

# EMERGENCE OF TENSE IN ETHIOSEMITIC

Ronny Meyer (Addis Ababa)

## 1 INTRODUCTION

All modern Ethiosemitic languages developed grammatical means to distinguish between past and non-past time reference in main clauses with a copula or an imperfective verb as predicate, which then gave rise to various innovative periphrastic verbal constructions, such as the perfect, or the proximative and progressive as specific phasal aspects. Past tense markers, moreover, became an essential component in irrealis constructions from which they tend to generalize their meaning to a marker of non-actuality to express a new type of speaker-oriented epistemic modality.

Meyer (2016) argues that verbs in Ethiosemitic languages primarily inflect for the imperative/jussive mood, and the perfective and imperfective viewpoint aspects. Tense as a grammatical category, in contrast, represents a secondary or more recent development, as a specific time reference for a communicated situation is often limited to main clause predicates, and usually indicated through additional auxiliary verbs. The present paper, which is a sequel to Meyer (2016), is particularly concerned with the grammaticalization processes that results in the obligatory past vs. non-past distinction for certain predicates in Ethiosemitic, and its subsequent impact on the grammar. For this purpose, the main grammatical means to distinguish between past and non-past in three Ethiosemitic languages, viz. Gəʿəz (North Ethiosemitic), Amharic (Transversal South Ethiosemitic) and Muher (Outer South Ethiosemitic), are examined and compared with each other. According to Hetzron (1972:119), these languages can be considered representatives of the three major branches within Ethiosemitic that cover a time period of almost two millennia. Thus, their comparison would allow for a more accurate understanding of diachronic processes, presupposing that Ethiosemitic stems from one common South Semitic ancestor language whose main grammatical traits are best preserved in Gəʿəz, whereas modern languages tend to develop new features due to more recent innovations or language-specific changes (cf., e.g. Voigt 2004:35–36; Hetzron 1972:123).

The Gəʿəz data and their linguistic analysis are exclusively extracted from published grammatical descriptions, particularly Tropper (2002); Weninger (2001); Dillmann (1907); Praetorius (1886). Most Amharic data also stem from published studies, particularly Leslau (1995), but their analysis is supplemented by own practical language skills and previous research on this topic. The Muher data, in contrast, entirely result from own field research. Based on these data, a tense marker and its basic function are identified or verified by comparing its morphosyntactic features and semantic co-occurrence constraints with competing elements in the same syntactic position and regular verbs. The general data analysis follows a descriptive

comparative-typological framework, which relies on historical-comparative research on Semitic languages, particularly Lipiński (1997); Hetzron (1972; 1977); Leslau (1979; 1991), well-established findings in linguistic typology regarding tense and aspect, and grammaticalization, mainly Sasse (1991); Bybee (1985); Bybee & Dahl (1989); Bybee, Perkins & Pagliuca (1994); Comrie (1985); Heine (1993); Heine & Kuteva (2004).

The paper is organized as follows: §2 provides background information regarding the genetic classification and sociolinguistic status of Gəʿəz, Amharic, and Muher, and outlines the main typological features of Ethiosemitic with focus on Gəʿəz, Amharic and Muher. The subsequent three sections deal with the emergence of tense marking in copula clauses (§3) and on main clause imperfective verbs (§4), as well as the use of tense markers in periphrastic constructions for new verbal categories (§5). In addition, §3 describes the establishment of a formal distinction between equative and existential copula clauses. The development of past marking to an epistemic modality denoting irreal situations and non-actuality on the one hand, and the assumed grammaticalization of a former irrealis marker to a past tense marker on the other are discussed in §6. Possible sources for tense-marked copulas and auxiliaries and the involved semantic and conceptual shifts in their grammaticalization are examined in §7. Finally, §**Error! Reference source not found.** summarizes the main arguments and assumed developments.

## 2 POSITION OF GƏʿƏZ, AMHARIC AND MUHER IN ETHIOSEMITIC

### 2.1 *Genetic classification and sociolinguistic status*

Ethiosemitic consists of about a dozen languages that are natively spoken at the Horn of Africa. Despite scarce evidence (cf. Faber 1997:12), they are usually treated as descendants of a common West Semitic ancestor language, which belongs to the South Semitic sub-branch in traditional classifications (cf. Hetzron 1972:15–19; Huehnergard & Rubin 2011:260–267). Intense contact with speakers of Cushitic languages and various migrations are probably the main causes for linguistic variation within this ancestor language, which eventually splits in various independent languages. According to Hetzron (1972:119; 1977:15–24), these languages belong to three main groups, as shown in Table 1.<sup>1</sup> Except Gafat, Outer South Ethiosemitic languages share various typological features so that they are grouped together as Gunnän Gurage (cf. Hetzron 1977:3), in which Northern Gurage forms a special subgroup (Hetzron 1977:23–24). Gunnän Gurage is only remotely related to Eastern Gurage (cf. Meyer 2011a:1221–1224).

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<sup>1</sup> For alternative classifications, cf. Hudson (1977; 2000; 2013). Critical points are raised in Goldenberg (1977), and more recently in Voigt (2009); Bulakh & Kogan (2010); Faber (1997:12).

Table 1 Main genetic sub-groups of Ethiosemitic

I. NORTH ETHIOSEMITIC	
Gəʿəz, Tigre, Tigrinya, and probably Dahalik	
II. TRANSVERSAL SOUTH ETHIOSEMITIC	III. OUTER SOUTH ETHIOSEMITIC
(a) Amharic, Argobba	(a) Gafat
(b) Harari, EASTERN GURAGE with Zay, Wolane, Silt'e	(b) GUNNÄN GURAGE consisting of <ol style="list-style-type: none"> <li>1. NORTHERN GURAGE with Muher, Kistane, Dobbi</li> <li>2. Mesqan</li> <li>3. Chaha and Inor dialect clusters</li> </ol>

Gəʿəz, Amharic, and Muher, which each represent one sub-group in Table 1, are the main concern of this paper. Gəʿəz is the first written Ethiopian language with a large corpus of literary works, the oldest going back to monumental inscriptions from the 3<sup>rd</sup> and 4<sup>th</sup> century AD. It ceased to be spoken as a native language after the 8<sup>th</sup> century, but is retained as a learnt language for liturgical purposes in the Ethiopian Orthodox Church until today. Moreover, it was the sole written language at the royal Ethiopian court from the 13<sup>th</sup> to the 19<sup>th</sup> centuries. Thus, the Gəʿəz corpus contains two different types of data. The texts until the 7<sup>th</sup> century represent Gəʿəz as a natively spoken language, whereas it was used as a foreign or learnt language in later texts. Accordingly, the extant texts vary due to the influence of the scribes' mother tongues beside possible dialectal differences (cf., e.g. Weninger 2011a:1124–1126; 2005:465; Ullendorff 1955:4–16). Gəʿəz grammars indicate alternative forms and constructions, but rarely explain the variation. Nevertheless, they provide a fairly good insight, which allows for substantiated hypotheses about the early structure of Ethiosemitic languages.

Amharic has been sporadically used as written language since the 14<sup>th</sup> century, when it started to serve as spoken lingua franca at the Ethiopian royal court. The language of the texts composed before the mid 19<sup>th</sup> century is known as Old Amharic. When Amharic was promoted as national language of Ethiopia at the end of the 19<sup>th</sup> century, it became the dominating Ethiopian language in modern education and in the print media. Today, it is the de facto Ethiopian lingua franca in Ethiopian and widely spoken as second language. Several reference grammars, the oldest going back the 17<sup>th</sup> century, describe the linguistic structure of Amharic, either by focusing on a specific variety, or by merging several dialects (cf., among others Meyer 2011b; Appleyard 2003; Ullendorff 1955:16–19).

Muher is only used for oral communication; it has never been a literary language. Contrary to Hetzron (1972:3), Muher consists of two main dialects known as *anä-bet* and *ädi-bet*, whereas the latter is also referred to as *oçä* (cf. Kruczinsky 2007; Ahland 2010:51). A number of linguistic descriptions are available for the *anä-bet* dialect (e.g. Leslau 1981; 1982; Rose 1996). The Muher data in this paper, however,

represent, the almost unknown *ädi-bet* dialect, specifically the variety spoken in Tattessa, which is situated near Wolkite, the administrative town of the Gurage Zone (cf. Meyer 2010:161–162 for further details).

## 2.2 Main typological features

The phoneme inventories of Gəʼəz, Amharic, and Muher overlap to a certain extent (cf. Ullendorff 1955; Podolsky 1991 for a general overview; and Weninger 2010 for the reconstruction of the phonetic values of the Gəʼəz graphemes). They are characterized by a series of ejective plosives and affricates, and a set of labial co-articulated velars, which is extended to all non-coronals in Muher. Amharic and Muher, moreover, have alveopalatal consonants, which are lacking in Gəʼəz. Muher, in addition, has a set of palatal plosives and fricatives. The alveopalatal and palatal consonants in Amharic and Muher, and the labial co-articulated consonants in Muher may also result from the palatalization or labialization of their plain counterparts. The gemination of consonants can convey grammatical and lexical meaning, i.e. it is phonemic. Gəʼəz, Amharic and Muher have seven vowel phonemes, i.e. two front vowels *i*, *e*; two back vowels *u*, *o*; and three central vowels *ɨ*, *ä*, *a*. Vowel length is not phonemic. Only the central vowels tend to adapt their pronunciation to adjacent palatal, labial, and glottal elements. The pronunciation of the conventional symbols *i* and *ä* seems to be close to IPA ɜ and ɘ, respectively (cf. Derib 2011). The vowel *ä* is equivalent to short *a* in the Semitic transliteration tradition. The preferred syllable structure is CV(CC), whereas the final cluster depends on the sonority of the consonants. Impermissible consonant clusters are dissolved by the epenthetic vowel *i*. Word-initial consonant clusters are rare, they always involve the liquids *r* or *l* as second element.

The transcription/transliteration of linguistic data from Gəʼəz, Amharic and Muher is adapted to a unified transcription/transliteration system according to the IPA conventions with the following exceptions: The Gəʼəz graphemes **ሠ** and **ፀ** are transliterated by the symbols *ś* and *ḍ*, respectively, which probably represent the lateral fricatives *ɬ* or *ɮ* in IPA (cf., e.g. Tropper 2002:17–21). The symbols *ä* and *i* represent IPA ɜ and ɘ. Although vowel length is not phonemic, the symbol *ā* is used to distinguish original long *\*a* from *a* as an allophone of *ä* in the environment of the so-called gutturals *h*, *ħ*, *x*, *ʕ*, *ʕ* in Gəʼəz. A reduplicated consonant marks gemination.

The basic typological and syntactic features of Semitic languages are outlined in Gensler (2011) and Waltisberg (2011). Regarding Ethiosemitic, it seems that Gəʼəz is most conservative, as it preserved many of the common Semitic features, while Amharic and Muher are more innovative, probably due to prolonged contacts with Cushitic languages (cf. Leslau 1945a; 1952; 1959; but also Crass & Meyer 2011). All Ethiosemitic languages, for instance, are nominative–accusative languages, in which the nominative is the unmarked case of a noun and the accusative the marked one. However, the common Semitic constituent order V(erb)–S(ubject)–O(bject) is only found in Gəʼəz, whereas modern Ethiosemitic languages have regularly SOV (cf.

Tosco 1998:355–356). Accordingly, Gəʿəz exhibits most features of head-initial languages, i.e. complement nouns follow their case relators, and head nouns usually precede their (genitive, adjectival, relative clause) modifiers, but demonstrative modifiers always precede the head, adjectival do so sometimes, and numerals frequently precede and follow the head (Bulakh 2012a:171). In Muher and Amharic, in contrast, head nouns always follow their modifiers including demonstratives and numerals, but they have case relators that precede, follow or enclose their complement (cf. Lehmann 2011).

The case relators, usually called preposition or postposition in grammars of Gəʿəz and Amharic, are often bound elements, i.e. clitics or affixes. Many semantic case relators in Gəʿəz cannot take a personal pronoun as complement, but use the possessive suffixes instead,<sup>2</sup> which is impossible for case relators in Amharic and Muher. Case relators often denote various semantic relations, e.g. locative-instrumental(-malefactive), or allative-addressee-beneficiary(-genitive). The accusative case suffix *-ä* in Gəʿəz also functions as (or is homonymous with) the linking vowel *-ä*, which connects a head noun with a modifying noun (*bet-ä nigus* ‘house-LNK king’), or a case relator with its complement (*b-ä-bet* ‘in-LNK-house’), even if it is a suffix (*l-ä-kä* ‘to-LNK-you (2SM)’). This linking vowel became inherent part of the corresponding case relators in Amharic and Muher, but it is generally lacking if the relator functions as subordinating conjunction attached to imperfective verbs.

As in other Semitic languages, verbs in all Ethiosemitic languages are formed through non-linear morphology by intersecting a grammatical template with a lexical root, commonly consisting of three consonants. Ethiosemitic verbs inflect in three primary conjugations denoting the perfective or imperfective aspect, or the imperative/jussive mood. Gəʿəz and Amharic have an additional conjugation for the converb. These conjugations are characterized by a combination of the grammatical templates with a person-number-gender affix set indexing the subject. The affix set for perfective verbs entirely consists of suffixes, which differ from the set of prefixes and suffixes that combines with imperfective and jussive verbs, as well as from the suffix set of the converb conjugation (cf. Meyer 2016:167–178; Meyer 2014:228–235), as shown in Table 2. Except the converb, all verb bases, i.e. the combination of a grammatical template and a subject index, are independent (or fully finite) verbs in Gəʿəz. In Amharic and Muher, in contrast, the imperfective base is a dependent verb that needs additional modifications to function as predicate of affirmative main clauses, viz. an auxiliary verb in Amharic, or a main verb marker in Muher (cf., e.g. Meyer 2014:240–246). The main verb markers in Muher are the suffix *-u* (and its allomorphs *-i*, *-n*, *-tt*), which combines with imperfective verbs, the

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<sup>2</sup> Gəʿəz has two sets of almost identical person-number-gender suffixes to index objects on verbs, or to indicate the possessor on nouns (Tropper 2002:43–45). It is assumed that the relators mark their complement by a possessive suffix, not an object suffix, because they combine with the 1s possessive suffix *-jä*, but not with the object suffix *-ni*.

past auxiliary and the prohibitive constructions, and the suffix *-m* on perfective verbs (cf. Meyer 2014:239, 242–243 for details). Due to their almost complementary distribution in Muher, Rose (1996:219) analyzes them as tense markers, i.e. *-u* indicates non-past, but *-m* past. This analysis is not convincing because the assumed non-past marker *-u* also attaches to the past auxiliary, and exclusively occurs in affirmative main clauses.<sup>3</sup> Goldenberg (1999), therefore, rejects the tense function of *-u*, and considers *-u* (and its allomorphs) as marker of the “Independent-Affirmative-Indicative” (Goldenberg 1999:216, in particular fn. 11). As the suffix *-u* in Muher is also part of the prohibitive (Meyer 2014:239), and of predicates with an irrealis reading (cf. §6), it simply indicates that a verb (complex) is independent and functions as predicate of an affirmative main clause, hence it is an affirmative main verb marker.<sup>4</sup>

Table 2 Primary conjugations of Amharic Type A verbs

ROOT	TEMPLATES	INDEX	VERB BASE
√ s-b-r ‘break’	PERFECTIVE	-ä (3SM)	säbbärä ‘he broke’
	C <sub>3</sub> äCC <sub>2</sub> äC <sub>1</sub>		
	*säbbär	-u (3P)	säbbäru ‘they broke’
	IMPERFECTIVE	j- (3SM)	jisäbir ‘he breaks’ (dependent)
	C <sub>3</sub> äC <sub>2</sub> C <sub>1</sub>		
	*säbr	j-...-u (3P)	jisäbru ‘they break’ (dependent)
	JUSSIVE	j- (3SM)	jisbär ‘he should break’
	C <sub>3</sub> C <sub>2</sub> äC <sub>1</sub>		
	*sbär	j-...-u (3P)	jisbäru ‘they should break’
	CONVERB	-u (3SM)	säbro ‘he breaking’ (dependent)
	C <sub>3</sub> äC <sub>2</sub> C <sub>1</sub> ä		
	*säbrä	-w (3P)	säbräw ‘they breaking’ (dependent)

Depending on their number of root consonants, and the Verb Type (cf. Meyer 2016:168), lexical roots in Ethiosemitic belong to a specific conjugational class,

<sup>3</sup> Note that in Kistane, the main verb marker *-u* regularly combines with perfective and imperfective verbs (cf. Goldenberg 1999:217).

