Negation in Highland East Cushitic

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CHAPTER 1

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1. Introduction

The Highland East Cushitic (HEC) branch of Cushitic is a small group of languages and dialects spoken in the South of Ethiopia: Hadiyya-Libido (i.e. the Hadiyya subgroup), Kambaata-Alaaba-K'abeena (i.e. the Kambaata subgroup), Sidaama, Gedeo and Burji, listed here roughly according to their geographical distribution from North to South (see Figure 1). Sidaama, Gedeo and Burji are also referred to as Southern Highland East Cushitic (sHEC), the Hadiyya and Kambaata subgroups as Northern Highland East Cushitic (nHEC).[1]

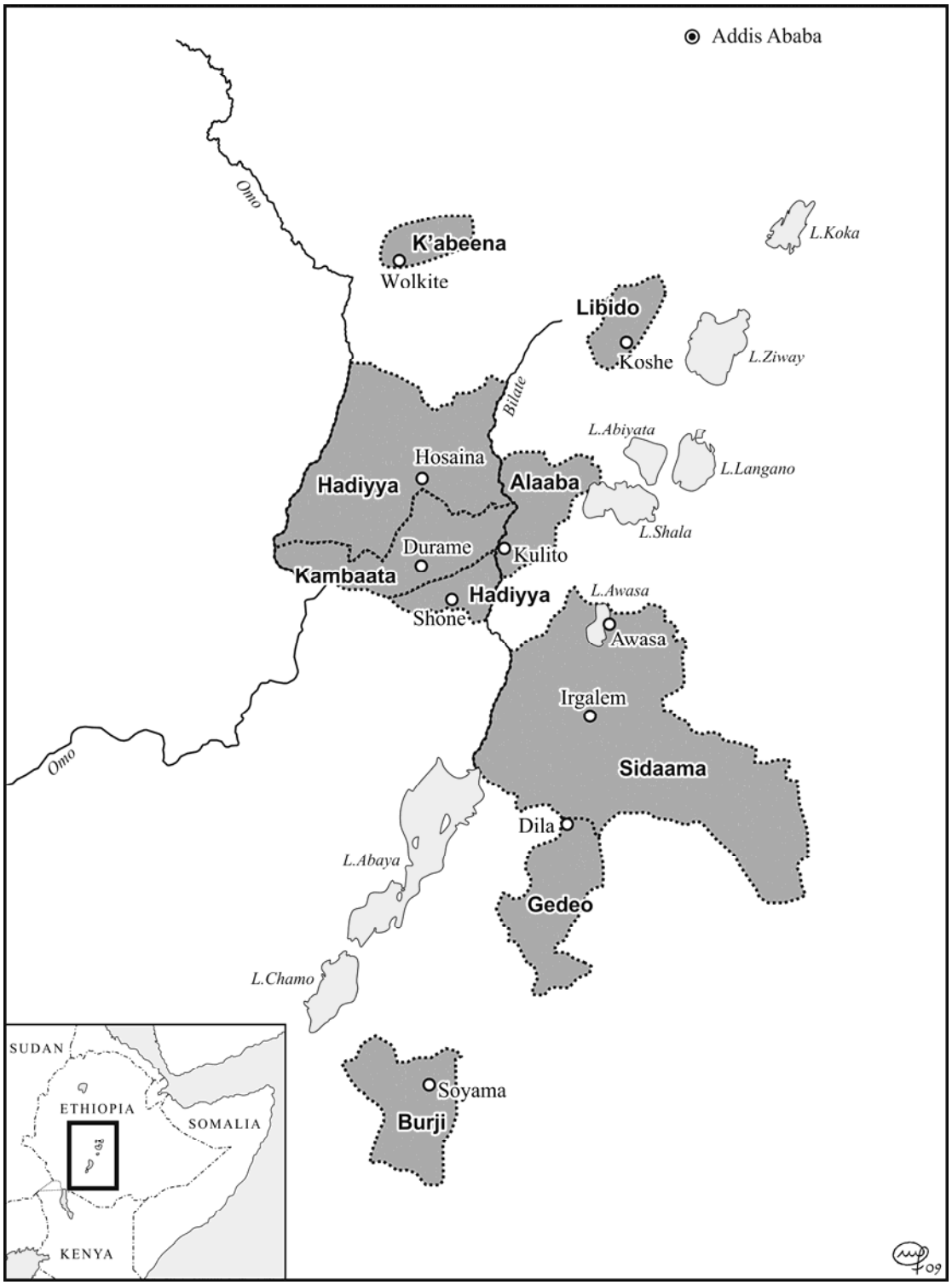
Our knowledge of HEC languages has been significantly advanced in the past years through the production of PhD theses, grammars and articles on individual languages. The steady increase in literature enables us more and more to determine in which details these closely related languages are similar or different and it allows us to add to the comparative work started by Hudson (1976, 1981, 1989, 2007).

