical extension of the tonal pattern found in 1DU and 1PL.

Cysouw's typological work suggests that an inclusive/exclusive paradigm (without dual) is a possible source for the type of pronominal paradigm we find in MA: SG, DU, PL forms across three persons but with no inclusive/exclusive distinction –a paradigmatic pattern Cysouw calls 'dual-unified-we' (Cysouw 2003:278). Citing data from the Miwok languages (Plains Miwok, Northern Sierra Miwok, and Bodega Miwok), Cysouw suggests the older 1PL inclusive is cognate with the new 1DU, while the older 1PL exclusive appears to be related to the 1PL in the resulting paradigm (Cysouw 2003:277–278). Interestingly, the older 1PL inclusive in Miwok was "probably only prototypically used for the speaker-addressee dyad 1 + 2" and was a general inclusive rather than a strict minimal inclusive (Cysouw 2003:277). So, even in cases without a minimal inclusive, deriving a dual from an inclusive is not without apparent precedent.

Before continuing, it's important to note that the phonological reduction of pronominal enclitics and the innovation of dual in these two stages provides a

unifying account of an otherwise perplexing pronominal/subject-marking paradigm (as originally seen in Table 2, above). While the innovated host + enclitics in Table 13, are the same morphological shapes found on MA realis verbs today, the phonological reductions of the reconstructed pronominals and their tones (without the /**ha**/ host) match the forms found on irrealis non-future verbs (see shaded rows in Table 14).

Table 14: Highlighting 1st and 2nd non-singular across MA verbal constructions.

Free pronouns		Realis verb Prefixes	Irrealis verb Non-future (negative) suffixes	Irrealis verb Future (affirmative and negative) suffixes
1SG	**tí-jé**	**tí-**	**-tí**	**-ɗ́**
1DU	**han-é**	**haɲ́-**	**-ɲ́**	**-ɲ́**
1PL	**hambèl-è**	**ham̀-**	**-m̀**	**-m̀**
2SG	**hì-jè**	**hì-**	**-hì**	**-èm**
2DU	**háw-é**	**háw-**	**-ẃ**	**-́** (H Tone)
2PL	**hàwèl-è**	**hàw-**	**-ẁ**	**-̀** (L Tone)
3SG	**íʃ-è**	**Ø-**	**-Ø-**	**-m̀**
3DU	**íʃ-kuw-e**	**Ø- /-and/**	**-Ø- /-and/**	**-m̀ /-and/**
3PL	**íʃ-kol-è**	**Ø- /-and/**	**-Ø- /-and/**	**-m̀ /-and/**

In MA realis verb constructions, the enclitics would have needed a host as they moved within their preverbal domain (in the same way as we see in Ganza today). But in irrealis constructions, the verb itself would have been the host: in the non-future, the enclitics attach to the verb itself and in the future, they attach to the verbal word, but are positioned after the future suffix. It is after this future suffix that the 2nd person non-singular forms weakened even further, losing all segmental material and maintaining only the H and L tones for dual and plural, respectively.[54]

4.2.3 Fusion of the /ha/ host with 1st and 2nd person non-singular forms

The fusion of the affirmative marking /**ha**/ host with the 1st and 2nd person dual and plural subject-marking enclitics is crucial to the understanding of pronominal innovations in MA. The fusion of the affirmative /**ha**/ host with these enclitic forms (and the later impact on the shape of new free pronouns, discussed below) strikingly

54 The **[m]** forms in 2SG and across 3rd person in Table 14's Irrealis Verb Future Suffixes column are due to an intrusion which takes place only in future constructions. This is from an old purposive /-**gàm**/ suffix–the historical source of the future tense marker in MA. For details see Ahland 2014.

sets the MA pronominals apart from the rest of Mao and Omotic. The **[ha]** shape was a major reason for Bender's argument that MA pronouns were the result of borrowing from Nilo-Saharan (see Bender 2000:184 and also Section 5.3, below).

Questions central to the fusion of the affirmative host with these particular enclitics include the following: 1) Why is this fusion not seen on irrealis verbal subject marking in the corresponding persons? and 2) What motivates the fusion on the 1st and 2nd person non-singular forms (and thus does not trigger the same for other persons)?