<sup>4</sup> The origin of the main verb marker *-u* is discussed controversially. Leslau (1967) considers it to be a Proto-Semitic feature related to the suffix *-u* as marker of indicative imperfective verbs in Classical Arabic. Hetzron (1968:171) argues against this hypothesis and suggest an origin from an assumed Proto-Semitic copula *\*wt~\*nt*. Goldenberg (1999:219), in contrast, proposes a more recent origin from deictic elements through contacts with non-Semitic languages.

which may alter the pattern of the grammatical templates. Moreover, the jussive templates in Gəʼəz and Muher have different patterns for a specific type of intransitive verbs vs. all other verbs. This distinction also occurs with the perfective template in Gəʼəz, while Muher uses different perfective templates for affirmative and negative verbs. Negation is commonly marked by a prefix attached to an inflected verb (cf. Bulakh 2012b; Meyer 2014:236–240).

Beside the obligatory subject index, objects can be optionally indexed on verbs by a separate suffix set. In Gəʼəz, object indexing on verbs has an impact on the case relator of the cross-referred nominal, which must be marked by the allative/dative relator *lä-* instead of the accusative suffix *-ä*. As Gəʼəz lacks a definite article, this strategy is often used to mark definite objects. In Amharic and Muher, object indexing rather has an emphasizing function, as they developed a definite marker for nouns. In addition to the marking of the primary object, Amharic and Muher use the object index preceded by case suffix to cross-refer applied objects.

### *2.3 Semantic functions of viewpoint aspect and tense*

Tense and aspect are two separate grammatical categories for the temporal description of situations (cf. Lindstedt 2001:768). Both of them are frequently marked by inflectional morphology in the languages of the world (Dahl 1985:14; Bybee 1985:32, 155–156). According to Comrie (1985:6–9), tense is a deictic category that locates the communicated situation on a time axis. With the moment of utterance as default reference point, tense can be subdivided into three basic values: present (at the moment of speech), past (before the moment of speech), and future (after the moment of speech) (cf. Bybee 1985:155).<sup>5</sup> Some languages use only two subdivisions, for instance by combining present and future tense under non-past (Comrie 1985:49–50).

Aspect deals with the internal temporal constituency of a situation (Comrie 1976:1–5), which can be encoded by different means. The semantics of a verb denotes a concrete situation in a specific lexical aspect, e.g. as a state or an activity. Specific temporal phases within the lexical aspect of a situation, like its beginning or prolonged duration, can be emphasized by morphosyntactic constructions denoting a specific phasal aspect. Lexical and phasal aspects are found in any language.

Verbs in languages with viewpoint aspect, in contrast, regularly occur in two contrasting forms – perfective and imperfective – to describe the same situation from two different perspectives. According to Sasse (Sasse 1991:11), the main concern of the viewpoint aspects is the semantically inherent boundary component

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<sup>5</sup> Relative tense (cf. Comrie 1985:Chap. 3), which has a variable deictic center, is not included here, as its temporal relations (i.e. anteriority, simultaneity, and posteriority) are considered taxis interpretations of the viewpoint aspect (Timberlake 2007:298; Lindstedt 2001:772; Sasse 1991:23).

of a situation. The perfective aspect emphasizes the transitory phase that marks the end of the activity with dynamic verbs, or the beginning of a state with inchoative-stative verbs. As a result, a situation denoted by a verb in the perfective aspect is often perceived as completed prior to the moment of speech, i.e. in the past (Bybee, Perkins & Pagliuca 1994:93; Dahl 1985:16). The imperfective aspect has the opposite function of the perfective. It suppresses any boundary component of a situation so that it is perceived as prolonged activity or extended state, which can convey various readings including that of a progressive, continuous, durative, iterative, habitual, or even as a “general present” (Timberlake 2007:294; Bybee 1985:143), which is by default interpreted as being of relevance at the moment of utterance, i.e. with a present or non-past time reference (Dahl 1985:16).

In contrast to past tense, which due to its deictic anchorage has a regular semantics with all verbs, the time-deictic interpretation of perfective verbs interferes with the verb semantics (Bybee, Perkins & Pagliuca 1994:93–95; Bybee 1994:351; Sasse 1991). Although the perfective aspect emphasizes the initial boundary of inchoative-stative verbs, this boundary is implicitly followed by a state, which is interpreted by default as being relevant at the moment of utterance resulting in a present time reading. However, in specific marked-contexts, inchoative-stative verbs can also convey a past reading in the perfective aspect. Dynamic verbs, in contrast, are always perceived as denoting past situations in unmarked contexts. Most frequently, languages with grammatical viewpoint aspect also mark the tense opposition past vs. non-past on verbs in the imperfective aspect yielding a tripartite opposition, in which the perfective is atemporal, but the imperfective marked for past or non-past reference (Dahl 1985:17).

In the description of Semitic languages, there is often no clear distinction between aspect and tense as distinct grammatical categories. On the other hand, it is commonly assumed that Proto-Semitic had a viewpoint aspect system at a certain stage, which then changed into an aspect-tense or tense system in individual languages (cf., e.g. Lipiński 1997:345–346; Stempel 1999:34; Rubin 2010:48–52). With regard to Ethiosemitic, Meyer (2016) argues that the predicate of a verbal clause is a verb that obligatorily inflects for viewpoint aspect or mood, whereas tense marking is a less prominent secondary development. The two main arguments in favor of viewpoint aspect over tense as primary inflectional category are: (i) the base form of a verb, i.e. the combination of a grammatical template with a subject index, is atemporal or unmarked for a specific time reference in the perfective and imperfective conjugation, and (ii) the time reference of verbs in the perfective conjugation is not uniformly past, but commonly present with inchoative-stative verbs, except in marked contexts (Meyer 2016:199–209).

In modern Ethiosemitic languages like Amharic and Muher, imperfective verbs in main clauses are obligatorily marked for a specific tense value (cf. §4), but they are still atemporal in subordinate clauses (cf. also Klingenberg 1956:276). In contrast, imperfective verbs in Gə‘əz are usually unmarked for tense, even in main clauses, so



that their base form can have a past or non-past interpretation depending on the context. For example, the imperfective of the dynamic verb ‘come’ is translated with future time reference in (1a), but as past habitual in (1b), in which the preceding clause establishes a past context (cf. also (31) in §4):

- (1) a. ወዘእምድኅሬየ ይመጽእ ይጽንእ እምኔየ። Gəʿəz  
*wä-ʔim-dixre-jä ji-mäss’iʔ ji-s’änniʔ ʔimi-nne-jä*  
 and-ABL-behind-POSS.1S 3SM-come\IPFV 3SM-be\_strong\IPFV ABL-AUG-POSS.1S  
 ‘The one who will come after me, is stronger than I.’ (Mt 3,11) (Tropper 2002:186)
- b. ወፅኦ እምሀገር ወጎደረ ውስተ መቃብር፣ ወይመጽኡ ማለእክት ወይዜንውዎ በእንተ ኩሉ።  
*wäs’ʔa ʔim-hagär wä-xadär-ä wist-ä mäk’abir*  
 exist\PFV.3SM ABL-town and-lodge\PFV-3SM inside-LNK grave  
*wä-ji-mäss’iʔ maläʔikt wä-ji-zenniwi-w-wo bäʔintä kʷillu*  
 and-3SM-come\IPFV angle.P and-SJ.3PM-report\IPFV- about all  
 SJ.PM-OJ.3SM  
 ‘He went out from the town and lodged between the graves. And angles used to come to him and to report him everything.’ (Praetorius 1886:57)

Dynamic verbs, such as ‘exit’ in (1b), usually evoke past reference in the perfective conjugation, whereas cognitive and sensory verbs in Gəʿəz may also have an additional present reading (cf. Dillmann 1907:168; Weninger 2001:75–76), as shown in (2a) vs. (2b):<sup>6</sup>

- (2) a. ወርእየ ኩሎ ዘገብረ። Gəʿəz  
*wä-riʔij-ä kʷullo zä-gäbr-ä*  
 and-see\PFV-3SM all.ACC REL-make\PFV-3SM  
 ‘And he saw all that he had made.’ (Dillmann 1907:168)
- b. ርኢኩዎ የሐውር።  
*riʔi-ki-wwo jä-ħawwir*  
 see\PFV-SJ.1S-OJ.3SM 3SM-go\IPFV  
 ‘I see that he is going.’ (Dillmann 1907:171)

The ambiguous time reading of perfective verbs with an inchoative-stative semantics is also found in modern Ethiosemitic, as shown in (3) for Amharic:

<sup>6</sup> Cognitive and sensory verbs have an inchoative-stative semantics, as they denote sensory impressions or mental states that cannot be actively or consciously influenced by a subject.

(3) a. አብዱ ቡና ተከለ።

AMHARIC

*abdo bunna täkkäl-ä.*

Abdo coffee plant\PFV-3SM

‘Abdo planted coffee (seedlings).’

b. በውርጩ ምክንያት በጣም በረደው።

*bä-wirtf’-u miknijat bät’am bärräd-ä-w*

LOC/INST-frost-DEF reason very feel\_cold\PFV-SJ.3SM-OJ.3SM

i. ‘He feels very cold because of the frost.’ (default) (Leslau 1995:437)

(ii. ‘He felt very cold because of the frost.’)

The perfective aspect of the dynamic verb ‘plant’ in (3a) emphasizes the end of the activity, which typically implies a past reading. However, the perfective aspect of the inchoative-stative verb ‘feel cold’ in (3b) highlights the transitory phase into a new state, but also implies its subsequent duration, which typically has the present tense reading (i), but could also refer to a past situation (ii) in a marked contexts, e.g. by adding a time adverb like ‘yesterday’. If the verb in (3b) were inflected for past tense such variation would be impossible because a tense marker is not sensitive to the lexical aspect.

### 3 TENSE MARKING IN COPULA AND EXISTENTIAL CLAUSES

Following Dixon (Dixon 2010:159–161), copula clause is defined as a bivalent clause that minimally consists of a copula as predicate, the copula subject, and the copula complement.<sup>7</sup> The copula connects the subject and the complement into a clause. This syntactic connection establishes a specific semantic relation between the two constituents, which always includes identity and attribution, but can also be extended to possession,<sup>8</sup> benefaction, location, and existence. For convenience, these various semantic relations, except existence, are amalgamated under the term linking relation in the following sub-sections.

The existential relation usually occurs in clauses which introduce entities in the discourse or assert their existence (McNally 2011:1832). They often stem from a locative copula clause and possibly further grammaticalize into possessive constructions, or original possessive constructions may develop into existential copulas (cf. Lyons 1967; Heine & Kuteva 2004:99, 203–204, 241–242).

<sup>7</sup> Goldenberg (2005:248) provides a similar definition for Semitic language, in which the subject, the predicative complement, and the predicative relation are three distinct components of a copula clause. For further details on the typology of copula clauses, cf., e.g. Hengeveld (1992); Pustet (2003).

<sup>8</sup> Among the various types of possessive constructions, the focus in this paper is solely on predicative possession, particularly HAVE-possession (cf. Heine 1997:26–33).

Consequently, clauses with an existential copula as predicate are monovalent, i.e. their only argument is the subject, as the original locative or possessive complement became part of a complex predicate. However, existence can be expressed through regular intransitive verbal predicates so that it might be difficult to distinguish between copula and verbal clauses (cf. Dixon 2010:260).

Morphosyntactically, a linker copula can be a verb, or various elements of non-verbal origin, such as (deictic) particles, demonstrative and personal pronouns. A subject and a complement can also be linked simply by juxtaposition, i.e. through an empty predicate. Contrary to Dixon (2010:160–161), empty predicates, which are almost limited to *Gəʕəz* in Ethiosemitic, will be treated as zero copula clauses, as their syntactic behavior is almost identical to that of personal pronoun copulas. There are two main sources for the grammaticalization of overt linker copulas, viz. regular verbs meaning ‘live, exist, be’, but also ‘go’ or stance verbs ‘sit, stand, lie’, which lost their referential component, and deictic elements, such as demonstratives or anaphoric pronouns (cf. Dixon 2010:183; Lehmann 2015:29). If languages have two copulas, one of them usually expresses stative relations, hence a BE-copula, but the other a change of state, i.e. it is a BECOME-copula that also might mark temporal reference (Dixon 2010:175).

Copula clauses in Proto-Semitic (and the presumed Ethiosemitic ancestor language) basically juxtapose subject and complement without an overt copula, whereas pronoun copulas are later innovations to mark topicalized or focused constituents (cf. Lipiński 1997:484–487; and also Zewi 1996:41–42; Klingenhoben 1956:264). Although the basic constituent order in Proto-Semitic is V–S–O, the pronoun copulas either intervene between S and O, or follow the complement (Lipiński 1997:485–486, 488). In S–O–COP clauses, the pronoun copula commonly agrees with the subject, while the intervening copula may also be an invariable 3SM pronoun. Several Semitic languages grammaticalized a deictic element as copula on which the subject is cross-referred by subject or object indexes of regular verbs (Lipiński 1997:487).<sup>9</sup> The Proto-Semitic copula clauses are unmarked for aspect, tense, and mood, but obtain their temporal and modal reading from the context or through adverbials (Lipiński 1997:485).

### 3.1 *Gəʕəz*

Copula clauses in *Gəʕəz* have either a zero copula or a personal pronoun as predicate. The original zero copula clauses express several semantic relations, including identity (4), attribution (5), and location (6):

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<sup>9</sup> Regarding copula clauses in Semitic languages in general, cf. Zewi (2008) for a concise bibliography. A comparative overview of copula clauses in Semitic languages is found in Zewi (1996; 1999), while Goldenberg (2005; 2007) elaborates on specific morpho-semantic features of copula predicates.

## IDENTITY

- (4) አንትሙ ዘክርስቶስ፣ ወክርስቶስኒ ዘእግዚአብሔር። Gəʿəz  
*?antimu (ø) zä-kristos wä-kristosi-ni (ø) zä-?igzi?abher*  
 2PM COP? POSS-Christ and-Christ-FOC COP? POSS-God  
 ‘You are Christ’s and Christ is God’s.’ (1 Cor 3,23) (Dillmann 1907:469)

## ATTRIBUTION

- (5) a. ወምድሩ በረድ። Gəʿəz  
*wä-midr-u (ø) bäräd*  
 and-floor-POSS.3SM COP? crystal  
 ‘And its floor was crystal.’ (Hen 14,10) (Dillmann 1907:496)
- b. ኅሊናክ እኩይ።  
*xillina-kä (ø) ?ikkuj*  
 thought-POSS.2SM COP? evil  
 ‘Your thought is evil.’ (Gen 46,15) (Praetorius 1886:160)

## LOCATION

- (6) a. ወስይፍ ምሉኅ ውስተ እደሁ። Gəʿəz  
*wä-säjf mīlux (ø) wistä ?id-e-hu*  
 and-sword drawn COP? inside hand-LNK-POSS.3SM  
 ‘And a drawn sword was in his hand.’ (Josh 5,15) (Dillmann 1907:504)
- b. እምነ ዐጽምየ ወእምነ ሥጋየ አንተ።  
*?im-innä ?as’mi-jä wä-?im-innä šiga-jä (ø) ?antä*  
 ABL-AUG bone-POSS.1S and- ABL-AUG flesh-POSS.1S COP? 2SM  
 ‘Of my bone and of my flesh art thou.’ (Gen 29,14) (Dillmann 1907:496)

Later, the independent personal pronouns are used as another copula in Gəʿəz, probably to avoid syntactic ambiguity and as a device for emphasis (Dillmann 1907:498–499; Tropper 2002:215).<sup>10</sup> Syntactic ambiguity occurs in sequences of noun and an adjective or demonstrative, in which the adjective and the demonstrative can function as attribute, or head noun:

<sup>10</sup> Regarding the origin of the Arabic pronoun copula, similar reasons are proposed. Eid (1983:203–206) argues for Egyptian Arabic that the ambiguity between the attributive and clausal reading of a noun phrase was removed by pronouns as copula. Zewi (1996), however, assumes that the third person pronouns did initially not function as a copula, but are “grounded on the basic structure of extraposition” (Zewi 1996:52), i.e. in emphatic constructions.

- (7) a. **ሞት እኩይ** GE'EZ  
*mot* *ʔikkuj*  
 death evil  
 i. 'an evil death' (Dillmann 1907:424)  
 (but also: ii. 'Death is evil.')
- b. **ዝንቱ ውእቱ ንጉሥ።**  
*zintu wiʔitu nigus'*  
 PRX COP/3SM king  
 'This is the king.' (Tropper 2002:215)

Dillmann (1907:424) only provides the translation (i) for (7a), but it could also represent a copula clause as in (ii). If the 3SM personal pronoun *wiʔitu* intersects between demonstrative and noun, as in (7b), they represent a copula clause. Without the pronoun, (7b) would be a noun phrase, i.e. *zintu nigus'* 'this king'.