This chapter takes a comparative look at the forms and functions of negative morphemes in HEC languages, all of which possess at least two, at the most five different negative morphemes. In all HEC languages except Sidaama, negation is indicated by negative *suffixes* on verbal or non-verbal predicates. In Sidaama, the negative morpheme is a proclitic, the host of which is not necessarily the predicate. After a short typological profile of the HEC languages has been sketched in section 2, section 3 shows which negative morphemes are used in which clause types. Section 3.1 elaborates on the standard negation strategy. Section 3.2 and 3.3 take a closer look at negative existential clauses and negative non-verbal clauses. The subsequent sections 3.4 and 3.5 are dedicated to non-declarative main clauses, i.e. imperative and jussive clauses. The negation of converb clauses is examined in section 3.6. Relative clause negation is dealt with in section 3.7. A short excursus on the means of negating verbal nouns is found in section 3.8. In section 4, the division of labour of the negative morphemes in the individual HEC languages is compared and diachronic issues are addressed. Section 5 discusses how the analysis of negation can contribute

[1] The term "Northern Highland East Cushitic" was introduced by Sim (1988); the term "Southern Highland East Cushitic" has here been created in analogy.

to our understanding of the internal relationships in HEC. Section 6 presents the conclusion.

Figure 1. Approximate distribution of the Highland East Cushitic Languages



2. Typological profile

All HEC languages have a five vowel system with phonemic length contrast. The consonant system is of medium complexity, a characteristic feature is the presence of ejective plosives and affricates (p', t', tʃ', k'). In addition, the southern HEC languages Sidaama, Gedeo, Burji have an alveolar implosive stop (ɗ). The distinction between single and geminate consonants is phonemic.

The HEC languages are all head- and dependent marking[2] and agglutinating-fusional. Nouns are marked for gender (masculine vs. feminine), case (at least a distinction between nominative, accusative and genitive is made), and number (general number, singular and plural). The derivational morphology of verbs includes at least a causative, a middle and a passive morpheme. Inflectional categories on verbs are aspect/tense, subject agreement and mood. Declarative main verbs are usually fused verbal complexes and originate, in most cases, from a combination of a converb and an existential verb form. Apart from these internally complex independent main verb forms, all HEC languages (with the possible exception of Gedeo; see §3.6) have at least one paradigm of dependent converbs, which are used in non-final clauses. Adverbial clauses that are not headed by converbs seem to be based on relative verbs.

Apart from nouns and verbs, it makes sense to assume a separate word class of adjectives, at least for some HEC languages. Ideophones are a common open word class, pronouns a closed word class. The existence of other word classes such as adpositions and adverbs is contentious.

All HEC languages are head-final languages. The verb is the last element in the clause. Nominal modifiers precede the head noun and subordinate clauses precede main clauses. For a more detailed overview of shared grammatical features the reader is referred to Hudson (2007).

3. Forms and functions of negative morphemes

In his study of negation in the Central Cushitic (Agaw) languages, Appleyard (1984) points out that the individual Central Cushitic languages have more than one negation strategy. Typically, in these languages, a three-way contrast is made between the negation of declarative main verb forms, subordinate/relative forms and imperatives. I will show in the following sections that the grammatical means of marking negation seem to be equally, if not even more elaborate in most HEC languages. The HEC languages have up to five different inflectional negative morphemes on verbs.[3] In this chapter I will examine in detail what determines the choice of a certain negative morpheme over another in the individual languages. Although there is a surprising array of negative morphemes found in these closely related languages, similarities in the division of labour of the negative morphemes can be observed, i.e. certain negation patterns are shared in HEC. Minimally, a two-way contrast is made between

[2] The syntactic relations within the clause are marked both by case morphology on the arguments and by agreement morphology on the verb. In the noun phrase, the possessor is dependent-marked.

[3] Some HEC languages also have a cognate negative *derivational* morpheme ('-less'), which should not concern us further in this chapter. See Treis (2008a: 277f) on Kambaata *-beelú(-ta)* '-less', Crass (2005: 246f) on K'abeena *-beell*^{u}, Kawachi (2007: 163, 319ff) on Sidaama *-iweelo / -iweello* and K. Wedekind (1990: 289) on Gedeo *-belo*.

declarative and non-declarative verbs; maximally, the negation of declarative main verbs, imperatives, jussives, converbs and relative verbs is distinguished.

3.1. Standard negation (declarative verbal main clauses)

Main verbs have the highest inflectional potential in HEC. They make a sentence complete and are thus distinct from converbs (§3.6), which are used in non-final clauses. Declarative main verbs have to be treated separately from non-declarative main verbs, i.e. imperative (§3.4) and jussive verbs (§3.5). In this section, we are only concerned with what is called "standard negation" in the typological literature (cf. Payne 1985, Miestamo 2007).