First, as perhaps is obvious, the fusion could only apply in the preverbal realis domain. This is the domain where the /**ha**/ affirmative form was hosting the enclitics. In cases where the verbal word was serving as the host for the enclitics (e.g. the irrealis verb), the subject markers remain unaffected. Second, the motivation for this fusion could have been due to phonological necessity: these particular 1st and 2nd person non-singular enclitics have weakened to single consonants, as this was unfolding, they would have become less easily hosted by elements ending in consonants because they were all consonants themselves. MA's specific phonotactic requirements of complex codas would have prevented any of these (/**ń**/, /**m̀**/, /**ẃ**/, and /**ẁ**/) forms from serving as the second C of a CC coda.[55]

The fusion of the /**ha**/ affirmative host with the enclitics is represented in Table 15.[56]

Table 15: Fusion of host with Enclitics.

Host + **enclitic**		**New fused subject markers**
ha=ń 1DU	>	**hań**
ha=m̀ 1PL	>	**ham̀**
ha=ẃ 2DU	>	**háw**
ha=ẁ 2PL	>	**hàw**

55 Complex codas in MA are limited to the nasal + final consonant (NC) pattern (Ahland 2012:79–85), and none of the enclitics in question (nasals or labiovelar approximants) would be able to attach to any consontant-final word without having a final vowel to keep them from being an unallowable coda. In addition to the phonotactic constraints, the CV patterns of most nouns (most likely hosts for the enclitics after the more frequent /**ha**/) mean that the noun ends in a terminal vowel (TV) which is lost in connected speech and the result is that most nominals then end in consonants and thus would not be able to host the enclitics.

56 The association of the tone on the 2DU and 2PL /**-w**/ forms spreads to the erstwhile host while the H and L tones on the 1DU and 1PL do not–the tones of the first person forms are indeed maintained but as floating tones which only spread to following elements (see Ahland 2012:132–138). It's not clear why this difference in tonal association developed.

Presumably, these fused forms would have maintained their freedom to move within the preverbal domain (as is still the case in Ganza).

The results of the /**ha**/ fusion are important. First, the fusion of the /**ha**/ host in these cases renders the realis subject-marking paradigm independent from the irrealis subject-marking paradigm in MA.[57] And most important for our focus here, this fusion is the initial intrusion of the /**ha**/ host into the MA pronominal system. We now have obligatory (i.e. highly frequent and salient) markers for all realis constructions which involve a combination of subject markers fused with their erstwhile host and others (like 1SG and 2SG) that are not fused. These moveable, preverbal, obligatory subject markers also show a dual versus plural distinction in 1st and 2nd person. But of course, there was a problem: the old free/full pronouns would not have matched in shape with the intruded /**ha**/ nor with the innovated dual versus plural distinction. This would have been an issue for expressing persons in a number of important environments: as grammatical objects, establishing emphasis, contrastive focus and for responding to questions of 'who' (just to name a few).

4.2.4 New free pronouns through augmentation

An examination of synchronic paradigms in MA may initially lead one to assume that the bound subject marking on realis and irrealis verbs is the result of reductions from the free pronouns. The problem with such an analysis, of course, is that the free pronouns contain various elements which are not reconstructable as part of the Mao pronoun system: most strikingly the **[ha]** shape on four pronouns and the **[el]** shape on first and second person plural pronouns.

Certainly, there is a strong case to be made in the historical literature for the idea that bound morphological forms develop from a further grammaticalization and reduction of free pronouns. This pathway of reduction from free, full pronoun to bound (or otherwise reduced) form (including agreement) has been well-established in the literature: Meillet 1912, Givón 1976, Hopper and Traugott 1993, Ariel 2000–among the many prominent works.

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57 In this scenario, at this stage of development MA would have had two sets of grammatically obligatory pronominal subject marking paradigms relative to the realis/irrealis verb types: a set of free, moveable forms positioned preverbally in realis constructions and a set of bound forms on irrealis verbs. The bound forms on irrealis verbs were at this stage analyzable as suffixes since their morphological shapes (in the 1st and 2nd dual and plural forms) no longer matched the moveable forms in realis verbs.

But the internal facts in MA do not support such an analysis in this particular instance. If today's realis prefixes are reduced from the pronouns themselves, how did the **[ha]** form, which cannot be reconstructed as part of the pronouns, enter into the paradigm? Why do the 1PL and 2PL pronouns transparently exhibit internal morphology, such as the /-**el**/ PL marker? The answer to these questions lies in how today's free pronouns (1DU, 1PL, 2DU, and 2PL) developed via augmentation (with necessary morphology) from copies of the newly fused obligatory subject-marking forms (the erstwhile /**ha**/ + enclitic).