Dillmann (1907:498) assumes that the pronouns copula became so prominent that it even was extended to unambiguous sequences of nominals in copula clauses, probably for emphasis, which results in the tendency to avoid the zero copula throughout:

- (8) **እነ ውእቱ አምላክ አብርሃም።** GE'EZ  
*ʔanä wiʔitu ʔamlak-ä ʔabriham*  
 1S 3SM/COP God-LNK Abraham  
 'It is me who is / I am the God of Abraham.' (Gen 26,4) (Dillmann 1907:499)

However, clauses with a relator phrase as complement, as in (6), seem not to use a pronoun copula. Particularly, copula clauses with a locative complement marked by the relator *b(ä)-*, which express possession or location/existence, as in (9), apparently never have a pronoun copula. Note that the 3SM and 3SF possessive suffixes on the locative relator can be augmented by the suffixes *-tu* or *-ti*, respectively, as in (9b):

- (9) a. **አብ ብነ።** GE'EZ  
*ʔab-ä bi-nä (ø)*  
 father-ACC LOC-POSS.1P COP?  
 'A father – we have.' (Dillmann 1907:407)
- b. **ወባቲ ለርብቃ እኅወ።**  
*wä-b-a-ti (ø) lä-riḃäk'a ʔixw-ä*  
 and-LOC-POSS.3SF-AUG COP? ALL-Rebecca brother-ACC  
 'And she, Rebecca, had a brother.' (Gen 24,29) (Dillmann 1907:438)

c. በ ማየ/ማይ።

*bä-u* [bo]      *maj(ä)*

LOC-POSS.3SM    water(-ACC)

‘There is/was water.’ (Tropper 2002:218; Lambdin 1978:123)

Possessive and existential constructions show further peculiarities. Their subject is usually lacking – or an expletive 3SM ‘it’, which is always opaque. The possessor is usually salient in discourse, and only cross-referred by possessive suffixes on the locative relator, as in (9a). If an overt noun denotes the possessor, it is simply placed adjacent to the locative complement, or marked by the allative relator *l(ä)*- ‘to, for’, as in (9b). The noun denoting the possessed entity, predominantly occurs in the accusative, cf. (9a–b).

In existential clauses like (9c), the locative complement is invariably *bo*, i.e. the relator *b(ä)*- with the expletive 3SM possessive pronoun *-u* as complement. The pivot noun whose existence is asserted is usually unmarked, or sporadically in the accusative. In the latter case, existential and possessives copula clauses are identical so that the construction with the accusative noun in (9c) could also mean ‘He has/had water.’ These morphosyntactic peculiarities could indicate that the copula clause with the locative relator *b(ä)*- first grammaticalized as predicative possessive construction, and then developed into an existential marker.

As shown in (5), (6) and (9), zero and pronoun copula clauses are translated with present and past reference so that they cannot be marked for a specific tense, i.e. they obtain their time interpretation from the context (Tropper 2002:221; cf. also Dillmann 1907:500).

Gə‘əz has another type of existential clause with the perfective verb *halläwä~hallo* ‘exist’ as predicate (but cf. also §7.1), which frequently has a non-past reading (cf. Goldenberg 2013:216–217; but also Tropper 2002:183):

(10) a. ህየ ሀሎኩ አነ ማእከሎሙ።

Gə‘əz

*hijjä hallo-ku      ?anä      maʔikäl-omu*

DST    exist\PFV-3SM    1S      middle-POSS.3PM

‘There am I (present) in the midst of them.’ (Matt 18,20) (Dillmann 1907:499–500)

b. ሀለዉ ዕራቃኒሆሙ።

*halläw-u      ʕirakʹani-homu*

exist\PFV-3PM      naked.P-POSS.3PM

‘They were naked.’ (Gen 2,25) (Dillmann 1907:361)

c. አምጣኑ ሀሎ መርዓዊ ምስሌሆሙ።

*ʔamt'an-ä hallo märṣāwi misle-homu*  
 extent-ACC exist\PFV.3SM groom COM-3PM

‘As long as (lit. to the extent) the bridegroom is with them.’ (Mark 2,19)  
 (Dillmann 1907:410)

In contrast to the existential *bo* clause in (9c), the pivot noun in the existential constructions in (10) is obligatorily indexed as subject on the verb *halläwä*. Beside existence, *halläwä* also emphasizes prolonged duration, as in (10b–c). The verb *halläwä* in Gə‘əz is also said to function as past auxiliary, e.g. Tropper (2002:223), due to time contrasts, as in the following example:

(11) a. ምስሌኑ እግዚአብሔር።

Gə‘əz

*misle-nä ʔigziʔabxer*  
 COM-POSS.1P God

‘God is with us.’ (Tropper 2002:223)

b. ወሀሎ እግዚአብሔር ምስለ ዮሴፍ።

*wä-hallo ʔigziʔabxer mislä josef*  
 and-exist\PFV.3SM God COM Joseph

‘And God was with Joseph.’ (Gen 39,2) (Tropper 2002:223)

Given the alternating time reference of *halläwä* in (10), its analysis as past auxiliary is not convincing. Consequently, the time reference in these clauses must stem from the context alone. The verbal copula *halläwä* rather seems to emphasize exclusively the existence of the predicative relation between subject and complement, which could be interpreted as temporary, in contrast to a permanent relation established by the linker copula.<sup>11</sup>

Past time reference in copula clauses is infrequently indicated by the verb *konä* ‘be(come)’ in the perfective conjugation, which still is a regular lexical verb in Gə‘əz (Dillmann 1907:499–500), as in (12). Lambdin (1978:61) mentions that *konä* even may replace the existential verb *halläwä* in past contexts, similar to (12c), but not vice versa.

<sup>11</sup> The semantic and pragmatic differences between *halläwä* and *bo* existential clauses need further research. Remarkably, verbal and non-verbal existential constructions also co-occur in Akkadian (cf. Bar-Asher Siegal 2011).

- (12) a. **ወኩነ ድቀቱ ዐቢየ።** GǝʿǝZ  
*wä-kon-ä* *dik'ät-u* *ʃabij-ä*  
 and-be(come)\PFV-3SM ruin-POSS.3SM big.SM-ACC  
 ‘And great was its destruction.’ (Matt 7,27) (Tropper 2002:224)
- b. **ወኩነ ሕግ ውስተ እስራኤል።**  
*wä-kon-ä* *ḥigg* *wist-ä* *ʔisraʔel*  
 and-be(come)\PFV-3SM custom inside-LNK Israel  
 ‘A custom arose/it became a custom in Israel.’ (Judges 11,39) (Dillmann 1907:442)
- c. **ኮኖ ለኖኅ**  
*kon-ä-u* [kono] *lä-nox*  
 be(come)\PFV-SJ.3SM-OJ.3SM ALL-Noah  
 ‘There was to Noah ...’ (Gen 7,6) (Dillmann 1907:443)

Although *konä* is an inchoative-stative verb, its affirmative perfective conjugation never conveys a present reading in copula clauses. In negation, however, it commonly implies present, as in (13a), but rarely past, as in (13b).

- (13) a. **እኩየ ጸጓር ውእቱ ወአንሰ ኢኮንኩ ጸጓረ።** GǝʿǝZ  
*ʔixu-jä* *s'äg<sup>w</sup>ar* *wiʔitu* *wä-ani-ssä* *ʔi-kon-ku* *s'äg<sup>w</sup>ar-ä*  
 brother- hairy 3SM/COP and-1S-EMPH NEG-be(come)\PFV-1S hairy-ACC  
 POSS.1S  
 ‘My brother is hairy while I am not.’ (Gen 27,11) (Dillmann 1907:500)
- b. **ኢኮነ ሠናየ።**  
*ʔi-kon-ä* *śānaj-ä*  
 NEG-be(come)\PFV-3SM good-ACC  
 ‘It is not good.’ (Matt 15,26) (Dillmann 1907:442)

The negated perfective of *konä* often substitutes the linker copula in negative clauses. Other means of negating copula clauses are the negative particle *ʔakko*, the prefix *ʔi-* attached to the negated constituent, or the negative prefix *ʔal-*, which is restricted to locative/existential constructions with the relator *b(ä)-* as complement, e.g. *ʔal-bo* ‘there is/was no’ (cf. Tropper 2002:220–221). The existential verb *halläwä* is regularly negated by the prefix *ʔi-*:

- (14) **ኢሀሎኩ በሥጋ ሀሎኩ በመንፈስ።** GǝʿǝZ  
*ʔi-hallo-ku* *bä-śiga* *hallo-ku* *bä-mānfäs*  
 NEG-exist\PFV-1S LOC-flesh exist\PFV-1S LOC-soul  
 ‘I am not physically present, (but) spiritually.’ (Praetorius 1886:58)



A peculiar feature of Gəʿəz is the use of the linker copula in subordinate clauses, cf. (15a) vis-à-vis the subordinated verb *halläwä* in (15b):

- (15) a. **ዘይመውት እንዘ ጸድቅ ወኒር** Gəʿəz  
*zä-jä-mäwwit ʔinzä (ø) sʾadikʾ wä-xer*  
 REL-3SM-die\IPFV while COP? righteous and-good  
 ‘who dies while being righteous and good’ (Hen 81,4) (Dillmann 1907:483)
- b. **እንዘ ሀሎኩ ውስተ ዓለም ሰማዕኩ ዜናሁ ለቅዱስ።**  
*ʔinzä hallo-ku wist-ä ʕäläm sämaʔ-ku zena-hu lä-kʾiddus*  
 while exist\PFV-1S inside-LNK world hear\PFV-1S news-POSS.3SM ALL-holy  
 ‘While I was in the world, I heard the news of the holy.’ (Praetorius 1886:149)

Most modern Ethiosemitic languages restrict the linker copula to main clauses, but substitute it by the regular verb ‘be(come)’ in subordination (cf. example (21) in §3.2). In Gəʿəz, however, *konä* ‘be(come)’ in the perfective conjugation only rarely substitutes the linker copula in subordination, apparently to refer overtly to a past situation:

- (16) **ብዙኅ ዘእምተጽሕፈ ዘኮነ ጸብእ ላዕለ ንጉሥ።** Gəʿəz  
*bizux zä-ʔim-täsʾihif-ä zä-kon-ä sʾäbiʔ laʕil-ä nigusʾ*  
 many REL-ABL-be\_written\PFV-3SM REL-be(come)\PFV-3SM warfare top-LNK king  
 ‘More than what has been written of (here), (was) the warfare that was (conducted) by the king.’ (Dillmann 1907:533)

The sketchy description of linker and existential copula clauses in Gəʿəz clearly shows that they are unmarked for tense. The use of *halläwä* and *konä* instead of a linker copula is often optional, usually to emphasize a more specific reading, viz. past reference for *konä*, and (temporary) existence for *halläwä*.

### 3.2 Amharic and Muher

Amharic and Muher have an obligatory linker copula based on the inflected element *\*n*, which probably derives from an original deictic construction (cf. §7.2). Similar to Gəʿəz, the linker copula expresses a variety of semantic relations, cf. (17)–(20), which, however, do not include existence.

## IDENTITY

- (17) a. አልማዝ የሃና እህት ናት/ነች። AMHARIC  
*ʔalmaz jä-hanna ʔihit nat / nättf*  
 Almaz.F GEN-Hanna.F sister COP.OJ.3SF COP.SJ.3SF  
 ‘Almaz is Hanna’s sister.’
- b. *zi miss ʔaddis-we ʔastämari-n.* MUHER  
 PRX man new-DEF teacher-COP.3SM  
 ‘This man is the new teacher.’

## ATTRIBUTION

- (18) a. ልጆቹ ወፋፍራም ናቸው። AMHARIC  
*liḱ-ottf-u wäfafram nattsäw*  
 child-P-DEF big.P COP.OJ.3P  
 ‘The children are big.’
- (19) a. *bä-dähä bet jannätt gärad likk’e mälkamma-ʔe-ja.* MUHER  
 LOC-2SM house REL:AUX.EXIST.3SF girl very beautiful-thing-(COP)OJ.3SF  
 ‘The girl in your house is very beautiful.’
- b. *mam<sup>w</sup>ä-mmi-n-kä?* c. *rawda-m sitti-m gällif-k’e-n-äma.*  
 good-FOC-COP-SJ.2SM Rawda.F-FOC Sitti.F-FOC tall-thing-COP-OJ.3PF  
 ‘Are you well?’ ‘Rawda and Sitti are tall.’

## LOCATION

- (20) a. (ቁልፉ) በጠረጴዛ ላይ ነው። AMHARIC  
*(k’ulf-u) bä-t’äräp’eza laj näw*  
 (key-DEF) LOC-table top COP.OJ.3SM  
 ‘(The key)/It is on (the) table.’
- b. *(fästal-we) bä-sat’in ʔanc’ät-in.* MUHER  
 plastic\_bag-DEF LOC-box behind-COP.3SM  
 ‘The plastic bag is behind the box.’

In Muher, the linker copula is a bound element that attaches to the predicate complement, but in Amharic it is an independent word, which alone can represent a full clause (cf. Goldenberg 1965:13). If the subject in Amharic and Muher copula clauses is salient in discourse it may not be denoted by an overt noun, but it must be indexed on the copula clauses, as in (20). The linker copula regularly inflects by object suffixes in Amharic; only the 3SF subject alternatively can be indexed by a verbal suffix, cf. (17a). In Muher, the linker copula inflects less regular. The 1/2 persons are indexed by verbal subject suffixes (19b), but the 3P by the object suffixes (19c). The plain copula *-n* marks 3SM subjects (20b), and the object suffix *-ja* 3SF subjects (19a).

The linker copula in Amharic and Muher occurs exclusively in affirmative main clauses. In subordination, it is substituted by the inchoative-stative verb *honä* ‘be(come)’, which is cognate with Gə‘əz √ *k-w-n* (cf. §7.3):

- (21) a. አልማዝ እሁቴ ስለሆነች አልመታትም። AMHARIC  
*ʔalmaz ʔihit-e silä-hon-ättf ʔal-mätat-im*  
 Almaz.F sister-POSS.1S because-be(come)\PFV-3SF NEG.SJ.1S-hit\IPFV.OJ.3SF-FOC  
 ‘As Almaz is my sister, I don’t hit her.’
- b. begg jä-hon-ä-ät [jähonät] likk’e ji-zämb-u. MUHER  
 rainy\_season REL-be(come)\PFV-3SM-ADE much 3SM-rain\IPFV-MVM  
 ‘As it is the rainy season, it rains a lot.’

In contrast to Gə‘əz (cf. (16)), the perfective conjugation of the verb *honä* as verbal copula in subordination usually conveys a present reading in Amharic and Muher, as in (21). In main clauses, the negated perfective of *honä* regularly substitutes the linker copula in Muher (22), whereas Amharic has an additional negative copula *ajdällä* ‘not be’, which inflects like a perfective verb (22a):

- (22) *ʔalmaz tämari ʔan-xon-ätt.* MUHER  
 Almaz.F student NEG-BE(COME)\PFV-3SF  
 i. ‘Almaz is not a student.’ (default)  
 ii. ‘Almaz did not become a student.’
- (23) a. አልማዝ አስተማሪ አይደለችም። AMHARIC  
*ʔalmaz ʔastämari ʔajdällättf-im*  
 Almaz.F teacher COP.NEG.3SF-FOC  
 ‘Almaz is not a teacher.’
- b. አልማዝ አስተማሪ አልሆነችም።  
*ʔalmaz ʔastämari ʔal-hon-ättf-im*  
 Almaz.F teacher NEG-be(come)\PFV-3SF-FOC  
 ‘Almaz did not become a teacher.’ / \*‘Almaz is not a teacher.’

The time implications of the Amharic negative copula in (23a) is not identical to that of negated copula verb *honä* in (23b), i.e. the negated copula *honä* narrowed its semantics from an inchoative-stative verb to a telic verb, which subsequently only yields a past reading. The corresponding atelic situation with a present reading is expressed by the negative copula *ʔajdällä* in (23a). In Muher, such a semantic shift does not occur in negated main clauses, as shown in (22), in which *honä* is still an inchoative-stative verb with the dominant atelic present reading (22i), but it can also express a telic past situation in marked contexts resulting in reading (22ii). The narrow telic semantics of *honä*, nevertheless, occurs in affirmative main clauses in Muher – and in Amharic as well:

- (24) a. *miss-we näggäde hon-ä-m.* MUHER  
 man-DEF merchant be(come)\PFV-3SM-MVMP  
 ‘The man became/\*is a merchant.’

- b. ሰውየው ነጋዴ ሆነ። AMHARIC  
*säw-ijjä-w näggade hon-ä*  
 person-SNG-DEF merchant be(come)\PFV-3SM  
 ‘The man became/\*is a merchant.’