The morphological make-up of declarative main verbs is very similar in all HEC languages except Burji. The verb stem (root plus derivation) is followed by three inflectional morphemes which may be more or less fused into one complex portmanteau-morpheme:[4] the inherited Afro-Asiatic subject agreement morpheme is followed by the tense/aspect morpheme and the second subject agreement morpheme (a.k.a. "additional morpheme" in the literature). For a summary of the hypotheses brought forward to explain the make-up of the declarative main verbs in HEC see Crass (forthcoming).[5] While the first subject agreement morphemes are cognate and display only a little variation from language to language (Hudson 1976: 263), there are considerable differences in the inventory of the second subject agreement morphemes (Crass forthcoming, Tosco 1996).

Ex. (1)-(2), from Kambaata and Libido, illustrate the internal structure of declarative main verbs; the subject agreement morphemes are highlighted.

KAMBAATA (own field data)[6]

(1)	dul-*t*-áa-*nt*	dul-*teen*-á-*nta*
	slaughter-*2SG*-IPFV-*2SG*	slaughter-*2PL*-IPFV-*2PL*
	'you (SG) will slaughter'	'you (PL) will slaughter'

LIBIDO (Crass forthcoming; glosses Y.T.)

(2)	y-i-*t*-aa-*tto*	y-i-*tak*-a-*'o*
	say-EP-*2SG*-IPFV-*2SG*	say-EP-*2PL*-IPFV-*2PL*
	'you (SG) will say'	'you (PL) will say'

HEC languages typically differentiate between an imperfective and one or two perfective main verb paradigms. There is no agreement in the literature about whether HEC languages are aspect, tense or tense/aspect languages. Consequently, the terminology used to refer to the main verb paradigms differs from author to author.[7]

[4] Therefore, they are often not segmented in the examples given below.

[5] Burji lacks the secondary subject agreement morphemes.

[6] The Kambaata data is written in the official orthography. The following graphemes are not in accordance with the IPA conventions: ph [p'], x [t'], q [k'], j [dʒ], c [tʃ'], ch [tʃ], sh [ʃ], y [j] and ' [ʔ]. Length is indicated by double letters, e.g. aa [a:], bb [b:], shsh [ʃ:]. The second consonant of a glottal stop-sonorant cluster is generally written as double by convention although the cluster consists of only two phonemes, e.g. 'mm [ʔm]. All consonant-final words in Kambaata end in an unvoiced i, which is not written in the orthography.
For cited examples, the authors' orthographic conventions have been respected.

[7] An overview of the terminology used in the individual grammatical descriptions for the basic (non-periphrastic) declarative main verb paradigms is presented here. The terms that I use in this chapter are

For ease of communication and cross-language comparison, however, I will refer to all paradigms which seem to encode uncompleted, habitual and/or future events as "imperfective" (IPFV) and all paradigms which seem to encode completed events and/or events viewed as a whole as "perfective" (PFV). If a language has two perfective paradigms, I will refer to the perfective paradigm which also encodes present relevance as "perfect" (PRF), in agreement with Crass (forthcoming). The term "non-imperfective" is used to refer to a paradigm in which the distinction between perfective and perfect is neutralised. The reader must be aware that these terms do not necessarily reflect the terminology used in the individual grammatical descriptions that I consulted.

Apart from the types of declarative main verb introduced above, the individual languages may also have periphrastic declarative main verbs (e.g. progressives) which consist of a content verb (often in a converb form) and an existential verb. Depending on the individual language, periphrastic verbs are negated:

- by negating the existential V2 (as described in §3.2): see, e.g., Sasse and Straube (1977: 257) for the negation of the Burji progressive;
- by negating the converbal V1 (as described in §3.6): see, e.g. Kawachi (2007: 288 fn. 78) for the negation of the Sidaama progressive; or
- by using a non-periphrastic negative main verb form: in Kambaata, the negative non-imperfective verb form (see below) is also used to negate the periphrastic progressive.

In the remainder of this section, we will only be concerned with the negation of non-periphrastic main verb forms, for which not less than four non-cognate morphemes are used in HEC.

Hadiyya uses the negative suffix *-yyo* (Sim 1985: 20, 1989: 158) in declarative main clauses. See the negative perfective verb in ex. (3) and the negative imperfective verb in ex. (4).