There is growing evidence that the relationship between free and reduced/bound pronominals is not always unidirectional (i.e. less grammatical to more grammatical). More recent work has established that there may be developmental cycles whereby free pronouns can produce new reduced/bound pronominals and where the reduced (often obligatory and bound) pronominals can spark the development of new pronouns as well (see Harvey 2003, Mushin and Simpson 2008, and Norde 2009:204-207). Mushin and Simpson conclude:

> This leads to the suggestion that, if a language has different forms for free and reduced pronouns, all else being equal, the reduced pronouns should be taken as representing the earlier stage of the language, and the free pronouns as being the result of paradigm extension, or borrowing, or innovation on the basis of the reduced pronouns with additional material (Mushin and Simpson 2008:591)

The developments in MA provide evidence that while the bound pronominal forms very likely derived originally from the free pronouns in the Proto-Mao state, innovations within the obligatory bound pronominal forms (fused host + enclitics) would have created a need for new pronouns to develop through augmentation based off of these obligatory forms.

First, given that the subject marking enclitics were obligatory in all clauses, as the subject marking device, and given that these most frequent forms had developed innovations related to dual number in both 1st and 2nd person, updates in the free / full pronoun paradigm would have been needed so that all relevant person/number categories could be expressed. These enclitics with their hosts, of course, would have been already moving freely preverbally, but they were limited functionally as subject markers and were not used for many of the discourse functions for which free pronouns are required. Speakers of MA, appear to have done just as Mushin and Simpson suggest: they appear to have constructed new pronouns on the basis of the fused host + enclitic 1DU/PL and 2DU/PL forms. In this case, the additional material involved the toneless terminal vowel /-**e**/ that marks all nominals (including the other MA pronouns) and the addition of the /-**el**/ PL suffix to the 1PL and 2PL forms (Table 16).

Table 16: Augmentation of subject-markers to new free Pronouns.

	Fused Subject- markers	Augmenting morphology			New free pronouns
1DU	**haǹ**	+ **-e** -TV		>	**hané**
1PL	**haǹ**	+ **-el-e** -PL-TV	> **hamèlè**	>	**hambèlè**
2DU	**háw**	+ **-e** -TV		>	**háwé**
2PL	**hàw**	+ **-el-e** -PL-TV		>	**hàwèlè**

The tones of the erstwhile enclitics /**-ǹ**/ and /**-m̀**/ in 1DU and 1PL respectively spread rightward onto the toneless suffixes. In a related manner, the tones which had already associated to the vowel of the first syllable in the 2DU and 2PL form, also spread right to the toneless suffixes.[58]

The only other change that appears to have occurred involves a sound change in the 1PL pronoun. Strengthening of intervocalic bilabial nasal through the addition of a homorganic stop (a subtype of excrescence **[m]** > **[mb]**) before a vowel is quite commonly found in languages in western Ethiopia. For instance, consider the word 'camel:' /**gɨmɛl**/ in Amharic; /**dʒəmel**/ in Arabic; /**kambəla**/ in Gumuz (Colleen Ahland, personal communication); /**hambel**/ in Bertha (BGLDP 2007:112); and /**hàmbèlè**/ in MA (Ahland 2012:252). Cross-linguistically, this sort of nasal-stop strengthening is relatively common, where **[m]** is fortified to **[mb]** before vowels. Such a change is reported for Haida (Mithun, p.c.), Maxakalí (Gudschinsky et al. 1970), and throughout Amazonia (Hyman 2007:351).[59] With the completion of this one sound change, we find today's free pronouns for the 1st and 2nd non-singular forms in the final column of Table 16.

4.2.5 Subject-markers collapse into prefixes

Given the comparative data from Ganza and Seezo, it seems likely that even in the Proto-Mao stage, the Mao subject marking enclitics could at times procliticize to realis verbs. Certainly, as demonstrated above, in Seezo, realis constructions today require the procliticization of subject markers to the verbs. And in Ganza,

58 Rightward spread of tone to toneless suffixes is attested throughout MA's phonological system (see Ahland 2012:132–138).