The examples (22)–(24) show that the inchoative-stative lexical semantics of *honä* is affected through semantic and syntactic interference with the linker copula, which expresses a stative relation per se. If *honä* and the linker copula are competing alternative copula predicates, as in (23) and (24), the inchoative-stative semantics of *honä* is narrowed to a telic reading. If *honä*, however, is the only possible option, as in (22), its semantics does not change. Thus, the lexical aspect of *honä* is not completely fixed, but varies due to its interference with other available copula predicates. More specifically, the grammaticalization of a deictic element as linker copula not only affects the semantics of the copula, but also of other regular verbs that are conceptually associated with it, like *honä*. Consequently, the semantics and functional range of the root original root √ k-w-n ‘be(come)’ is not uniform in Gə‘əz, Amharic and Muher, but shaped through language-specific developments.

The existential relation in Amharic and Muher is not expressed through a linker copula with an locative complement, but by another predicate, viz. the existential auxiliary *?allä* in Amharic (which is cognate with Gə‘əz *halläwä* ‘exist’) or *jinä* in Muher, which only occur in a single (perfective) conjugation in affirmative clauses (cf. §7.1):

- (25) a. ውሃ (እቤት ውስጥ) አለ። AMHARIC  
*wiha (?i-bet wist’) ?allä*  
 water (LOC-house inside) AUX.EXIST.3SM  
 ‘There is water (in the house).’

- b. (bahuyña ge) mango likk’e jinä-ä-u [jino]. MUHER  
 LOC.now time mango much AUX.EXIST-3SM-MVM  
 ‘There are plenty of mangos (at this time).’

While Amharic *?allä* is also found in subordinate clauses, Muher *jinä* is restricted to main clauses, in which it regularly combines with the main verb marker. In subordination, *jinä* is substituted by the bound existential auxiliary =*annä*, cf. (19a), which is related to Amharic *?allä* and Gə‘əz *halläwä* (cf. §7.1). In syntactic contexts requiring a jussive verb or a verbal noun, the existential auxiliaries are substituted by the respective verbs with the meaning ‘live’, viz. *norä* in Amharic and

*näbbärä* in Muher (cf. §7.3). These verbs may also substitute the existential auxiliaries in subordinate clauses, which require a verb in the imperfective conjugation, although they can combine with subordinating conjunction restricted to imperfective verbs (cf. §7.1):

- (26) a. **ዝናብ ሲኖር አየሩ ይቀዘቅዛል።** AMHARIC  
*zinab s-i-nor ?ajär-u jì-k'äzäkk'iz-all*  
 rain while-3SM-live\IPFV air-DEF 3SM-be(come)\_cold\IPFV-AUX.EXIST/NPST  
 'When it rains the air cools down.'
- b. **binäbr mikat jännä.** MUHER  
*bijä b-i-näbir mikat jännä.*  
 ensete\_pith while-3SM-live\IPFV problem AUX.EXIT.NEG.3SM  
 'When there is ensete pith (to make local bread) there is no hunger.'

Like linker copulas, the existential auxiliaries have suppletive forms in negation, which inflect with the subject index of perfective verbs, but never convey a past reading. Muher uses *jännä* in negated main and subordinate clauses, whereas Amharic has *jällä* in main clauses, but the bound =*lellä* in subordination:

- (27) a. **የሌለ ነገር የለም።** AMHARIC  
*jä-lellä nägär jällä-m*  
 REL-AUX.EXIST.NEG.3SM thing AUX.EXIST.NEG.3SM-FOC  
 'There is nothing which is not there.'
- b. **sikk<sup>w</sup>ar nägä jino, ?äkk<sup>w</sup>a jännä.** MUHER  
 sugar tomorrow AUX.EXIST.3SM.MVM today AUX.EXIST.NEG.3SM  
 'There will be sugar tomorrow, today it is out.'

The various existential auxiliaries are the bases for predicative possession constructions, in which the possessed entity is marked as subject on the verb and the possessor as object:<sup>12</sup>

- (28) a. **ማሞ ቤት አለው።** AMHARIC  
*mammo bet ?allä-w*  
 Mammo.M house AUX.EXIST.SJ.3SM-OJ.3SM  
 'Mammo has a house.'
- b. **ፋገላላ ባዛ ቦርር ገንዳ-ከ-ከት.** MUHER  
*Jilalu.M many BIRR jinä-nn-itt.*  
 Jilalu.M many BIRR AUX.EXIST.SJ.3SM-OJ.3SM-MVM  
 'Jilalu has a lot of money.'

<sup>12</sup> Cf. Ahland (2009), for predicative possession in Amharic.



Moreover, the dipartite division between linker copula and existential auxiliary is peculiar to Ethiosemitic (and Akkadian), but seems to be absent elsewhere in Semitic (Leslau 1952:72).

#### 4 TENSE-MARKED IMPERFECTIVE VERBS IN MAIN CLAUSES

Main-clause imperfective verbs in Gəʿəz are unmarked for tense, but only encode aspect, i.e. their time interpretation solely depends on the discourse context (cf., e.g. (1) in §2.3). Therefore, the same imperfective verb can have a present or a past reading, as in (31), in which the imperfective *jik'ättil* denotes a general statement at the moment of speech in (a), but a past habitual situation in (b):

- (31) a. **ወውእቱ ይቀትል ወያሐዩ።** Gəʿəz  
*wä-wiʔitu jì-k'ättil wä-j-aħajji*  
 and-3SM 3SM-kill\IPFV and-3SM-enliven\IPFV  
 'He *kills* and makes alive.' (Weninger 2001:136)
- b. **ዘፈቀደ ይቀትል ወዘፈቀደ ይቀሥፍ ወዘፈቀደ ያከብር።**  
*zä-fäk'äd-ä jì-k'ättil wä-zä-fäk'ädä jì-k'äśśif wä-zä-fäk'ädä j-akäbbir*  
 REL-wish\ 3SM- and-REL- 3SM- and-REL- 3SM-  
 PFV-3SM kill\IPFV wish\PFV-3SM torture\PFV wish\PFV-3SM honor\IPFV  
 'He *used to kill* whom he liked, to torture whom he liked, and to honor whom he liked.' (Dan 5,19) (Tropper 2002:188)

Like copula predicates (cf. 3.1), Gəʿəz can optionally mark past reference on imperfective verbs by combining them with *konä* in the perfective conjugation, which now clearly functions as past auxiliary (Tropper 2002:108; Weninger 2001:287):

- (32) **ኮንኩ እባርኮ ለእግዚእ።** Gəʿəz  
*kon-ku ʔi-barrik-o lä-ʔigziʔi*  
 AUX.PST-1S SJ.1S-praise\IPFV-LNK.OJ.3SM ALL-God  
 'I was just praising God' (Hen 12,3) (Dillmann 1907:172)

Alternatively, a past reading is reported for combinations of an imperfective verb with the existential verb *halläwä* (33a), and the verb *näbärä* 'sit' (33b) in the perfective conjugation (cf., e.g. Tropper 2002:197–198; Dillmann 1907:172):

- (33) a. **ወሎጥስ ሀሎ ይነብር ውስተ አንቀጽ።** Gəʿəz  
*wä-lot'i-ssä hallo jì-näbbir wist-ä ʔank'äs'*  
 and-Lot-EMPH AUX.EXIST.3SM 3SM-sit\IPFV inside-LNK gate  
 'Just while Lot was sitting in the gate.' (Gen 19,1) (Dillmann 1907:172)

- b. ነበርኩ እጼሊ።  
*näbbär-ku*      *ʔi-s'elli*  
 sit\PFV-1S      1S-pray\IPFV  
 'I kept on praying.' (Dillmann 1907:172)

The existential auxiliary *hallo* in (33a) seems rather to emphasize the continuous reading 'being in the state of sitting'. As predicates consisting of an imperfective verb and the existential auxiliary may also refer to present or future situations – cf. particularly Weninger (2001:256–270) – it is unlikely that *hallo* marks past tense. Similar to the plain imperfective verb in (31), the past reading of imperfective verb and existential auxiliary *hallo* in (33a) is induced through the context, but not through the grammar (cf. also §3.1 and §5.2). Regarding the use of the regular Gəʿəz verb *näbbärä* 'sit' as marker of the past imperfective, Weninger (2001:305) concludes that it represents a calque from Amharic because this combination appears relatively infrequent in more recent texts (cf. also §5.1, fn. 18). Thus, most probably only *konä* functions as optional past auxiliary in Gəʿəz.<sup>13</sup>

In Amharic and Muher, however, tense is grammaticalized as an obligatory feature of imperfective verbs in main clauses. Past tense is commonly marked by the respective past auxiliaries of copula clauses, viz. *näbbär* in Amharic and *bannä* in Muher:

- (34) a. *dirä-ge inninge bä-xʷett säʔat ti-dgädde banno.* MUHER  
 former- always LOC-two hour 3SF-sleep\IPFV AUX.PST. (3SM).MVM  
 time  
 'In former times, she used to sleep at two o'clock [i.e. at 8 pm].'  
 ድሮ ጧት ጧት ቡና እጠጣ ነበር። AMHARIC  
 b. *duro tʷat ≈ tʷat bunna ʔi-t'ätt'a näbbär*  
 formerly morning ≈ ITER coffee 1SG-drink\IPFV AUX.PST  
 'In former times, I used to drink coffee every morning.'

The two past auxiliaries in (34) are phonetically independent words, but lack the obligatory subject index of regular perfective verbs, which is evident on the Amharic auxiliary *näbbär* in (34b). Although the Muher past auxiliary *bannä* in (34a) ends in the vowel *ä*, it does not cross-refer the 3SF subject, but is an inherent part of auxiliary base, i.e. the base of the past auxiliary *bannä* is formally identical with the form for a 3SM subject. In Muher, moreover, the past auxiliary also hosts the main verb marker, which is obligatory part of affirmative main clauses (cf. §2.2 for details).

<sup>13</sup> A parallel grammaticalization of the √ k-w-n to a past marker on imperfective verbs is found in Arabic (cf. Stempel 1999:38).



Non-past reference is variously marked on imperfective verbs. In affirmative main clauses, Amharic indicates non-past through the existential auxiliary *?allä*. In contrast to the past auxiliary *näbbär* in (34b), *?allä* still indexes the subject for most persons,<sup>14</sup> but it cliticizes to the preceding imperfective verb (cf. Leslau 1995:341), as in (35):

- (35) ነገ ሙቶ ብር ትስጠዋለህ። AMHARIC  
*nägä mäto bīrr ti-sät'-äw = allä-h.*  
 tomorrow hundred birr 2SM-give\IPFV-OJ.3SM = AUX.EXIST/NPST-2SM  
 'You will give him hundred birr tomorrow.'

In Muher, non-past is not marked by an auxiliary on imperfective verbs, i.e. they are formally similar to those in Gə'əz, cf. (31), except the clause-final main verb marker in affirmative main clauses:

- (36) *inninge bä-x<sup>w</sup>ett ≈ bä-x<sup>w</sup>ett sä?at ji-dgädde-<sup>w</sup>u-ø* MUHER  
 always LOC-two ≈ ITER hour 3SM-sleep\IPFV-MVM-NPST  
 'He always sleeps at two o'clock [i.e. 8 pm].'

The main verb marker *-u* in (36) does not mark tense, as it also combines with the past auxiliary *bannä* in (34a) (cf. also §2.2). Nevertheless, imperfective verbs as predicate of a main clause in Muher exclusively denote non-past situations. Consequently, they cannot be combined with a past adverbial, unless they are overtly marked for past by the auxiliary *bannä*, as shown in (37a) vs. (37b):

- (37) a. *\*dirä-ge tʃ'at ji-?äm-u-ø.* MUHER  
 former-time khat 3SM-chew\IPFV-MVM-NPST  
 Intended: 'In former times, he was chewing khat.'
- b. *dirä-ge tʃ'at ji?äm banno.*  
 former-time khat 3SM-chew\IPFV AUX.PST.3SM.MVM  
 'In former times, he was chewing/used to chew khat.'

<sup>14</sup> In combination with imperfective verbs, only the 3SM of the existential auxiliary *?allä* is peculiar because it lost the word-final base vowel, which also hosted the 3SM subject suffix *-ä*, yielding uninflected = *all*. The reduced form = *all* also cliticizes to 3P imperfective verbs marked by an additional object index, and to the converb in present perfect construction (cf. §5.1), in which = *all* occurs with all persons, except the 1s and the 3SF (cf. 2014 for details).

In subordination, however, plain imperfective verbs are not obligatorily marked for tense when they denote situations that are situated in the past through the main clause predicate, as in (38):

- (38) *jiftät*      *tʃʼat*      *t-i-ʔäm*      *ʔaʒʒä-hu-nni-m.* MUHER  
 previously   khat      SUB-3SM-chew\IPFV      SEE\PFV-SJ.1S-OJ.3SM-MVMP  
 ‘Previously, I saw him chewing khat.’

The ungrammaticality of the plain imperfective verb in the main clause (37a) vis-à-vis its appropriate use in the subordinate clause (38), implies that the tense value of the two predicates is not identical. As in copula clauses (cf. §3.2), the obligatory marking of past situations in main clauses yields the morphosyntactic opposition plain imperfective verb vs. imperfective verb plus past auxiliary. This morphological opposition, furthermore, affects the semantics of the predicates, i.e. past-marked imperfective verbs limit the use of their plain counterparts to present and future situations, and cause the grammaticalization of a zero non-past marker in main clause predicates. Consequently, the original atemporal reading of imperfective verbs in Gəʿəz is only found in subordinate clauses in Muher, as well as in Amharic, as shown in (39a) vs. (39c). The zero non-past marker, furthermore, is part of predicates with an negated imperfective verb in Amharic, as can be deduced from the ungrammaticality of (39a) vs. (39b):

- (39) a. *\*ድሮ ቡና አይጠጣም።* AMHARIC  
*\*duro bunna ʔa-j-tʼättʼa-mm-ø*  
 former coffee NEG-1SG-drink\IPFV-FOC-NPST  
 Intended: ‘In former times, he was not drinking coffee.’
- b. *ድሮ ቡና አይጠጣም ነበር።*  
*duro bunna ʔa-j-tʼättʼa-mm näbbär.*  
 former coffee NEG-1SG-drink\IPFV-FOC AUX.PST  
 ‘In former times, he was not drinking coffee.’
- c. *ድሮ ቡና ሳይጠጣ ትምህረት ይማር ነበር።*  
*duro bunna s-a-j-tʼättʼa timhört ji-mmär näbbär*  
 former coffee SUB-NEG-1SG-drink\IPFV-FOC lesson 3SM-learn\IPFV AUX.PST  
 ‘In former times, he was learning without drinking coffee.’

Thus, two morphemes indicate non-past on Amharic main-clause imperfective verbs, viz. the existential auxiliary *ʔallä* in affirmative clauses, and the zero morpheme in negation. Apparently, the non-past marker *ʔallä* is a more recent innovation in Amharic. In the Old Amharic panegyrics from the 14<sup>th</sup> century, the existential auxiliary *ʔallä* basically functions as copula, but does not occur in complex predicates to mark the non-past (Richter 1997:549–550). In a text from the 17<sup>th</sup>

century, however, the existential auxiliary usually marks non-past tense on imperfective verbs (Getatchew 1983:163–165; cf. also Appleyard 2003:234), but Ludolf (1698:12, 15, 16, 21, etc.) assumes that the combination of imperfective verb and existential auxiliary as main predicate emphasizes ongoing present situations, while bare imperfective verbs may also denote future situations. The imperfective verb and the existential auxiliary are independent words until the 19<sup>th</sup> century, i.e. they both index the subject in all persons and are often written as separate words (cf. Praetorius 1879:252–253). Since the 20<sup>th</sup> century, however, the imperfective verb and the existential auxiliary merged into a single word. Thus, most probably the existential auxiliary originally marked the progressive aspect on imperfective verbs in Amharic (Klingenheben 1956:276) – as it still does in Tigrinya (Voigt 1977:337) and probably did in Gəʿəz – but then grammaticalized into a general non-past marker. Cross-linguistically, progressive constructions based on a locative verb frequently grammaticalizes into an imperfective or present (cf. Bybee 1994:244; Heine & Kuteva 2004:93–94); the latter seems to be the case in Amharic.

## 5 TENSE AS MAIN COMPONENT OF PERIPHRASTIC CONSTRUCTIONS

### 5.1 Perfect

The perfect is an aspectual verbal category that simultaneously emphasizes the right-most transformational phase of a verb and its subsequent stative phase, which often yields the interpretation that the new state is of some relevance for a subsequent situation (cf. Sasse 1991:27; Timberlake 2007:289–291).