HADIYYA (Sim 1989: 243, 464; glosses adjusted)[8]

(3)	ise	losisaancot	ik-ko'	bikkina	t'a'm-an-to'o-*yyo*
	3F	teacher.COP	be-3F.PFV.REL	because	ask-PASS-3F.PFV-*NEG*

'Because she is a teacher she is not married (lit.: "she wasn't asked;" Y.T.).'

given in brackets (→) after the terminology from the original sources. Kambaata (Treis 2008a): imperfective (→ IPFV), *e*-perfective (→ PFV) and *o*-perfective (→ PRF); Alaaba (Schneider-Blum 2007): imperfective (→ IPFV), perfective (→ PFV) and anterior/perfect (→ PRF); K'abeena (Crass 2005): imperfective (→ IPFV) and perfective (→ PFV); Hadiyya (Sim 1989): imperfect (→ IPFV), simple perfect (→ PFV) and present perfect (→ PRF); Libido (Crass forthcoming): imperfective (→ IPFV), perfective (→ PFV) and perfect (→ PRF); Sidaama (Anbessa 2000, Kawachi 2007): imperfect (→ IPFV), simple perfect (→ PFV) and present perfect (→ PRF). Gedeo (K. Wedekind 1990): imperfect (→ IPFV) and perfect (→ PFV); Burji (Sasse and Straube 1977 / C. Wedekind 1985 / K. Wedekind 1990): present-future / simple imperfect / imperfect (→ IPFV) and preterite / simple perfect / past (→ PFV).

[8] The glosses of cited examples have been adjusted to the best of my knowledge, mostly for the sake of uniformity and to allow for an easier comparison of the data. In some cases, I have indicated additional morpheme boundaries.

(4) uumboomm-isa-m lank'oommo-*yyo*
fall.1PL.IPFV.REL-like-ADD know.1PL.IPFV-*NEG*
'[W]e don't (even) know whether we will fall.'

Hadiyya has three non-periphrastic main verb paradigms:[9] imperfective, perfective and perfect (Sim 1989: 142f). Negation triggers the neutralisation of the distinction between perfective and perfect. The negative non-imperfective form is based on the perfective (Sim 1985: 20); cf. Table 1.

Table 1. Main verb paradigms in Hadiyya (based on Sim 1985, 1989)

AFFIRMATIVE	NEGATIVE
Imperfective	Imperfective-*yyo*
Perfective	Perfective-*yyo*
Perfect	

The addition of the negative morpheme to the imperfective is accompanied by minor additional changes in two persons, i.e. the affirmative and negative forms are not strictly symmetrical. In the second person singular and third person masculine the negative marker is attached to a shortened affirmative verb form, which is otherwise also used for subordinate verbs and before the question morpheme (Sim 1985: 20ff); compare 2SG.IPFV *-tootto* / 3M.IPFV *-ookko* in the affirmative and 2SG.IPFV *-too-yyo* (**-tootto-yyo*) / 3M.IPFV *-oo-yyo* (**-ookko-yyo*) in the negative.

Libido distinguishes three main verb forms (imperfective, perfective and perfect), but, in contrast to Hadiyya, it has negative forms ending in *-ssho* (cognate with Hadiyya *-yyo*) for all three paradigms (Crass forthcoming).

Kambaata uses the morpheme *-ba(ʼa)* for standard negation. As in Hadiyya, there are three non-periphrastic declarative main verb paradigms. The affirmative and negative imperfective paradigms are symmetrical, except for the presence of the negator *-ba(ʼa)*. The distinction between perfective and perfect verb forms is neutralised in the negation. Interestingly, the negative non-imperfective verb form is neither based on the perfective (as in Hadiyya) nor on the perfect (as shown for Sidaama below) (Table 2).

Table 2. Non-imperfective main verb paradigms in Kambaata

	PERFECTIVE	PERFECT	NEGATIVE NON-IMPERFECTIVE
1SG	(P/G)-Ø-*ee-m(m)* *	(P/G)-Ø-*óo-m(m)*	*-Ø-im-bá(ʼa)*
3M	(P/G)-Ø-*ee-ʼ(u)*	(P/G)´-Ø-*o*	
2SG	*-t-ee-nt* *	*-t-óo-nt*	*-t-ím-bá(ʼa)*
3F/PL	*-t-ee-ʼ(u)* *	*-t-óo-ʼ(u)*	
3HON	*-éem-Ø-ma(ʼa/ʼu)*		*-een-im-bá(ʼa)*
1PL	*-n-ee-m(m)* *	*-n-óo-m(m)*	*-n-im-bá(ʼa)*
2PL/HON	*-tée-Ø-nta(ʼa/ʼu)*		*-teen-im-bá(ʼa)*

* The stress position in these verb forms depends on the phonological structure of the verb stem.

[9] Strictly speaking, there is also a forth paradigm, the "continuous" (Sim 1989: 147). This paradigm, however, is formed from the imperfective paradigm by suffixing *-ulla*. Sim (1989) does not discuss how the "continuous" is negated.

Whilst the Kambaata affirmative non-imperfective paradigms display the typical HEC structure and are marked by a sequence of first subject agreement morpheme, aspect morpheme and second subject agreement morpheme (see the segmentation in Table 2),[10] the negative non-imperfective paradigm has its own unique morphological make-up. The negative non-imperfective forms have *only one* slot for subject agreement morphemes. Thus, the number of person distinctions is reduced from seven in the affirmative paradigms to five in the negative paradigm (1SG = 3M and 2SG = 3F/PL). The negative marker is preceded by the enigmatic non-imperfective morpheme *-im*, whose origin is unknown. Whereas the affirmative 1SG and 3M forms trigger the palatalisation (P) and/or gemination (G) of preceding alveolar and/or single stem-final consonants, these morphophonological processes are not prompted in the negation.