59 See also the discussion of excrescence across Indo-European languages in Campbell (2013:31–32).

procliticization to the realis verb is not entirely infrequent in my fieldnotes. Of course, in MA today realis verbs obligatorily carry subject marking prefixes which derive from the old enclitic system.[60]

Regardless of how widespread the procliticization of the subject markers to the verbal word was in the earliest stages, it's clear that in MA today, the collapse into the verb is complete. As noted in Section 2.2.1, realis subject markers are obligatory prefixes and the required verbal inflection for the expression of subject.[61]

The relative chronology of the collapse into inflectional prefixes and the development of the new free pronouns is not entirely clear. It seems to me that an increase in frequency of procliticization of the subject marking host + enclitic composites (and certainly the complete collapse of these forms into verbal prefixes) could have been a major motivation for the development of the new free pronouns. Cysouw suggests such a situation:

> …free and bound forms can also arise because the original clitics became 'real' inflectional markers and, as a consequence, free pronouns had to be remade by reinforcing [augmenting] the clitics. Such reinforcement of reduced pro-forms is quite common cross-linguistically. A well-known example is the development of the Latin pronouns *nos/vos*, which were reinforced in Spanish as *nos-otros/vos-otros* (Cysouw 2004:10).

4.2.6 A new 3rd person pronoun series

Finally, we arrive at what may well be one of the more recent developments in the MA pronominal paradigm: the development of a new 3rd person pronoun series. A quick inspection of Table 7 again shows widespread variation in Mao 3rd person forms. As briefly noted above in the discussion around Tables 7 and 8, there are strong correspondences between each 3rd person pronominal form and language-internal demonstratives across the Mao languages. No one single system or single demonstrative source can be reconstructed for the whole group. Ultimately, it appears that a variety of demonstratives have served as the base for the 3rd person pronouns.

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60 These subject markers are analyzed as prefixes (rather than proclitics) on the grounds that they are today formally distinct from the MA irrealis suffixes. Certainly, both systems derive from the same enclitic etyma.

61 One might suggest that the realis prefixes today could have been clipped from the new free pronouns in Table 16. While that can't be entirely ruled out, the analysis whereby the fused host + encltics spark new pronouns and then complete their collapse into the verb seems simpler and more likely. We can see from comparative data that the subject markers in Ganza and Seezo also procliticize to the realis verb.

In the case of MA, the base is the distal demonstrative /**íʃ-é**/ DIST-TV–the final vowel is the toneless terminal vowel. The 3SG pronoun includes the demonstrative base with a L tone on the terminal vowel–perhaps as a means for distinguishing the 3SG pronoun from the distal demonstrative synchronically; both are still in use. The dual and plural forms include the number and terminal vowel morphology expected of other nominals (Table 17).[62]

Table 17: The demonstrative base and morphology in 3rd person pronouns.

Demonstrative base		Number and TV morphology	New pronouns
íʃ-é	>	**íʃ** + **-è**	**íʃè**
DIST-TV		3 -TV	
	>	**íʃ** + **-kuw-e**	**íʃkuwe**
		3 -DU-TV	
	>	**íʃ** + **-kol-è**	**íʃkolè**
		3 -PL-TV	

Bender reports an array of possibly related isomorphs of various shapes: /**izi**/ Macro-Ometo, /**isi**/ Gimira, and /**iz**/ Dizoid, associated with 3SG, and /**ist**/ Macro-Ometo, /**ic**/ Gimira, and /**iʃ**/ Dizoid, associated with 3PL (Bender 2003:223). I don't believe there is a clear case for reconstruction of such a form across Omotic. I do suspect it is more likely that in various subgroups, a cognate demonstrative has been brought in to the pronominal paradigm, independently. In the case of MA, the transparent quality of the morphological forms suggests the incorporation of the demonstrative to be more recent, sometime after a stage where any gender that would have been present in Proto-Mao had been lost.