The perfect is an innovative category in Ethiosemitic, which is expressed through a periphrastic construction consisting of a converb or perfective verb followed by a tense marker. Often, the perfect only occurs in affirmative main clauses. Amharic and Muher formally distinguish between present and past perfect. While the present perfect is still of relevance at the moment of utterance, the past perfect refers to an anterior situation, which is not directly connected to the moment of utterance.

Amharic grammaticalized the combination of converb and the existential/non-past auxiliary as present perfect, while converb plus past auxiliary constitutes the past perfect, as in (40):<sup>15</sup>

- (40) a. ይህ በቅሎ እግሩ ተሰብሯል። AMHARIC  
*jih bāk'lo igr-u täsäbr<sup>w</sup> = all.*  
 PRX mule leg-POSS.3SM be\_broken\CNV.3SM = AUX.EXIST/NPST  
 'The leg of this mule is broken [now].' (Leslau 1995:389)

<sup>15</sup> For the diachronic development of the perfect in Amharic, cf. Ullendorff (1970); for its functional analysis vis-à-vis the perfective, cf. particularly Kapeliuk (1971) but also Poláček (1972).

b. ደብዳቤውን ልኮት ነበር፣ አልደረሰም።

*däbdäbbe-wi-n liko-t nābbär – al-därräs-ä-mm*  
 letter-DEF-ACC send\CNV.SJ.3SM-OJ.3SM AUX.PST NEG-arrive\PFV-3SM-FOC  
 ‘He had sent the letter, but it didn’t get there.’ (Leslau 1995:375)

Muher does not have a separate converb conjugation. Therefore, it grammaticalizes the perfect from a perfective verb marked by the suffix *-m*, which is functionally equivalent to the Amharic converb (cf. Meyer 2016:187–188), cf. the present perfect in (41), and the past perfect in (42). As with main clause imperfective verbs, cf. (36), non-past tense is marked by a zero morpheme in the present perfect:

- (41) *kubra tamijña bässatti-m-Ø* MUHER  
 Kubra yesterday come\PFV.3SF-CNV-NPST<sup>16</sup>  
 (i) ‘Kubra has come yesterday [and is still here].’ (> PRESENT PERFECT)  
 (ii) ‘Kubra came yesterday [but went then to another place].’ (Perfective)
- (42) *kubra tamijña bässatti-m banno* MUHER  
 Kubra yesterday come\PFV.3SF-CNV AUX.PST.3SM.DCM  
 ‘Kubra had come yesterday [when this had happened].’ (> PAST PERFECT)

In Muher, clauses as in (41) are ambiguous. They typically have a present perfect interpretation, cf. (41i), but may also convey a perfective reading, as in (41ii). The ambiguity results from a diachronic process in Gunnän Gurage through which the innovative present perfect replaced the older perfective in affirmative main clauses.<sup>17</sup> Only the two Gunnän Gurage languages Mesqan and Kistane still formally distinguish a present perfect from the perfective in main clauses, i.e. verb-final *-m* is only attached to the former, but not to the latter (Meyer 2016:222).

According to Weninger (2001:307), the perfect is a contact-induced innovative category in Gə‘əz that only appeared when it was no longer spoken as a native language. Moreover, Gə‘əz only has a past perfect, which is expressed by various constructions, viz. the combination of a perfective verb with the past auxiliary *konä* (43a), or a converb with the existential verb *hälläwä* (43b) or *näbärä* ‘sit’ (cf. Weninger 2001:279–286, 306–307):<sup>18</sup>

<sup>16</sup> The sequence CNV-NPST is combined to MVMP elsewhere.

<sup>17</sup> The same process is currently ongoing in Tigrinya, which is not closely related to Gunnän Gurage (Rubin 2010:50). Kapeliuk (1971:80–81) also assumes a similar tendency for Amharic, in which the present perfect seems to be dominating in direct speech, while the perfective seems to be preferred in written texts.

<sup>18</sup> The use of *näbärä* as an auxiliary in periphrastic constructions is not frequent, and only occurs in texts that were composed after Gə‘əz ceased to be spoken as a native language. Weninger

- (43) a. እስመ ኮንኩ ኢነበብኩ ቃለ ጽድቅ በሕይወትዬ ... Gəʿəz  
*ʔismä kon-ku ʔi-näbäb-ku k'al-ä s'idk' bä-hijwäti-jä*  
 because be(come)\PFV-1S NEG-speak\PFV-1S word-ACC justice LOC-life-POSS.1S  
 'As I had not spoken a word of justice in my life ...' (Praetorius 1886:47)
- b. መጠቅላት ውእቱ ደበር ሀለዉ ሕዝብ ከሎሙ ተገቢአሙ።  
*wä-mätäht-ä wiʔitu däbr halläw-u*  
 and-base-ACC 3SM mountain (AUX).exist\PFV-3PM  
*həzb kʷəllomu tägābiʔomu*  
 people all.POSS.3PM be\_gathered\CNV.3PM  
 'And at the base of that mountain all people had gathered.' (Weninger 2001:279)

The reading of the present perfect seems to be part of the semantics of a perfective verb in Gəʿəz (cf., e.g. Weninger 2001:309–312), as in Harari (Beniam 2013:194–197).<sup>19</sup> The perfective and the present perfect also merged into a single grammatical category in Muher, but here it is the present perfect that took over the semantics of a former perfective in main clauses. Although the Gəʿəz perfect is probably contact-induced, it shows that this category first evolved in the past, while its non-past counterpart is a later development.

The semantics of the present perfect overlaps with that of the perfective because the two are commonly interpreted as referring to an anterior situation. The perfective is a non-deictic atemporal category, but nevertheless the moment of utterance functions as default value for its time implication. The perfective has a present reading with inchoative-stative verbs, but a past reading with dynamic verbs. The present perfect, in contrast, is always anchored at the moment of speech, i.e. it uniformly refers to present situation with all types of verbs. Moreover, it is often perceived as a pragmatically more emphatic than the perfective, if the two categories are competing (cf., e.g. Kapeliuk 1971:88). The semantic overlap between present perfect and perfective, furthermore, seems to facilitate and cause their merger into a single category, the present perfect, which subsequently changes its semantics to an atemporal new perfective, as in Muher.

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(2001:334–335), therefore, concludes that these constructions are calques invented by scribes with another Ethiosemitic mother tongue, particularly Amharic, in which *näbbär* functions as a past auxiliary (cf. also Tropper 2002:200, 208).

<sup>19</sup> Similarly, Tigre has one perfect construction, in which a perfective verb only combines with a past auxiliary to denote a past perfect (cf. Raz 1983:73–75; but also Meyer 2016:218–224 for a general overview).

## 5.2 Proximative and progressive phasal aspects

Phasal aspects are formed through periphrastic constructions in main clauses to highlight a specific component of the verbal semantics. Among the various phasal aspects, the proximative and the progressive are frequently grammaticalized in Ethiosemitic languages. The proximative emphasizes the temporal period immediately preceding the initial boundary of a situation (Heine 1994:36),<sup>20</sup> while the progressive denotes an uninterrupted ongoing action (Comrie 1976:12).

In Amharic and Muher, the proximative is expressed through a linker copula clause whose complement is an imperfective verb marked by the allative prefix *l(ä)-* ‘for, to’ in Amharic (cf. Baye 2006:198), or by the adessive suffix *-ät* ‘nearby’ in Muher:

- (44) a. እኔ የምድሩን ዑሉ መንገድ ልሄድ ነው። AMHARIC  
*ʔine jä-midr-u-n hullu mängäd l-i-hed näw*  
 1s GEN-earth-DEF-ACC all way ALL-1s-go\IPFV COP.3SM  
 ‘As to me, I am about to go all ways on earth.’ (1 King 2,2)
- b. በአጠገባቸውም ዐልፎ ሊሄድ ነበር።  
*bä-ʔat’ägäb-attfäw-imm alfo l-i-hed näbbär*  
 LOC-side-POSS.3P pass\CNV.3SM ALL-3SM-go\IPFV AUX.PST  
 ‘He almost had passed them.’ (Marcus 6:48)
- (45) wälliso alläf-nä-m goru ni-säla-nä-ät-in. MUHER  
 Wolliso pass\PFV-1PL-CNV Goru 1PL-arrive\IPFV-1PL-ADE-COP.3SM  
 ‘We passed Wolliso and are about to arrive at Goru.’

As shown in (44), the Amharic proximative can refer to a present or a past situation depending on the copula. In Muher, however, the proximative is restricted to present situations. If the linker copula in (45) were replaced by the past auxiliary *bannä*, the clause would be interpreted as an unreal situation, cf. example (56) in §6.

Amharic, but not Muher, grammaticalized a periphrastic construction for the progressive, which is also based on the linker copula, but with a perfective verb marked by the distributive prefix *ʔijjä-* as complement (cf. also Baye 2006:199). Like the proximative, the progressive in Amharic distinguishes between past and non-past:

- (46) a. ምን ትሠራለህ? – እየበላሁ ነው። Amharic  
*mīn tī-sära = allä-h? – ʔijjä-bälla-h<sup>w</sup> näw.*  
 what 2SM-work\IPFV = AUX.EXIST/NPST-2SM DSTR-eat\PFV-1SG COP.3SM  
 ‘What are you doing? – I am eating.’ (Leslau 1995:664)

<sup>20</sup> In descriptions of Ethiosemitic languages, this category is usually called intentional, ingressive or prospective.

- b. ለሰው ሁሉ [...] እውነተኛው ብርሃን ወደ ዓለም እየመጣ ነበር።  
*lä-säw hullu ... ?iwnätäṇṇa-w bīrhan wädä ?aläm*  
 ALL-man all righteous-DEF light towards world  
*?ijjä-mätt'a näbbär*  
 DSTR-come\PFV.3SM AUX.PST  
 'The righteous light was coming to the world for all mankind.' (John 1:9)

The progressive reading is also part of the semantics of an imperfective verb in Amharic (Demissie 1988:623), as in Muher, which did not grammaticalize a separate phasal aspect construction (cf. Meyer 2016:213–214).

Gə'əz seems to be developing periphrastic constructions for phasal aspects including the proximative and progressive, but they are not clearly distinguished from each other. Accordingly, the combination of an imperfective verb with the existential auxiliary *halläwä* may denote the progressive/continuous or the proximative (Praetorius 1886:56; Dillmann 1907:170–171; Tropper 2002:197–200), as shown in (47a–b):

- (47) a. ይጻሐፍ ሀሎ። GƏ'ƏZ  
*jī-ss'ähaf hallo*  
 3SM-be\_written\IPFV AUX.EXIST.3SM  
 'There will continue to be recording.' (Hen 98,7) (Dillmann 1907:170)
- b. ይመጽእ ሀሎ።  
*jī-mäss'ī? hallo*  
 3SM-come\IPFV AUX.EXIST.3SM  
 'He is about to come.' (Hen 10,2) (Dillmann 1907:170)
- c. ሀለዎ ይምጽእ።  
*halläw-ä-u [halläwo] jī-ms'ī?*  
 AUX.EXIST-SJ.3SM-OJ.3SM 3SM-come\JUSS  
 i. 'He is about to come.' (Hen 10, 2) (Praetorius 1886:56)  
 (ii. 'He is obliged to come.')

Alternatively, the imperfective verb in the proximative construction (47b) can be replaced by a jussive verb, as in (47c). In this case, *hallo* inflects with an invariable 3SM subject and an additional object suffix, which is co-referential in person, number and gender with the subject of the jussive verb. Depending on the context, the proximative based on a jussive verb can also express obligation (Dillmann 1907:170–171), as indicated in translation (ii) of (47c). It remains unclear whether the proximative and the progressive in Gə'əz are limited to present situations – similar to the proximative in Muher – or atemporal.

## 6 TENSE AND MODALITY

The pragmatics of past imperfective main clause verbs is often ambiguous in current Amharic. They allow an interpretation in the indicative mood, in which they denote continuous, durative or habitual situations in the past, as described in §4, or they indicate an epistemic modality, viz. the irrealis expressing hypothetical or counterfactual situations, or desire. Accordingly, the actual interpretation of the past imperfective verb in (48a) depends on the context. In the indicative, it denotes a durative action in the past, cf. (48b), but a counterfactual situation in the irrealis reading (48c):

- (48) a. **ልጆቹ በመናፈሻው ለረጅም ሰዓት ይጫወቱ ነበር፤ ...** AMHARIC  
*liḍ-ottf-u bā-mānafäsa-w lä-räḍim säʔat ji-tf'äwwät-u näbbär ...*  
 child-P-DEF LOC-park-DEF ALL-long hour 3P-play\IPFV-P AUX.PST  
 i. 'The children were playing for hours in the park.' <(48b)  
 ii. 'The children would have played for hours in the park.' <(48c)
- b. ... **አሁን ተኝተዋል።**  
 ... *ahun täjnitäw = all.*  
 now sleep\CNV.3P = AUX.EXIST/NPST  
 [The children were playing for hours in the park ...]  
 'Now they are sleeping.'
- c. ... **ግን መሸ።**  
 ... *gin mäffä.*  
 but be(come)\_evening\PFV.3SM  
 [The children would have played for hours in the park ...]  
 'But it got dark.' (adapted from Leslau 1995:316)

The irrealis reading of a past imperfective verb is certainly related to irreal conditional clauses, in which the apodosis almost exclusively contains a past imperfective verb as predicate. Despite the past auxiliary *näbbär*, an irreal apodosis in Amharic can refer to past, present or future situations, i.e. it is atemporal. The irreal conditional clause in (49), thus, can denote a hypothetical situation in the present or future, cf. reading (i), or a counterfactual situation in the past, cf. (ii):

- (49) **ሥራ ብትሠራ ሕይወትህ ይለወጥ ነበር።** AMHARIC  
*sira bi-tti-sära hijwät-ih ji-lläwwät' näbbär.*  
 work LOC/IRR-2SM-work\IPFV life-POSS.2SM 3SM-be\_changed\IPFV AUX.PST  
 i. 'If you worked your life would be changed.'  
 ii. 'If you had worked your life would have been changed.' (Abdu 2011:39)

It seems that Amharic expanded the irrealis reading of conditional clauses as an optional variant to all main-clause predicates that are overtly marked for past by the



auxiliary *näbbär*. The past perfect, for instance, is frequently used in very polite requests:

- (50) ይቅርታ፣ ዶክተር ኢማናን ፈልጌ ነበር። AMHARIC  
*jik'irta doktor ?imana-n fälligge näbbär*  
 INTJ.excuse doctor Imana.F-ACC want\CNV.1S AUX.PST  
 'Excuse me please, I would like (to speak to) Dr. Imana.'

Even copula clauses with the past auxiliary as predicate may convey an irrealis reading, as shown in the short dialogue between a waiter for whom Amharic is the mother tongue, and a guest who speaks it as a foreign language (51):<sup>21</sup>

- (51) a. [Waiter:] ምግቡ እንዴት ነው? AMHARIC  
*migib-u ?indet näw?*  
 food-DEF how COP.3SM  
 'How was (lit. is) the food?' [while clearing up the table]
- b. [Guest:] ጥሩ ነበር።  
*t'iru näbbär*  
 good AUX.PST  
 i. 'lit.: It was good.'  
 ii. 'It would have been good.' (contextually)
- c. [Waiter:] «ጥሩ ነው» ማለት ፈለግክ?  
*«t'iru näw» malät fälläg-k [fälläkk]?*  
 good COP.3SM say\VN want\PFV-2SM  
 'Did you intend (lit. want) to say, "It is good"?''

After the guest finished his meal, the waiter asked him (51a) while clearing up the table. The guest intended (51b) as positive reply, i.e. reading (i), assuming that the past auxiliary would be the appropriate copula because he had already stopped eating some time prior to the question (51a). However, the conventionalized interpretation of (51b) in this situation only yields reading (ii). The waiter understood the intention of the guest, and corrected the copula to the non-past linker copula in (51c).

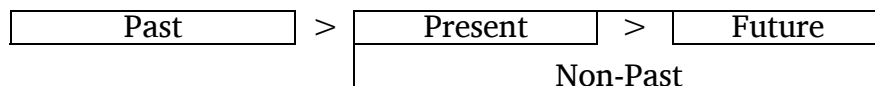
The conflation of past and irrealis, which also includes future situation, is not unique to Amharic, but also occurs in other unrelated languages. Pettersson (1994), who observed this phenomenon in various Indo-European languages, resolves the contradiction that the same auxiliary may refer to past and future situation through a reinterpretation of the conventional linear time concept with the moment of

<sup>21</sup> I thank Joachim Crass for providing me with this example in February 2016.