Even among the closely related languages of the Kambaata subgroup, the standard negation strategies differ in important details. K'abeena has only two non-periphrastic declarative main verb paradigms, namely imperfective and perfective; consequently, aspectual distinctions are not neutralised in the negation. The K'abeena negative suffix *-ba* is cognate with Kambaata *-ba*(*'a*) and is simply added to the affirmative verb form (Crass 2005: 166).[11] Though genetically closer to K'abeena, Alaaba has three non-periphrastic main verb paradigms[12] like its geographically closer neighbour Kambaata, namely imperfective, perfective and perfect, which are negated with the suffix *-ba'*^{a}.[13] The distinction between perfective and perfect is again neutralised in the negation. Like in Sidaama (see below), the negative non-imperfective form is based on the perfect (Schneider-Blum 2007: 210).

The Sidaama negative proclitic *di*= is one of the rare dependent morphemes in HEC that precede their host. Not only its status but also its use is unique in HEC. The negative morpheme does not necessarily precede the main verb (or predicate) directly, but it can also cliticise to preverbal constituents (Kawachi 2007: 290ff); consider ex. (5)-(6). When the negative morpheme is found on the main verb, the event as such is negated. Shifting the negative morpheme to preverbal constituents, e.g. the direct object ('food') in ex. (6), limits the scope of negation. Any constituent (e.g. indirect object, subject, adverbial) can be placed in preverbal position, thus be focussed and negated by *di*=.

SIDAAMA (Kawachi 2007: 289, 290; glosses adjusted)

(5) bule sagalé dangur-í-ra *di*=u-i-t-ino
Bule.F.NOM food.ACC Dangura-GEN-DAT *NEG*=give-EP-3F-PRF
'Bule did not give food to Dangura.'

[10] The first subject agreement morpheme is zero for 1SG and 3M. The aspect morpheme is zero in the affirmative 3HON and 2PL/HON.

[11] The suffixation of the negative morpheme *-ba* involves minor segmental changes, namely the omission of glottal endings and degemination; this should, however, not concern us here, because this is not a particularity of the negation but also observed when other morphemes are added.

[12] Strictly speaking, there are four non-periphrastic main verb paradigms, because there is also a progressive paradigm; this paradigm, however, is formed from the imperfective paradigm by suffixing *-t*(*i*) (Schneider-Blum 2007: 220ff). The progressive is also negated with *-ba'*^{a}; cf. example (16) in Schneider-Blum (2007: 32).

[13] Schneider-Blum (2007) marks devoiced vowels by round brackets; this convention has here been changed to superscripts.

(6) bule dangur-í-ra *di*=sagalé u-i-t-ino
Bule.F.NOM Dangura-GEN-DAT *NEG*=food.ACC give-EP-3F-PRF
'Bule gave Dangura not food (but something else).'

Other HEC languages do not have the option of shifting negative morphemes from the main verb to other constituents in order to manipulate the scope of negation. Instead, they have to make use of cleft sentences and express the focussed constituent as a non-verbal predicate ("It is not food that X gave to Y", "It is not to Y that X gave food" etc.).

Sidaama also has three non-periphrastic main verb paradigms (Kawachi 2007: 397-400), imperfective, perfective and perfect, in the affirmative but only two paradigms in the negative, because the aspectual distinction between perfective and perfect is neutralised (Table 3). The negative verb is based on the perfect form (Kawachi 2007: 287).

Table 3. Main verb paradigms in Sidaama (based on Kawachi 2007)

AFFIRMATIVE	NEGATIVE
Imperfective	*di*=Imperfective
Perfective	*di*=Perfect
Perfect	

Interestingly, the southern HEC language Gedeo does not share the negative morpheme with its closest relatives Sidaama or Burji but it uses a suffix *-ba*(*a*), which is cognate with the negative morpheme of the Kambaata subgroup; consider ex. (7). In the 1SG, 2SG and 1PL of certain verb forms,[14] this negative morpheme has an infixed allomorph *-bo'-* (K. Wedekind 1985: 85f, 91ff; 1990: 301-305); see ex. (8).

GEDEO (K. Wedekind 1990: 84, 155; glosses adjusted)

(7) k'orsi kaba hed'-e-*baa*-ni
medicine here exist-3M.PRF-*NEG*-DECL
'There is no medicine here.'

(8) golalo[-ka] fad'acco 'ind-a*bo'*no
white-AGR horse.SG eat-1PL.IMPF<*NEG*>
'[W]e shall not eat white horses[.]"[15]

It does not become entirely clear in K. Wedekind's description what triggers the occurrence of the negative infix in favour of the negative suffix; this definitely requires further investigation.