5 Concluding thoughts and implications

While only two of the nine MA pronouns may appear to be cognate with other Mao languages at first inspection, the comparative and internal evidence provided here demonstrate how the MA pronominal system could have developed through internal processes. The developments appear to have begun in the obligatory subject-marking paradigm where enclitics underwent the development of a dual versus plural opposition. The details suggest that an old, reconstructed 1PL inclusive form provided

62 In the case of the plural form, the plural /-**kol**/ is found today mainly on kinship terms; the productive form of the plural inflection is the lenited /-**(w)ol**/.

the source for the new 1DU while the reconstructed 1PL exclusive became the general 1PL. This new dual versus plural opposition then would have spread to 2nd person as well, and the 2PL form split into 2DU and 2PL (marked by a tone change). The most frequent host for the enclitics in realis verb constructions was likely an old demonstrative-turned-affirmative marker, /**ha**/. As 1st and 2nd DU and PL subject marking enclitics reduced phonologically to single consonants, they fused with their /**ha**/ hosts in realis constructions and became new forms, each beginning with a unanalyzable /**ha**/ shape. On the basis of these new fused subject-marking forms, new pronouns were constructed, with the expected morphology found on other nominals: the addition of a PL suffix for the plural forms and the addition of the terminal vowel that is found on all nominal wordforms. New 3rd person pronouns developed as well, grammaticalizing from demonstratives with number and terminal vowel suffixes.

The argument presented here also attempts to correct earlier accounts involving degrammaticalization of new pronouns from verb prefixes (see Ahland 2012:246–254; 2013; 2015). The scenario presented here does not involve degrammaticalization in the strictest sense. Norde defines degrammaticalization as a movement of one step from left to right along Hopper and Traugott's cline of grammaticalization (Norde 2009:8): content item > grammatical word > clitic > inflectional affix (from Hopper and Traugott 2003:7). This study involves the development of new grammatical words (pronouns) from clitics, but in the case of MA forms, the fused /**ha**/ + enclitic forms were not simple clitics themselves. Rather, they were host + clitic complexes and already evidenced some degree of word status through their ability to move across the preverbal domain.[63] The argument presented here suggests that these host + clitic complexes were the source patterns from which the new pronouns developed through augmentation. Thus, while the source complexes involved clitics, they were more than clitics and were already non-bound phonologically. It's worth noting, though, that these host + clitic complexes were indeed limited in function: e.g. obligatorily marking subject and unable to be used for grammatical objects or typical discourse functions associated with free and full pronouns. This suggests that they were indeed inflectional in function, despite the fact that the morphological shapes exhibited at least some properties of full words.

63 Norde defines deinflectionalization strictly as: "a composite change whereby an inflectional affix in a specific linguistic context gains a new function, while shifting to a less bound morpheme type" (Norde 2009:152). Given that MA's host + enclictic composite forms were themselves not affixes and not bound (apart from the preverbal domain), the phenomenon in MA does not meet the requirements for a deinflectionalization analysis. Of course, if there were clear evidence that the fused clitic complexes had fully collapsed into the verb as prefixes before sparking new pronouns, the deinflectionalization analysis would be clearly supported. That said, no clear evidence that these clitic complexes were fully bound to the verbs as prefixes before the pronouns developed has been found.

5.1 Theoretical implications

While there is a long-standing argument for bound morphological forms developing from full, free pronouns (as discussed in Section 4.2.4), the internal evidence in MA do not support such an analysis. The presence of the **[ha]** and **[el]** forms on the free pronouns today, which are not themselves reconstructable as part of the pronominal paradigm, strongly suggests that the clitic forms sparked the construction of new free pronouns through augmentation with necessary morphology.

The findings add to the growing body of literature supporting, at the very least, a less-than unidirectional approach to understanding the relationship between bound/reduced pronominals and full/free pronouns. In the Proto-Mao stage, the subject-marking enclitics were very likely developments from the free pronouns (full/free > reduced). The most reasonable means by which the intrusive /**ha**/ enters the full pronouns is through 1) fusion of the /**ha**/ with the obligatory subject marking enclitics and then 2) development of new full pronouns based on these highly frequent fused forms through augmentation with morphology found on other nominals (subject marking forms > full/free pronouns). This is evidence for the sort of bidirectional processes Mushin and Simpson argue for (2008).

Finally, the evidence presented here attempts to provide an account for other pronominal developments. Most important is the development of a dual versus plural opposition: arising from a clusivity distinction in 1PL and then spreading to 2nd person and eventually to 3rd person. The study also supports the widespread phenomenon of demonstratives serving as 3rd person pronominal forms.