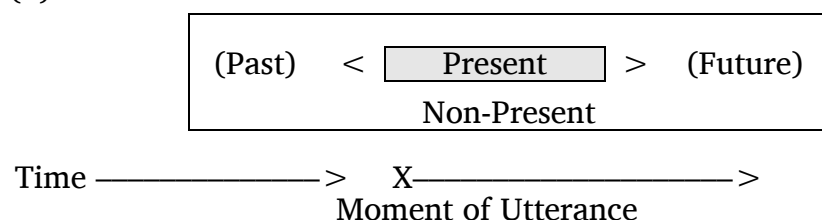
utterance as reference point. Accordingly, the linear opposition past vs. present vs. future, or past vs. non-past is reorganized into a concentric model with the moment of utterance, i.e. present, as center that contrasts to past and future as common exponents of non-present time reference, which thus can be marked by the same element, viz. the past auxiliary.

Table 3 Conceptual reorganization of time

(a) LINEAR TIME MODEL



(b) CONCENTRIC TIME MODEL



After the past auxiliary *näbbär* in Amharic changed to a non-present marker, its semantics further broadened so that it eventually denotes any kind of past or imagined situation that is not pertinent or directly experienceable at the moment of utterance, i.e. it grammaticalized into a marker of non-actuality as an epistemic modality (cf. particularly Windfuhr 1985:448).<sup>22</sup> Subsequently, its non-past counterpart is acquiring the epistemic modality actuality as an optional reading. For instance, the relation between the subject and the complement in the copula clauses (52) is applies to a past situation in (a) and (b). Nevertheless, the non-past linker copula occurs in (52a), but the past auxiliary in (52b):

- (52) a. **ያስደነቀኝ የስሙ ነገር ነው።** AMHARIC  
*j-asdännäk'-ä-jən*                      *jä-sim-u*                      *nägär*                      *näw*  
 REL-astonish\PFV-SJ.3SM-OJ.1S      GEN-name-POSS.3SM      matter                      COP.3SM  
 'What astonished me was (lit. is) the matter of his name.' (Goldenberg 1965:17)
- b. **በመጀመሪያ የባርያ ንግድ ሞኖፖል የያዘች እስፓኛ ነበረች።**  
*bä-mädžämmarija*    *jä-barja*    *nigd*    *monopol*    *jä-jaz-ättf*  
 LOC-begin                      GEN-slave    trade    monopoly    REL-seize\PFV-3SF

<sup>22</sup> Such a function of the past auxiliary is also found in Palestinian Arabic (cf. Karawani & Zeijlstra 2013).

AUX.PST-3SF

'It was Spain that first monopolized slave trade.' (Goldenberg 1965:18)

The linker copula in (52a) does not only establish an equational relation between the relative clause ‘what astonished me’ and the noun phrase ‘the matter of his name’, but also indicates that this relationship is still pertinent at the moment of utterance, i.e. it marks actuality. The past auxiliary in (52b), in contrast, marks the predicative relation as non-actual, i.e. at the moment of speech Spain is no longer involved in slave trade. Actuality also explains the preference of the linker copula over the past auxiliary in (51b). Although the event of eating food has factually been completed, the quality of the food is still pertinent at the moment of speech.

The actuality reading is not restricted to copula clauses, but also occurs in verbal predicates, especially in narrations, which factually refer to situations in the past, but are marked with the non-past auxiliary, as described in Kapeliuk (1971) for the present perfect, or in Klingenheben (Klingenheben 1928:259) for the non-past imperfective in Amharic.

The semantic extension of *nābbār* from a past auxiliary to a marker of non-actuality in Amharic was facilitated through its function as irrealis marker in conditional clauses, like (49), which is an innovation. First, its grammaticalization to a past auxiliary is a recent development that only began in Gəʿəz, and second, Gəʿəz uses morphosyntactic constructions without a past auxiliary to mark the irrealis. The now infrequent archaic construction with a perfective verb preceded by the locative relator *bä*–<sup>23</sup> most probably represents the original irrealis in Amharic:

- (53) a. **ምነው እስዋን በምንኩ።** AMHARIC  
*mɨn-näw ʔiswa-n bǎ-hon-ku*  
 what-COP.3SM 3SF-ACC LOC/IRR-be(come)\PFV-1S  
 ‘I wish I were her!’ (Goldenberg 1965:14)
- b. **ሥራ በኖረኝ እንዲህ ባልተቸገርኩ ነበር።** AMHARIC  
*sira bǎ-nor-ä-jɣɣ ʔind-ih b-al-tätfäggär-ku*  
 work LOC/IRR-live\PFV-SJ.3SM-OJ.1S SIM-PRX LOC/IRR-NEG-be\_bothered\PFV-1S  
 ‘If I had a job, I would not have been bothered like this.’ (Abdu 2011:66)

Archaic irreal clauses like (53) optionally contain the past auxiliary *näbbär* for counterfactual (past) situations (Abdu 2011:64–66).

The Gəʼəz irrealis is structurally similar to the archaic Amharic construction. The apodosis has a perfective verb as predicated that marked by the relator *ʔim(mä)-*,

<sup>23</sup> Cf. Abdu (2011:49, 63) for details.

which could be stem from the ablative prefix *?im(ä)-* (cf. Tropper 2002:140), whereas the protasis is marked by a perfective verb and the temporal conjunction *sobä* ‘after’ (cf. Tropper 2002:245–246; Praetorius 1886:149–150):

- (54) ሶበ ነገርከኒ እምፈነውኩከ። ገፍኔ  
*sobä nāgär-k-ä-nni ?im-fännäw-ku-kä*  
 after tell\PFV-SJ.2SM-LNK-OJ.1S IRR-send\PFV-SJ.1S-OJ.2SM  
 ‘If you had told me I would have sent you.’ (Gen 31,27) (Tropper 2002:246)

Irreal protasis and apodosis can also occur independently to denote emphatic hypothetic or counterfactual expressions (Tropper 2002:247). The irrealis in Gə‘əz always lacks the past auxiliary, and does not denote non-actuality.

In Muher, the irrealis combines features of Amharic and Gə‘əz. Similar to Amharic, the auxiliary *bannä* marks past and irrealis, which are formally distinguished from each other through the conjugation of the main verb in the apodosis. Main clause predicates consisting of an imperfective verb and the past auxiliary predominantly refer to a durative or habitual past situation, as in (55i), but almost never to an irreal situation, as in (55ii):

- (55) *bit’ir ä-srä banno.* MUHER  
 clay\_plate 1s-buy\IPFV AUX.PST.3SM.DCM  
 i. ‘I was buying/used to buy clay plates.’ [default reading]  
 ii. ‘I would buy clay plates.’ [marked reading]

The unexpected future reading (55ii) is difficult to explain. At first sight, it seems to result from language contact with Amharic, as it also marks non-actuality in clauses with a copula or the perfect as main predicate, similar to Amharic (50) and (52). That means, as in Amharic, the Muher past auxiliary underwent a semantic shift towards a non-present/non-actuality marker. Thus, (55ii) could represent a non-actual predicate, which formally differs from irrealis clauses, which are most frequently expressed through a past imperfective verb marked plus the adessive suffix *-ät* ‘nearby’ in the affirmative.<sup>24</sup>

- (56) *bit’ir ä-srä-ät banno.* MUHER  
 clay\_plate 1s-buy\IPFV-ADE AUX.PST.3SM.DCM  
 ‘I would have bought clay plates.’

<sup>24</sup> The combination of imperfective verb and adessive suffix also marks the proximative, cf. example (45) in §5.2).

In a complex affirmative conditional clause consisting of a protasis and an apodosis, the irreal apodosis is expressed through a jussive verb followed by the past auxiliary:<sup>25</sup>

- (57) *t'ibä ?ozat tä-näbbär-ä ä-bja ba(nno).* MUHER  
 morning porridge ABL/IRR-live\PFV-3SM 1s-eat\JUSS AUX.PST(3SM.DCM)  
 'If there were porridge in the morning, I would have eaten it.'

The irreal protasis – similar to Gə'əz – contains a perfective verb in Muher to which the prefix *tä-* is attached that probably is related to the identical ablative prefix.

In negation, the two irrealis main clause predicates, and the past imperfective merge into a single construction in Muher consisting of an imperfective verb marked by the prefix *b-*, which could be related to the locative *bä-* of the archaic irrealis in Amharic, cf. (53):

- (58) a. *dirä-ge t'at ?attfäm b-a-nni-?äm.* MUHER  
 former-time khat absolutely LOC/PST-NEG-1s-chew\IPFV  
 'In former times, I never used to chew khat.' (past habitual)  
 b. *jiftät ?iga tä-sättf'ä ?ahuyña b-e-t'äma-nn.*  
 previously water ABL/IRR- now LOC/IRR-NEG.SJ.3SM-make\_thirsty\IPFV-  
 drink\PFV.3SM OJ.3SM  
 'If he drunk water previously, he would not be thirsty now.' (irrealis)

The negated irrealis and past imperfective in Muher – as well as in Chaha (Hever 2010:127, 132) – is marked through a single synthetic construction, whereas the corresponding affirmative predicates are differentiated through transparent analytic verb constructions with the past auxiliary *bannä*. Although the formal (and pragmatic) conflation of irrealis and past imperfective in negated main clauses in Muher resembles the Amharic situation, their opaque synthetic morphosyntax is closer to Gə'əz. In the affirmative, in contrast, the morphological transparent past auxiliary parallels Amharic, but the formally marked distinction between past imperfective and irrealis corresponds to Gə'əz. In other words, Muher ascribes new meanings to an old form in negation, but innovates new forms to express old meanings in affirmative clauses. As a result, past reference is not uniformly indicated by a single auxiliary in Muher, but also by a synthetic past/irreal construction, i.e. the *b*-imperfective. Originally, this synthetic construction probably only marked the irrealis, as can be assumed by comparing it with the irrealis

<sup>25</sup> The bound existential =*annä* never occurs in an irreal protasis, but is substituted by *näbbärä* 'live'.

construction in Gəʿəz, and the archaic irrealis in Amharic. Later, the functional range of the *b*-imperfective was extended to past imperfective verbs in the indicative.<sup>26</sup> Further comparative evidence for such a grammaticalization comes from Endegagn, which uses the *b*-imperfective as regular past of affirmative imperfective main clause verbs, as in (59a). Contrary to Muher but similar to Amharic, Endegagn expresses the irrealis by an analytic construction consisting of an imperfective verb and the past auxiliary, cf. (59b):

- (59) a. *jäʔä b-e-säwīr-kä.* ENDEGAGN  
 wood PST-NEG.3SM-break.IPFV-MVM  
 ‘He used to break wood/was breaking wood.’
- b. *bäkk’älä jäʔä jīsāwīr ban-dä.*  
 Bekele wood 3SM-break\IPFV AUX.PST-MVM  
 i. ‘Bekele would have broken wood.’  
 ii. ‘Bekele would break wood.’ (Yohannes 2015)

The proposed grammaticalization from irrealis to past could explain the enigmatic past auxiliary *bannä* in Muher and related Gunnän Gurage languages, which might be a fossilized predicate consisting of prefix *b-* and the existential auxiliary = *annä*.

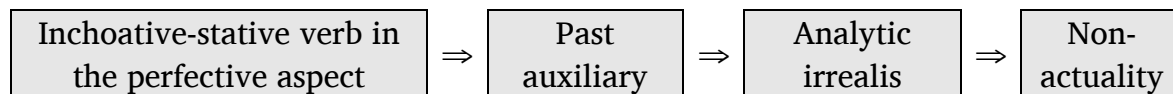
Thus, the Muher and Endegagn data suggest two sources for the grammatical marking of past. The grammaticalization of a morphologically independent past marker, viz. *bannä* in Muher, *näbbär* in Amharic, *konä* in Gəʿəz, cf. Table 4a, dominates in all three languages, and is also common cross-linguistically (cf. Heine 1993:67–69). The past auxiliary extended its use to irrealis constructions, probably first only with a counterfactual clauses, from which it spread to hypothetical clauses. Simultaneously, the past auxiliary became a marker of non-present reference (i.e. past and future). This generalization facilitated its further grammaticalization into a marker of non-actuality as a type of epistemic modality, which seems to be most advanced in Amharic.

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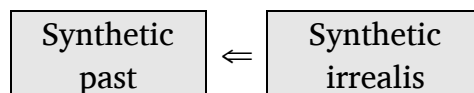
<sup>26</sup> According to Retsö (2014), Eades (2012) and Lipiński (1997:347–348), an imperfective verb marked by the prefix *b-* also expresses a variety of meanings including the volitive, progressive, habitual, future, irrealis in various Arabic dialects spoken in Egypt and the Levantine, the coastal Gulf States and South Arabia, as well as in Qatabanic (Ancient South Arabian). The prefix *b-* is assumed to originate from two different sources, viz. the locative prefix *b-* in Egypt and the Levantine, but the verb *ʔabā/jabī* ‘want’ in the Gulf States. As volitive verbs in Ethiosemitic have other lexical roots, it is rather unlikely that the prefix *b-* in Muher stems from such a verb. However, a locative construction, which Retsö (2014:69–70) and Klingenberg (1956:272) strongly favor for the Arabic dialects of Egypt and the Levantine, could also be the origin of the Muher *b*-imperfective. However, as the *b*-imperfective never has a present-progressive or habitual reading in Muher, I consider the grammaticalization from irrealis to past marker more plausible.

Table 4 Grammaticalization of past markers

(a) DOMINANT GRAMMATICALIZATION CHAIN



(b) RARE GRAMMATICALIZATION CHAIN



The grammaticalization (b) in Table 4 seems to be rare, probably restricted to Gunnän Gurage. Here, an opaque irrealis construction developed to a synthetic past marker for imperfective verbs, which could have started with the generalization of a counterfactual apodosis to a past-marked clause. According to Haspelmath (1997:87–92), past time reference can also be indicated by a locative expression that marks spatial distance from the moment of utterance.

Irrealis and past are semantically connected, but occur in two different conceptual domains (cf., e.g. Botne & Kershner 2008:158–160). On a linear time axis, the past auxiliary in Muher and Amharic locates a situation prior to the moment of speech, and disconnects them from each other. Consequently, the past situation is perceived as an event that is not contemporaneous with the moment of utterance resulting in the semantic generalization of a past marker into an irrealis marker, which eventually is reinterpreted as a marker of non-actuality.

## 7 ON THE ORIGIN OF THE COPULAS AND AUXILIARIES

This section is primarily concerned with the possible origin of the copula elements and auxiliaries discussed in §§3–6.

### 7.1 Existential auxiliaries

Table 5 provides an overview about the existential auxiliaries in Gəʼəz, Amharic and Muher:

Table 5 Existential auxiliary verbs

	Gəʼəz	AMHARIC	MUHER
MAIN CLAUSE FORM			
AFFIRMATIVE	<i>halläwä</i>	<i>?allä</i>	<i>jinä</i>
NEGATIVE	<i>?ihalläwä</i>	<i>jällä</i>	<i>jännä</i>
DIFFERENT FORM IN SUBORDINATE CLAUSES			
AFFIRMATIVE			= <i>annä</i>
NEGATIVE		= <i>lellä</i>	

The existential root  $\sqrt{h-l-w}$ , as found in Gəʿəz *halläwä*, Amharic *ʔallä*, and Muher = *annä*, is an Ethiosemitic innovation (Weninger 2011b:1115; cf. also Meyer 2016:197–199). It has two peculiar features in all languages, viz. its almost exclusive inflection in the perfective conjugation (in which it always implies a non-past time reading – except probably in Gəʿəz), and its combinability with subordinating prefixes that otherwise are restricted to imperfective verbs (Hetzron 1972:18), as, e.g. *ʔinzä* ‘while’ in the Gəʿəz example (15b).

The root  $\sqrt{h-l-w}$  is inflected like a Type B verb in Gəʿəz, i.e. with geminated second root consonant *ll* and the template vowel *e* following initial *h* in the imperfective:

- (60) a. *halläw-ä~hallo* ‘he exists; existed; will exist / there is; was; will be’ Gəʿəz  
exist\PFV-3SM
- b. *ʔi-halläw-ä* ‘he does not exist / there is no’  
NEG-exist\PFV-3SM
- c. *ji-hellu* ‘he will exist / there will be’  
3SM-exist\IPFV
- d. *jä-hallu* ‘he should exist / there should be’  
3SM-exist\JUSS (cf. Tropper 2002:120)

Moreover, various nominals are derived from  $\sqrt{h-l-w}$  in Gəʿəz, like *hallawi* ‘existent, substantial’, *mihilläw* ‘dwelling place, domicile’ (cf. Tropper 2002:59–62; Leslau 1991:218), but lacking in other languages. The only peculiar morphophonological feature of  $\sqrt{h-l-w}$  in Gəʿəz is the alternating contracted form *hallo* for the regular 3SM perfective *halläwä*, as other verbs ending in *w* do not merge the word-final sequence *äwä* to *o* (Dillmann 1907:175 fn. 2).<sup>27</sup> While the imperfective conjugation of  $\sqrt{h-l-w}$  in (60c) is rarely found in the other North Ethiosemitic languages Tigre and Tigrinya (Raz 1983:49; Praetorius 1871:327; cf. also Voigt 1977:115), the jussive conjugation seems to be peculiar to Gəʿəz alone.