Burji negative declarative main verbs (imperfective and perfective) are characterised by the presence of the suffix *-ey'i* (C. Wedekind 1985, K. Wedekind 1990: 541-544, Sasse and Straube 1977: 257), which replaces the final vowel of the affirmative verb forms. Affirmative and negative verb forms are thus not entirely symmetrical; cf. ex. (9)-(10).

[14] In certain persons of the so-called "intentional mood/aspect" (K. Wedekind 1990: 301-305).
[15] The correct translation is probably "a/the white horse"; see the SG-marking in Gedeo.

BURJI (K. Wedekind 1990: 541f; glosses Y.T.)

(9)	mar-t-a	mar-t-*ey'i*
	go-2SG/3F-IPFV	go-2SG/3F-*NEG*
	'you (SG) / she go(es)'	'you (SG) / she do(es) not go'
(10)	mar-an-d-u	mar-an-d-*ey'i*
	go-PFV-2SG/3F-PFV	go-PFV-2SG/3F-*NEG*
	'you (SG) / she went'	'you (SG) / she did not go'

The preceding discussion has shown that HEC languages differ considerably with respect to the form of the morphemes used to negate declarative main verbs and with respect to the effect that standard negation has on aspect and person marking; a summary is presented in Table 4.

Table 4. Standard negation in HEC[16]

	Standard negative morpheme	Neutralisation of PFV-PRF distinction	Neutralisation of person distinctions
Hadiyya	*-yyo*	yes	no
Libido	*-ssho*	no	no
Kambaata	*-ba'a*	yes	no/yes
Alaaba	*-ba'^{a}*	yes	no
K'abeena	*-ba*	—	no
Sidaama	*di=*	yes	no
Gedeo	*-baa/-bo'-*	—[17]	no
Burji	*-ey'i*	—	no

Some negative morphemes, namely those of Kambaata, Alaaba, K'abeena and Gedeo, and those of Hadiyya and Libido, seem to be cognate. At least in four languages, the correspondences between the affirmative and negative main verb paradigms are not one-to-one, because negation triggers the neutralisation of the distinction between perfective and perfect verb forms. Sim (1988) already observed that "the negative [non-imperfective] is not formed from the same affirmative [perfective or perfect] paradigm in every language" (1988: 447). In Hadiyya, the negative is based on the perfective (Table 1), while in Sidaama (Table 3) and Alaaba (Schneider-Blum 2007: 210) the negative morpheme is added to the perfect form.[18] In Kambaata, the negative non-imperfective is neither based on the perfective nor the perfect form but has a unique morphological make-up. Furthermore, Kambaata is the only HEC language in

[16] The dash (—) indicates that the respective language does not have a perfective-perfect distinction.

[17] Gedeo does not seem to have a perfective-perfect distinction. K. Wedekind provides various imperfective and perfective sub-paradigms for Gedeo (called "actual", "nonactual", "past", "intentional") and not all affirmative have corresponding negative paradigms. But as the description is not transparent enough, it is not possible to state here which grammatical distinctions are neutralised in which way. Consider the following quote from K. Wedekind (1990: 280): "For a language like Gedeo which does not express 'negation' with one single particle, it has to be expected that some affirmative paradigms are not paralleled by negative paradigms. The negative paradigms of Gedeo do in fact cover only the pragmatically 'interesting' [sic] tenses and aspects."

[18] With respect to Libido, Sim (1988: 447) also claims that negation neutralises the distinction between perfective and perfect and that the non-imperfective negative verb forms are based on the perfect. Crass (forthcoming) refutes this claim.

which some of the person distinctions are neutralised in the non-imperfective (but not the imperfective) negative paradigm. In other HEC languages, negation has no effect on subject agreement marking; note, however, that the reduction of person distinctions is also attested in various Cushitic languages outside HEC (e.g. Oromo, Bilin, Awngi; cf. Appleyard 1984: 204).

There are significant asymmetries (i.e. structural differences) between affirmation and negation in HEC. We are mainly dealing with *paradigmatic asymmetry* (Miestamo 2008), because in most languages not all verbal forms have corresponding affirmative and negative forms, mainly due to the loss of the perfective-perfect distinction in the negation. Apart from this, there are some instances of *constructional asymmetry* (Miestamo 2008), in which the addition of a negative morpheme triggers further structural changes on the verb form; recall, for instance, that the negative morpheme triggers the loss of a final vowel segment in Burji (cf. ex. (9)-(10)) and the loss of the second subject agreement morphemes and the use of another aspect morpheme (*-im*) in the negation of non-imperfective paradigms in Kambaata (cf. Table 2).