5.2 Implications for comparative Omotic

The present study provides strong support for the inclusion of the Mao languages as part of the Omotic family.[64] The details above provide evidence that the MA pronominal system is the result of internal developments not the result of external phenomena like substrata interference or borrowing (contra earlier suggestions: Bender 1996:158; 2000:184 and Zaborski 2004). A major thrust of the argument against inclusion of the Mao languages with Omotic has centered on the pronouns themselves. Bender suggested that MA's 1st and 2nd pronouns may have been borrowings from the Nilo-Saharan language Bertha; Bertha's 1PL and 2PL pronouns each begin with a **[ha]** sequence: /**haθaŋ**/ 1PL and /**haθu**/ 2PL (Bender 2000:184). Bender was

64 And it's important to note that as we have access to more details of the Mao phonological and morphosyntactic systems, many features (outside the pronominal and basic vocabulary systems) show these languages to fit within the Omotic family (see Ahland forthcoming).

unaware of MA's dual pronouns which also contain **[ha]**, and he was also unaware of the /**ha**/ affirmative marker in MA and in Ganza. Zaborski also argued that the Mao pronouns were problematic for an Omotic and even Afroasiatic classification (2004:183). It must be noted that both these scholars carried out their work and drew their conclusions well before any reference grammars or other large-scale descriptive work of any of the Mao languages had been completed.

While, as noted in the introduction, the internal structure of Omotic is still debated, the evidence from the pronominal examination above supports the notion that, despite the so-called surface divergence in the Mao pronominals, the system does attest to shared history for the Mao group, albeit one with multiple layers of more recent independent developments (especially in the case of MA). The evidence above also supports the inclusion of the Mao group within Omotic. At this point, we don't have enough evidence of specific innovations (especially sound changes) to support any particular subgroup to which Mao could belong, but given the widespread use of Omotic reflexes in the pronominal system, it seems entirely reasonable to consider the Mao languages to be part of the Omotic family in general and to put the old Nilo-Saharan hypothesis to rest.

Acknowledgments: This research was funded in part through a Documenting Endangered Languages grant from the National Science Foundation (#0746665). This work would not be possible without the support of the Benishangul-Gumuz Culture Office in Asosa and the help and support of the Mao communities in Bambassi and Diddessa, especially Yasin Ibrahim, Mamo Shimagele, and Tefera Ibrahim. The author is also indebted to the scholars at the Department of Linguistics at Addis Ababa University, who have helped to make this work possible – especially Baye Yimam, Hirut Woldemariam, Moges Yigezu and Girma Mengistu. Finally, I would like to acknowledge Doris Payne, Scott DeLancey, Spike Gildea, Susan Guion Anderson and Tom Payne–all of whom offered comments during various stages of this work. I would also like to acknowledge both Lionel Bender and Andrzej Zaborski. They were generous with their time in conversations during the early stages of the work. Unfortunately, neither of them lived to see the fieldwork or findings completed. Finally, I would like to thank my anonymous reviewers whose expertise helped shape this paper into its final form. Special thanks to Girma Mengistu for rendering the abstract into Amharic. Any errors, misrepresentations, or overstatements are, of course, entirely my own. A substantially different paper on this topic was presented at the 87th Annual Meeting of the Linguistic Society of America (in Boston) in 2013.
Research ethics: This human subject research was approved by Institutional Review Boards at the University of Oregon (2006) and Houghton College (2014).
Informed consent: Informed consent was obtained from all individuals included in this study, or their legal guardians or wards.

Author contributions: The author has accepted responsibility for the entire content of this manuscript and approved its submission.
Use of Large Language Models, AI and Machine Learning Tools: None declared.
Conflict of interest: The author states no conflict of interest.
Research funding: Research was funded in part by a Documenting Endangered Languages grant from the National Science Foundation (#0746665) as well as multiple internal grants from the California State University of Long Beach.
Data availability: The raw data can be obtained on request from the corresponding author.

Abbreviations

1	First person
2	Second person
3	Third person
ACC	Accusative
AFF	Affirmative
AUX	Auxiliary
CAUSE	Causative
COP	Copula
DECL	Declarative
DEF	Definite article
DIST	Distal
DU	Dual
EXCL	Exclusive
FUT	Future tense
H	High tone
INCL	Inclusive
INF	Infinitive
INTR	Interrogative
M	Masculine
F	Feminine
L	Low tone
NEG	Negative
NOM	Nominative
NPST	Non-past
NSG	Non-singular (dual and plural)
O	Grammatical Object
PAUC	Paucal
PL	Plural
PROG	Progressive
PROX	Proximal
REAL	Realis
RDP	Reduplicative prefix

SG	Singular
STI	Stance marker: indirect
TV	Terminal Vowel
V	Verb

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