In all South Ethiosemitic languages,  $\sqrt{h-l-w}$  solely inflects in the perfective conjugation and lacks the final *w*. The initial *h* usually changes to the glottal stop *ʔ*, or the vowel *a* (cf., e.g. Podolsky 1991:26–28). Hence, the assumed root  $\sqrt{h-l-w}$  appears as *ʔallä* in Amharic, and enclitic = *annä* in Muher. The change of original intervocalic *\*ll* to *\*nn* is common to Muher and other Gunnän Gurage languages (Fekede & Meyer 2015:544–545; cf. also Hetzron 1977:40; Leslau 1979:xlvi–lv).

In negative main clauses, the existential auxiliary is substituted by the irregular negated existential auxiliary *jällä* in Amharic, but *jännä* in Muher. These auxiliaries can be derived from the negated Gəʿəz verb *ʔihalläwä* ‘he does not exist; there is no’ in (60c) (cf. also (14) in §3.1.). The fricative *h* of *ʔihalläwä* first turns into the glottal

<sup>27</sup> Word-medially, however, *äw(ä)* tends to merge into *o* (cf. Dillmann 1907:78, 96).



stop *ʔ*, which then changes to the glide *j*. The weakening of *\*ʔ>j* is specifically triggered by the negative prefix *ʔi-*, as can already be observed in Gəʿəz (cf. Tropper 2002:33; Dillmann 1907:92). Hence, Gəʿəz *ʔihallāwä* probably first changed into *\*ʔihallä* and then to *\*ʔiʔallä > \*(ʔ)ijällä*, which finally became Amharic *jällä* or Muher *jännä* ‘not exist’. As the negative prefix *ʔi-* is unproductive in Amharic and Muher, the negated existential auxiliaries represent relatively archaic forms (cf. Bulakh & Kogan 2010:280). The Amharic subordinate negated existential *jä-lellä* (REL-AUX.NOT\_EXIST.3SM) ‘who/which does not exist’ must be of another origin, as it contains an additional initial *l*.

In order to refer to past existential relations,  $\sqrt{h-l-w}$  is substituted by the respective past auxiliary in Amharic and Muher (cf. §7.3), and even in Gəʿəz obligation constructions (cf. Dillmann 1907:171), as shown in (61a) vs. (61b):

- (61) a. **ሀለወከሙ ትርእዩዎ።** Gəʿəz  
*hallāw-ä-kkimu* *tī-rʔaji-w-wo*  
 AUX.EXIST-SJ.3SM-OJ.2PM SJ.2PM-see\JUUS-SJ.PM-OJ.3SM  
 ‘You must (then) see him.’ (Hen 55,4) (Dillmann 1907:171)
- b. **ኮኑ ... ይስግዱ።**  
*kon-u* ... *ji-sgid-u*  
 AUX.PST/be(come)\PFV-3PM 3PM-worship\JUUS-PM  
 ‘They had to worship.’ (Dillmann 1907:171)

From a diachronic perspective,  $\sqrt{h-l-w}$  seems to represent a regular verb with a total- or inchoative-stative semantics, given its almost regular verbal conjugation and nominal derivation in Gəʿəz. As total-stative verbs in Ethiosemitic do not inflect in the perfective conjugation (cf. Meyer 2016:205–207, in particular fn. 63), in which  $\sqrt{h-l-w}$  predominantly appears, it is probably an inchoative-stative verb, such as ‘come in existence and remain in this state’. However, the time interpretation of  $\sqrt{h-l-w}$  in the perfective conjugation commonly excludes a past reading so that its usage pattern would rather suggest a total-stative semantics that is associated with non-verbal predicates, like the linker copulas (§7.2). That means the existential  $\sqrt{h-l-w}$  could have developed from a zero copula clause, in which person-number-gender suffixes were attached to a locative construction as copula complement. Later, the zero copula and its inflected complement were reanalyzed as a single predicate to denote existence. The person-number-gender suffixes attached to the original locative complement could have been identical with the suffix set of perfective verbs, or they were leveled accordingly. This could have been facilitated through the cross-reference of second persons, for which the subject, object, and possessive suffixes are almost identical.

The new existential predicate could have been retained as such in South Ethiosemitic, i.e. Amharic and Muher, but was reanalyzed as verbal root  $\sqrt{h-l-w}$ ,

which then could inflect in other conjugations, in North Ethiosemitic, particularly in Gəʿəz. This would explain its features of a Type B verb, which is the preferred conjugation class for loan verbs (and verbalized nominals). The archaic negation found with the existential auxiliaries in Amharic and Muher does not necessarily contradict such an assumption because the prefix *ʔi-* also negates non-verbal elements in Gəʿəz (cf. Tropper 2002:148), and probably in the ancestor variety from which South Ethiosemitic split off. The origin of the existential auxiliary from a complex non-verbal copula predicate, finally, accounts for the peculiar total-stative semantics, as copulas per default express a stative relation between their subject and complement.

According to Lipiński (1997:315–316, 477), the locative complement that possibly developed into the existential root  $\sqrt{h-l-w}$  is the common Semitic demonstrative element *\*hanni~\*hanna* with the variants *\*halli~\*halla* and *\*ʔulli*. The specific function of these demonstratives remains unclear; probably they were presentative particles. The combination of *\*halla* and the 3SM possessive pronoun *\*(h)u* initially formed an existential copula clause, viz. *\*halla hu* ‘Here he/it is!’, which then developed into the existential verb *\*hallaw-* in Gəʿəz, whereas the plain demonstrative *\*halla* became Amharic *ʔallä*. Muher = *annä* could also have developed from *\*halla*, or it directly stems from its variant *\*hanna*.<sup>28</sup>

Thus, the Ethiosemitic existential verb  $\sqrt{h-l-w}$  could stem from two possible diachronic sources. First, the perfective conjugation of the regular inchoative-stative verb  $\sqrt{h-l-w}$ , which is almost unique to Ethiosemitic and particularly productive in North Ethiosemitic,<sup>29</sup> could have been grammaticalized as existential auxiliary, while its other conjugations and derivations became obsolete. This process, furthermore, must have narrowed its semantics to a total-stative verb, which is enigmatic and still needs further explanation. The other possible source of the existential  $\sqrt{h-l-w}$  could be a complex non-verbal predicate, particularly a zero copula with a demonstrative element marked by person-number-gender suffixes for subject reference as complement. The entire copula clause could have been reanalyzed as inflected existential copula predicate in South Ethiosemitic, but further generalized to a regular verb with the root  $\sqrt{h-l-w}$  in North Ethiosemitic.

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<sup>28</sup> The coexistence of two allomorphs *\*halla* and *\*hanna* is probably reflected in the *l~n* alternation between the independent existential auxiliary *ʔalä* and its bound counterpart = *an* functioning as non-past tense marker in Wolane and Silt’e (cf. Meyer 2006:94, 96; Gutt 1997:917, 933), as the sound change *\*l(l) > n(n)* is rather exceptional in Eastern Gurage.

<sup>29</sup> Cf. Leslau (1991:218) for proposed etymologies and their evaluation. Outside Ethiosemitic, an existential verb *hallo* is only reported for an Arabic dialect in southern Yemen (Müller 1981:399), for which early contacts with Ethiosemitic speakers cannot be excluded.

As shown in Table 5, Muher has another existential auxiliary in affirmative main clauses, *jinä*, which is in complementary distribution to *=annä*.<sup>30</sup> Lipiński (1997:477–478) relates Muher *jinä* to the Agaw verb *\*wän-* ‘be’ and the Egyptian *wn(-n)* ‘be’ assuming that the initial labial glide *w* changed to *j* due to an adjacent front vowel (cf. also §7.2 for a Proto-Semitic/Afroasiatic copula *\*wn*). Leslau (1944:62; 1945b:61), in contrast, connects Muher *jinä* to the Proto-Semitic demonstrative *\*hinna~?inna*, which is cognate with the above-mentioned *\*hanna* (cf. Lipiński 1997:321). Ethiosemitic languages retained *\*hinna~?inna* as element *?in(nä)-* or *nä* in various discourse-deictic constructions, which are often limited to a referent in the 2<sup>nd</sup> person (cf. Lipiński 1997:316; Leslau 1991:380):<sup>31</sup>

- |         |                 |  |                                |         |
|---------|-----------------|--|--------------------------------|---------|
| (62)    | <i>nä-hä</i>    | ‘Come to me (2SM)!’  | (only 2 <sup>nd</sup> person)  | MUHER   |
| (63) a. | <i>?innäho</i>  | ‘Here it is!’  | (invariable)                   | AMHARIC |
| b.      | <i>?in-ka</i>   | ‘Here you are (2SM)!’  | (only 2 <sup>nd</sup> person)  |         |
| c.      | <i>na</i>       | ‘Come to me (2SM)!’  | (only 2 <sup>nd</sup> person)  |         |
|         |                 |  | (Leslau 1995:900, 903)         |         |
| (64) a. | <i>näṣā</i>     | ‘Come (2SM)!’  | (only 2 <sup>nd</sup> person)  | GEʿEZ   |
| b.      | <i>nā-hu</i>    | ‘(T)here he is; behold!’   | (no 2 <sup>nd</sup> person)    |         |
|         | <i>nä-jä</i>    | ‘(T)here I am!’  |                                |         |
| c.      | <i>?in-kimu</i> | ‘Here you are (2PM)!’  | (only 2 <sup>nd</sup> person?) |         |
|         |                 | (cf. Praetorius 1886:87; Dillmann 1907:375–376; Leslau 1991:380) |                                |         |

Outside Ethiosemitic, derivatives from *\*hinna~?inna* usually have a presentative function, like Ugaritic *hn* and Hebrew *hinnē* ‘behold’ (Moscati et al. 1980:121), or (invariable) *?ino(h)* ‘there is’ in Soqotri (Leslau 1938:66). A demonstrative element similar to Soqotri *?ino(h)* apparently developed into the inflected existential auxiliary *?incho* ‘exist, there is’ found in the Rayya variety of Tigrinya, which indexes its subject by the object suffixes with 3s subjects, but the subject suffixes of perfective verbs in all other persons, e.g. *?inhä-hu* (AUX.EXIST-SJ.1S) ‘I am here’ vs. *?inha* (AUX.EXIST-OJ.3SF) ‘she is here’ (p.c. Dagnew Machew, 12 April 2016). It is very likely that the Muher existential auxiliary *jinä* has a similar origin, but completely leveled its subject index according to the subject suffixes of perfective verbs.

If a non-verbal origin is assumed, the existential copula was originally unmarked for tense (and aspect), but obtained its inherent non-past tense value through interferences with the past auxiliary (cf. §7.3).

<sup>30</sup> The existential auxiliary *jinä* also occurs in Kistane and in Gafat, while most other Gunnän Gurage languages have *närä* or *nänä* instead (cf. Leslau 1979:457 for further details), which like Muher *jinä* only occur in affirmative main clauses.

<sup>31</sup> Cf. also Girma (2012:147–148) for a locative element *inna* in Old Amharic copula clauses, and related functions.

## 7.2 Linker copulas

The linker copulas are not uniform. They include a zero and pronoun copula in Gəʿəz, and the inflected *n*-copulas in Amharic and Muher. The latter cross-refer their subject by suffixes of perfective verbs, object suffixes, or a combination of them.<sup>32</sup> Morphosyntactically, the linker copulas only index their subject, but no other arguments or adjuncts. Except Gəʿəz, they are restricted to main affirmative clauses.

Zaborski (e.g. 2005:12, 22) reconstructs the Proto-Afroasiatic copulas *\*(V)nV* ‘be’ and *\*ta* ‘be(come)’, which then became inherent part of verbal inflectional and derivational paradigms. Similarly, Hetzron (1977:92) assumes a Proto-Semitic/Afroasiatic copula *\*wn*, while Orel & Stolbova (1995:240) provide *\*ʕan-/\*ʕin-* ‘exist’ beside various other elements with the meaning ‘be(come), exist’. Be that as it may, it is unlikely that the *n*-copula in Ethiosemitic derives from a Proto-Afroasiatic copula – if there was any – as copula clauses in Proto-Semitic and also in Gəʿəz did not contain an overt copula, but simply juxtaposed subject and complement (cf. also Goldenberg 1999:119).

Lipiński (1997:299–301, 476–477), in contrast, suggests that the *n*-copula grammaticalized from Proto-Semitic personal pronouns based on the element *\*na* (with the variants *\*ʔan/\*n*) followed by person-number-gender suffixes. As pronoun copulas typically follow their complement, they could have been reanalyzed as copula predicate in South Ethiosemitic. Some of the proposed Proto South Ethiosemitic pronoun/copula forms are shown in (65). Note that the person-number-gender suffixes are identical to the object suffixes in Gəʿəz.

(65)	Proto-Copula	>	Amharic	
a.	<i>*na-ni</i>		<i>näṇṇ</i>	‘I am’
b.	<i>*na-ka</i>		<i>näh</i>	‘you are (2SM)’
c.	<i>*na-hu</i>		<i>näw</i>	‘he is’ (Lipiński 1997:477)

Lipiński (1997:477), furthermore, argues that the pronominal origin of the *n*-copula prohibits its negation. Consequently, it is substituted by copula verbs meaning ‘be(come)’ or other suppletive forms in negated clauses.<sup>33</sup>

The element *\*n*, or its augment *\*(ʔi)nt-* (Lipiński 1997:299), probably had a deictic function. As such it is also part of demonstrative pronouns in various Semitic

<sup>32</sup> For an overview about the linker copulas in Ethiosemitic, cf. Meyer (2016:191–197), Girma (2013), and Hever (2010).

<sup>33</sup> Note, however, that pronouns in Gəʿəz can be negated by the prefix *ʔi-* or the particle *ʔakko* (Tropper 2002:148, 221).

languages, but seems to be unrelated to the Proto-Semitic demonstrative *\*hanni* or its variant *\*hinna* mentioned in §7.1 (cf. Lipiński 1997:321, 323).<sup>34</sup>

Leslau (1991:380; cf. also 1945a:74) and Dillmann (1907:376 fn. 1, cf. also 117), in contrast, propose that the Amharic copula base *\*nä-*, which even is found in emphatic presentative expressions in Gəʿəz, cf. (64b), is related to the Semitic demonstrative *\*hinna*. Meyer (2007:191–192), moreover, remarks that the element *\*n(ä)* has various interconnected functions in Ethiosemitic beside that of a copula base,<sup>35</sup> viz. inflected focus marker *-n(ä)* in Zay (cf. Meyer 2005:291–294), which did not grammaticalize from a former copula (Meyer 2007:184–185), direct object marker in Amharic (but also in Zay and Silt’e),<sup>36</sup> and 3SM object suffix in Gunnän Gurage (cf. Hetzron 1977:65, 67).

Although the diachronic details regarding the origin of the *n*-copula in Ethiosemitic remain vague, it possibly represents a merged paradigm combining object suffixes, as well as inflected *\*nä* and *\*n* as bases with originally different functions. Apparently, the two deictic bases occur in Gəʿəz. The base *\*nä* is found in the emphatic deictic element *nä-/nā-* in (64b). In contrast to purely consonantal relator prefixes, the vowel *ä* must be inherent part of the emphatic deictic element, as it appears in all inflected forms, while consonantal relator prefixes regularly lack it with 1s complements: *nä-jä* (DEM-POSS.1s) ‘(T)here I am!’ vs. *bī-jä* (LOC-POSS.1s) ‘upon me’ (Tropper 2002:144). Recall that the emphatic deictic *nä-/nā-* is not used with 2<sup>nd</sup> person referents in Gəʿəz. The vowelless base *\*n*, in contrast, is found with the 1/2 personal pronouns in Gəʿəz, and the presentative prefix *?in-* in (64c), which is restricted to 2<sup>nd</sup> person referents. Thus, there seems to be an opposition between 2<sup>nd</sup> person *\*n-* vs. 1/3 person *\*nä-*.