3.2. Existential clause negation

The nHEC languages and Sidaama have a defective existential verb 'exist, be (located)', which can only be marked for a fraction of the grammatical information that non-defective verbs can be marked for. It is only used as a declarative main verb or relative verb and occurs only in one tense/aspect paradigm, which is usually similar to the perfect paradigm but which has present reference; see, e.g., ex. (11).[19] If verb forms for which the existential verb cannot inflect are required, the regular and non-defective verb 'live' is used.

KAMBAATA (own field data)

(11) mín-e *yóo'u*
house-OBL *exist.3*
'He is at home.'

The negation of the defective existential verb is like that of regular verbs in Kambaata, Alaaba, K'abeena and Sidaama; see ex. (12)-(13) from K'abeena.

K'ABEENA (Crass 2005: 195; translation Y.T.; glosses adjusted)

(12) mat^{u} k'aricc^{u} *yoo*
one.M.NOM God.M.NOM *exist.3*
'There is (only) one God.'

(13) tah^{u} dag-anu-ba-'i t'uloo *yoo-ba*
fly.M.NOM know-3M.IPFV-NEG-REL wound.M.NOM *exist.3-NEG*
'There is no wound that a fly does not know.'

In Hadiyya (Sim 1985: 21) and Libido (Joachim Crass, pers. comm.), however, the standard negation morpheme cannot be attached to the existential verb. Instead, there is a suppletive and invariant negative existential *bee'e* 'be absent, not be present' in

[19] In Hadiyya, the verbal paradigm of 'exist, be (located)' is not similar to any other paradigm (Sim 1988: 448).

Hadiyya and *beekk'e / bee'e* 'be absent, not be present' in Libido; consider ex. (14)-(15).

HADIYYA (Sim 1989: 255, 259; glosses adjusted)

(14) ka daajjenne k'urt'ume' *yookko*
DEM river.LOC fish *exist.3M*
'There are fish in this river.'

(15) iina oos *bee'e*
1SG.DAT boys *not_exist*
'I have no boys (lit. "Boys are not to me;" Y.T.).'

The Hadiyya negative existential verb *bee'e* constitutes the source of the morpheme (-)*bee'* (§3.7), which is attached to relative clauses and relative-based subordinate clauses.

Gedeo and Burji only have a regular verb 'live, exist, be (located)', GED *hed'-* and BUR *yed'-*, which is negated like any other verb in the language; see K. Wedekind (1990: 84, ex. 5; 230) on Gedeo and Sasse and Straube (1977: 259f) on Burji.

3.3. Non-verbal clause negation

The negation strategy used for non-verbal clauses, viz. clauses with a nominal or adjectival predicate, is generally the same as for declarative main clauses (§3.1) throughout HEC. In ex. (16) from Hadiyya, the standard negative morpheme *-yyo* (cf. §3.1) is suffixed to the non-verbal predicate.

HADIYYA (Sim 1989: 237; translation Y.T.)

(16) iyyann abuullaanco-*yyo*
my_father farmer-*NEG*
'My father is a farmer'

In all HEC languages, negative non-verbal clauses differ from their affirmative counterparts only in the presence of the negative morpheme. The only known exceptions to this rule are Burji and, in a restricted context, Hadiyya.[20] In reference to the Burji ex. (17), K. Wedekind (1990: 518) states that the "copula" *-g* preceding the standard negative morpheme *-ey'i* is restricted to negative nominal predicates. Affirmative non-verbal predicates are instead marked by a morpheme *-na* (K. Wedekind 1990: 533f, Sasse and Straube 1977: 252), as in ex. (18).[21]

[20] In Hadiyya, the copula *-tte* is dropped in the negation of predicates that are masculine proper nouns before the negative suffix *-yyo* is added (cf. Sim 1989: 327).

[21] This morpheme is also found on modified object nouns (Sasse and Straube 1977: 252). My gloss "COP" in ex. (18) might therefore not be appropriate. K. Wedekind glosses this morpheme as "N", which means "noun" according to his list of abbreviations.

BURJI (K. Wedekind 1990: 518, glosses adjusted; Sasse and Straube 1977: 252, translation and glosses Y.T.)

(17) ’ani d’aashi-g-*ey’i*
1SG Burji-COP-*NEG*
‘I am not a Burji man.’

(18) ani č’imeyši-*na*
1SG old_man-*COP(?)*
‘I am an old man.’

3.4. Imperative clause negation

All HEC languages distinguish between a singular and a plural imperative form. The imperatives are the simplest verb forms in HEC, because they lack the subject agreement morphology that is typical of other verb forms; see the Kambaata examples in ex. (19), in which the singular form is marked by an unvoiced *i*, the plural form by a morpheme *-é* or *-iyyé*, depending on the verb stem. The plural imperative morpheme triggers palatalisation and/or gemination of preceding alveolar and/or single consonants.

KAMBAATA (own field data)

(19) (a) háat-(i)[22]
roast-IMP.SG
‘Roast (SG)!’

(b) haachch-é
roast-IMP.PL
‘Roast (PL)!’