In Muher, the allomorph *-nn* of the 3SM object pronoun could stem from the plain base *\*n*, which also functions as linker copula for 1/2 person subjects if inflected with the subject suffixes of perfective verbs. Most probably, only the object suffixes initially functioned as linker copula for 3<sup>rd</sup> person subjects, which are derived from the 3SM suffix *-nn* or *-u* (cf. Meyer 2007:186 for the paradigm). Later, the base *\*n* of copula clauses with 1/2 person could have been reanalyzed as copula element and was subsequently extended to the 3<sup>rd</sup> person, in which it, however, retains its inflection with the original object suffixes. This leveling process is still ongoing with 3s subjects, as the copula for the 3SF is the plain object suffix. In Wolane (Eastern Gurage), however, the leveling process has been completed so that a single copula *n-* inflects with the subject suffixes of perfective verbs in all persons (Meyer

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<sup>34</sup> Moscati et al. (1980:99), for instance, propose such an origin for the suffix *-n* as demonstrative modifier or definite article in Ancient South Arabic, or the indefinite marker of Classical Arabic.

<sup>35</sup> For the various functions of the suffix *-n* in Amharic, cf. particularly Girma (2012:127–132).

<sup>36</sup> Appleyard (2004), in contrast, relates the accusative *\*n* in Amharic and Tigrinya to the allative/dative prefix *l(ä)-*.

2007:181). Contrary the Muher and Wolane, the linker copula in Dobbi (Northern Gurage) and the focus marker in Zay (Eastern Gurage) have *\*nä* as base for 1/2 person subjects, but *\*n* for the 3<sup>rd</sup> person. In Dobbi, *-nä* inflects with the subject suffixes, but *-n* (which as such represents the 3SM copula, as in Muher) with the object suffixes (Meyer 2007:186). This seems also to be the case in Zay, except that the 3SF subject is the verbal subject suffix (Meyer 2007:186; 2005:293–294).

The Amharic linker copula uniformly uses the object suffixes to index the subject; only the 3SF may optionally be marked by the verbal subject suffix (Leslau 1995:271; Girma 2013:299–301), as shown in (17a). The copula base, cf. (65), could be *\*nä* as well as *\*n*.<sup>37</sup> The vowel *ä* following the base *n* could be the accusative/linker suffix *-ä* found with the case relators (cf. §2.2) and in certain variants of the object suffixes in Gəʿəz (cf. Tropper 2002:91–95). In Amharic, this vowel regularly precedes the 1/3 person object suffixes cross-referring the primary object, e.g. (66b), but is replaced by the applicative suffixes *-bb* or *-ll* to index applied objects, as in (66c):

- (66) a. **ይውስድ** AMHARIC  
*ji-wsäd* ‘he should take’  
 3SM-take\JUSS
- b. **ይውስድኝ**  
*ji-wsäd-ä-jñ* ‘he should take me’  
 SJ.3SM-take\JUSS-ACC-OJ.1S
- c. **ይውስድብኝ**  
*ji-wsäd-ibb-ijñ* ‘let him take (it) to my detriment’  
 SJ.3SM-take\JUSS-APL.MAL-OJ.1S

Accordingly, the Amharic linker copula *näjñ* ‘I am’ in (65a) could be analyzed as *n-ä-jñ* COP-ACC-OJ.1S or *nä-(ä)jñ* COP-(ACC-)OJ.1S.<sup>38</sup>

To conclude, it seems that Ethiosemitic originally had a zero linker copula.<sup>39</sup> Later, it was substituted by overt pronoun copulas, which initially had an emphatic or disambiguating function, but then grammaticalized as copula predicate. While Gəʿəz

<sup>37</sup> Note that *\*nä* is commonly reconstructed as base for the Amharic copula (cf. Klingenberg 1956:275–276; Dillmann 1907:376 fn. 1; Leslau 1991:380).

<sup>38</sup> The analysis of the vowel *ä* as being the 3SM subject suffix of perfective verbs, as first suggested by Getatchew (1974), and then followed by others, e.g. Mulusew (2014), lacks evidence (cf. Girma 2012:115–126 for details).

<sup>39</sup> For assumed zero copula constructions even in Old Amharic, cf. Girma (2012:109–111). Note also that Old Amharic had an invariable *t* copula, which is also part of certain pronouns as complement in Muher copula clauses (cf. Meyer 2007:190–191 for details).

uses the personal pronouns as copula, Muher and Amharic grammaticalized a separate linker copula whose diachronic origin is not absolutely clear, but certainly related to archaic pronominal or demonstrative elements (object suffixes, deictic elements *\*n* and *\*nä*) that fused into a single paradigm. Similar to the zero or personal pronoun copula in Gəʿəz, the *n*-copulas in Amharic and Muher were originally not marked for a specific tense, but secondarily acquired non-past as inherent part of their semantics through the interference with the past auxiliary with which they are in complementary distribution.<sup>40</sup> Generally, the existence of two copula predicates, viz. √ h-l-w ‘exist’ (§7.1) and the linker copula ‘be’, is a peculiar feature of Ethiosemitic for which Leslau (Leslau 1952:72–73) assumes Cushitic influence.

### 7.3 Past auxiliaries

The past auxiliaries in Gəʿəz, Amharic and Muher are shown in Table 6:<sup>41</sup>

Table 6 Past auxiliary verbs

	GƏʿƏZ	AMHARIC	MUHER
	MAIN CLAUSE		
AFFIRMATIVE	<i>konä</i>	<i>näbbär</i>	<i>bannä</i>
NEGATIVE	<i>?ikonä</i>	<i>?alnäbbärä</i>	<i>?annäbärä</i>
	ADDITIONAL FORM IN SUBORDINATE CLAUSES		
		<i>(norä)</i>	<i>(näbbärä)</i>

Most past auxiliaries grammaticalized according to the Overlap Model described in Heine (1993:43–53) from regular verbal roots with an inchoative-stative semantics, viz. √ *k-w-n* ‘be(come)’ in Gəʿəz, but √ *n-b-r* ‘sit, dwell, live’. In all Ethiosemitic languages, the past auxiliary is regularly negated.

Initially, the perfective conjugation of these verbs denoted an atemporal lexical situation, but was also occasionally used to indicate past reference in copula clauses, and in clauses with an imperfective verb. This resulted in ambiguity because an identical verb was used in two different functions, viz. a lexical function, and an optional grammatical function as marker for past reference. This phase can clearly be observed in Gəʿəz and still partly persists in Muher. When past marking was formalized, the verb form functioning as past auxiliary was disassociated from the regular verb and became fossilized in the perfective conjugation, i.e. it lost its ability to inflect in other conjugations or to form a verbal noun, and started to omit

<sup>40</sup> A remarkable exception is Silt’e (Eastern Gurage), in which the *n*-copula (still) co-occurs with the past auxiliary in a single predicate (cf. Gutt 1997:945).

<sup>41</sup> Cf. Meyer (2016:194–196) for a general overview on past auxiliaries in Ethiosemitic.

subject indexing so that it finally differs formally from its regular counterpart, as in Amharic. Conceptually, the grammaticalization of a regular perfective verb into a past auxiliary is facilitated by two factors, viz. the inchoative-stative verb semantics, and the semantic interferences.

In the perfective conjugation, the common Semitic root  $\sqrt{k-w-n}$  ‘be, exist, occur’ (cf. Leslau 1991:299–300) appears as *konä* ‘be(come)’ in Gə‘əz, but as *honä* ‘be(come)’ in Amharic and Muher.<sup>42</sup> The perfective aspect of inchoative-stative verbs has a present-perfect reading by default, or may refer to past situations in specific contexts (cf. Meyer 2016:204–205). In Gə‘əz, these two readings are still found with *konä* in negated copula clauses, cf. (13). In affirmative copula clauses, however, *konä* seems to have exclusively a past reading, cf. (12), i.e. it is acquiring a new grammatical function as a past auxiliary. Within Ethiosemitic, this development of *konä* is peculiar to Gə‘əz, but it also occurs in Arabic (cf. Bubenik, Hewson & Omari 2013; Lipiński 1997:479). As tense marking in Gə‘əz is optional, the linker copulas express atemporal stative situations, cf., e.g. (5) or (6). If *konä* is used as predicate in linker copula clauses, it competes with the regular linker resulting in semantic interferences through which *konä* loses its stative component in copula clauses (which is expressed by the regular linker copula). The remaining inchoative component triggers a telic reading that exclusively emphasizes the transition phase into a new state without the following phase of being in this state, which induces straightforwardly a past reading. A similar meaning shift of  $\sqrt{k-w-n}$  in the perfective conjugation also occurs in Muher and Amharic through interferences with the linker copula, cf. particularly (23) and (24) in §3.2. However, only Gə‘əz conventionalized the use of *konä* as predicate in past-marked copula and verbal clauses.

A similar grammaticalization process can also be assumed for the past auxiliary in Amharic and Muher, which stems from the root  $\sqrt{n-b-r}$  ‘sit, dwell, live’ (cf. Leslau 1991:383–384). The regular root  $\sqrt{n-b-r}$  also exists in Gə‘əz, in which it appears as *näbärä* in the perfective conjugation with the predominant meaning ‘sit down, dwell’, as in (33a), whereas the meaning ‘live, be alive’ is characteristic for modern Ethiosemitic.<sup>43</sup> Gə‘əz instead uses the verb *hājwä* ‘live, be alive’ from the common Semitic root  $\sqrt{h-j-w}$ , which is unproductive in modern Ethiosemitic (cf. Leslau 1991:252).<sup>44</sup> Apparently, the root  $\sqrt{n-b-r}$  modified its meaning from ‘sit’ to ‘live’, but it remains unclear why  $\sqrt{n-b-r}$  possibly replaced  $\sqrt{k-w-n}$  in its functions as past auxiliary in most modern Ethiosemitic languages. Probably, it became an areal

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<sup>42</sup> For the weakening of  $*k > h$ , cf. Podolsky (1991:29–31).

<sup>43</sup> In some languages, the Gə‘əz meaning component still exists in derived forms, as in Amharic *anorä* ‘put, set, store up’ (cf. Kane 1990:1049).

<sup>44</sup> The root  $\sqrt{h-j-w}$  may occur in archaic words, like Amharic *hijwät* beside *nuro* ‘life’ (cf. Kane 1990:26, 1049), whereas Muher only has *nibrät* ‘life’.



linguistic feature that, once established in one variety, spread through language contact.

The Muher past auxiliary *näbbärä* is formally identical with the regular perfective verb *näbbärä* ‘live’, except that the auxiliary is restricted to negated and subordinated clauses (cf. example (30b) in §3.2.). In Amharic, in contrast, the past auxiliary *näbbär*, which tends to omit the subject index (cf. Podolsky 1991:75), formally differs from the regular verb that appears as *norä* ‘live’. The regular verb *norä* ‘live’ weakened the second root consonant *\*b* to a labial element that assimilates with the adjacent vowel *ä* to *o* or is realized as *u*, whereas the past auxiliary retained the original *\*b*.<sup>45</sup> This variation certainly displays a difference in the gemination, i.e. original single *\*b* weakened, while geminated *\*bb* was retained. According to received opinion, the Amharic regular verb *norä* developed from the imperfective base (*\*näbr*) with single *\*b*, while the past auxiliary stems from the perfective base *\*näbbär* with geminated *\*b* (Klingenheben 1968:122; Podolsky 1991:48). This might fit the Amharic pattern, in which gemination in the perfective and its loss in the imperfective is an assumed innovation, but does not account for the reverse pattern in Eastern Gurage and Harari, which lack gemination throughout (cf. Meyer 2016:178–180). Therefore, it might be that the gemination alternation represents an archaic thematic variation between the non-geminating basic theme *\*näbär* vs. the geminating doubled theme *\*näbbär*, which later were lexicalized in Ethiosemitic as Verb Type A vs. B, respectively (cf. Meyer 2016:169).

Muher (and other Gunnän Gurage languages) replaced the past auxiliary *näbbär* by the innovative element *bannä* in affirmative main clauses whose origin is discussed variously in the literature (cf. Leslau 1979:143–144; Hever 2010:126–127). Leslau’s (1949:220; 1956:76) assumption – and its further substantiation in Hever (2010) – that *bannä* consists of a prefix *b(ä)-* followed by the bound existential auxiliary = *annä* is most plausible, as a similar construction consisting of an imperfective verb marked by the prefix *b(ä)-* denotes the past imperfective in certain main clauses (cf. (58) and (59) in §6).

## 8 SUMMARY

Tense as an obligatory grammatical category of main clauses predicates is an innovative feature in modern Ethiosemitic, which started to emerge as optional feature in Gə‘əz. First, tense marking occurred in copula clauses, and in clauses with an imperfective main verb. Later it facilitated the emergence of periphrastic constructions denoting specific phasal aspects, mainly the perfect, proximate and

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<sup>45</sup> In most other Transversal South Ethiosemitic languages, weakened *\*b* is found in the past auxiliary, but not with the regular verb. Moreover, weakened *\*b* does not cause labialization, but lengthening of the adjacent vowel *ä* to *a~ā*, as in Zay, Silt’e, Harari *nar~nār*, or is completely lost in Wolane *nār* (cf. Meyer 2016:195 for references).

progressive. These constructions are commonly found in main clauses, as subordinate predicates usually only express viewpoint aspect but not tense.

The emergence of tense is accompanied by the grammaticalization of two distinct copula predicates, viz. the linker copula ‘be’ and the existential auxiliary ‘exist’, which have the past auxiliary as common tense-marked counterpart, as shown in Table 7.

Table 7 Copula predicates in affirmative main clauses

Gəʿəz			⇒	AMHARIC AND MUHER			
INDICATIVE	[ ± past]		([ + past])	[ − past]		[ + past]	
	LINKING	EXISTENTIAL		LINKING/ EXISTENTIAL	LINKING	EXISTENTIAL	LINKING/ EXISTENTIAL
	∅ > <i>PRO</i>	<i>bo</i> > √ <i>h-l-w</i>			<i>*n</i>	√ <sub>AUX</sub> <i>h-l-w</i> > <i>jinä</i>	√ <sub>AUX</sub> <i>n-b-r</i> > <i>bannä</i>
	√ <i>k-w-n</i>	√ <i>h-l-w</i>			√ <i>k-w-n</i>	√ <i>n-b-r</i>	
JUSS							

√ h-l-w ‘exist’; √ k-w-n ‘be(come)’; √ n-b-r ‘sit, (dwell, live)’ (Gəʿəz) but ‘live’ (Amharic, Muher)

√ = regular verb; √<sub>AUX</sub> = only perfective conjugation; > = additional form

Past reference is optional in Gəʿəz, but became obligatory in Amharic and Muher. Moreover, the existential relation in Gəʿəz seems still to be in the process of grammaticalization, as it can be based on a linker copula with a locative complement, or the regular verb √ h-l-w ‘exist’. In Amharic and Muher, the perfective conjugation of √ h-l-w ‘exist’ grammaticalized as existential auxiliary, which Muher replaced with the auxiliary *jinä* in affirmative main clauses. That means the existential relation in Amharic and Muher is formally separated from the linking relation, whereas the use of √ h-l-w ‘exist’ as distinct existential copula only started to evolve in Gəʿəz. Eventually, this existential auxiliary facilitated the grammaticalization of a new predicative possession construction in Amharic and Muher, which completely replaced the Gəʿəz construction based on a linker copula with a locative complement. The original atemporal copula and existential predicates in Gəʿəz acquired non-past as a secondary semantic feature in modern Ethiosemitic when tense marking was conventionalized to an obligatory part of main clause predicates. The overt past auxiliary interfered with the semantics of the copula and existential auxiliary so that their occurrence was limited to non-past situations. Consequently, a zero morpheme for non-past emerged that eventually became an inherent component of the copula and the existential auxiliary.

Probably, the past auxiliary was extended to imperfective verbs to clearly mark situations that are not longer extant at the moment of utterance. As with copula



ABL	Ablative	LNK	Linker
ACC	Accusative	LOC	Locative
ADE	Adessive	M	Masculine
ALL	Allative, dative	MAL	Malefactive
APL	Applicative	MVM	Affirmative main clause marker
AUG	Augment	MVMP	Combination CNV-NPST functioning as MVM
AUX	Auxiliary	NEG	Negation
CNV	Converb	NPST	Non-past
COM	Comitative	OJ	Object suffix
COP	Copula	P	Plural
DEF	Definite	PFV	Perfective
DST	Distal	PM	Plural-masculine
DSTR	Distributive	POSS	Possessive
EMPH	Emphatic	PRX	Proximal
EXIST	Existential auxiliary	PST	Past
F	Feminine	REL	Relative clause marker
FOC	Focus	S	Singular
GEN	Genitive	SF	Singular-feminine
INST	Instrumental	SIM	Similative
INTJ	Interjection	SJ	Subject affix
IPFV	Imperfective	SNG	Singulative
IRR	Irrealis condition	SUB	Subordinating conjunction
ITER	Iterative	VN	Verbal noun
JUSS	Jussive/imperative		

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