In Kambaata, imperative clauses are marked as negative by the suffix *-oot*, which is not used to negate any other verb form in the language. Whilst the affirmative imperative verbs do not contain the subject agreement morphemes *-t* (2SG) and *-teen* (2PL), they do occur in the negative forms; compare ex. (19) and (20). The negative morpheme is located between the subject agreement and the imperative morpheme. Its final consonant is palatalised and geminated before the imperative plural morpheme (*-oot* → *-oochch*); consider ex. (20)a-b.

KAMBAATA (own field data)

(20) (a) háat-t-*oot*-(i)
roast-2SG-*NEG*-IMP.SG
‘Don’t roast (SG)!’

(b) haat-téen-*oochch*-e
roast-2PL-*NEG*-IMP.PL
‘Don’t roast (PL)!’

Table 5 gives an overview of the imperative endings in the languages of the Kambaata subgroup.

[22] Word-final unstressed and unvoiced *i* is not written in Kambaata according to the official orthographic conventions; it is here added in brackets to show that the imperative actually ends in a vowel.

Table 5. Endings of affirmative and negative imperatives in the Kambaata subgroup (based on own field data, Schneider-Blum (2007: 224) and Crass (2005: 168ff); segmentation in the negative mine)[23]

		AFFIRMATIVE	NEGATIVE
2SG	Kambaata	-(i)	-t-*oot*(-i)
	Alaaba	-^{i}	-t-*óot*-^{i}
	K'abeena	-^{i}	-t-*ot*-^{i}
2PL	Kambaata	(P/G) -é/-iyyé	-téen-*oochch*-e
	Alaaba	(P/G) -é/-(i)yé	-tón-*occ*-^{e}
	K'abeena	(P/G) -iyye/-(iy)yé	-toon-*c*-iyye

As the right column of Table 5 shows, the negation of the singular imperatives is practically identical in all languages of the Kambaata subgroup. The subject agreement morpheme *-t* is followed by the negative morpheme *-o(o)t* and the unvoiced *-i* of the affirmative imperative singular. There are, however, slight differences in the plural.[24] In K'abeena, only the palatalised final consonant *c* (← *-t*) remains as a remnant of the negative morpheme *-ot* in the plural; the vowel of the negative morpheme is completely elided.

Another difference concerns the realisation of the 2PL subject agreement morphemes as *-tón* and *-toon* before the negative morpheme in Alaaba and K'abeena; the expected 2PL marker would have been *-teen*. This vowel change is triggered by the *o* vowel of the negative imperative morpheme and is thus a case of anticipatory assimilation.[25] Note that the trigger of this assimilation process is lost in K'abeena and that, synchronically, the vowel change in the subject agreement morpheme is the only remaining reflex of the vowel of the negative morpheme.

Affirmative imperatives in Hadiyya also lack the subject agreement morphemes and are only marked by SG *-e* and PL (G) *-ehe* (Sim 1985: 20, 30). The negative imperative markers are *-t-itt-e* 2SG-NEG-IMP and *-takk-ott-e* 2PL-NEG-IMP (Sim 1985: 21), which are made up of the regular subject agreement morphemes *-t* 2SG and *-takk* 2PL,[26] the two allomorphs *-itt* and *-ott* of the negative imperative morpheme and an ending *-e*. The negative imperative morpheme *-itt/-ott* in Hadiyya is cognate with the negative imperative morphemes in the Kambaata subgroup.

The imperative morphemes in Libido are almost identical to those of Hadiyya: SG *-e* and PL (G) *-ehe / -ette* in the affirmative and *-t-itt-e* 2SG-NEG-IMP and *-tak-itt-e* 2PL-NEG-IMP (Joachim Crass, pers. comm.).

In Sidaama, the affirmative imperatives are marked by 2SG *-i* and 2PL -C*e*[27] (Kawachi 2007: 425). The negative imperative morphemes *-t-oot-i* 2SG-NEG-IMP and *-tin-oont-e* 2PL-NEG-IMP consist of the regular subject agreement morphemes *-t*

[23] The allomorphs in the affirmative plural are predominately phonologically conditioned.

[24] Note that the affricate [tʃ] is written <ch> in Kambaata but <c> in Alaaba and K'abeena.

[25] This type of assimilation can also be observed elsewhere; see the 3HON jussive form *-oon(i)* in Alaaba (Schneider-Blum 2007: 224), which is reconstructable as 3HON *-een* + JUS *-un*, and the 3HON negative converb form *-oo'náan(i)* (Schneider-Blum 2007: 266), originating from 3HON *-een* + NCO *-u'náan(i)*. Consider furthermore the realisation of 3HON subject agreement morpheme as *-oon* rather than *-een* in the 3HON jussive *-oonu(n^{i})* in K'abeena (Crass 2005: 172) and the 3HON negative converb *-oo'naan^{i}* (Crass 2005: 185), resulting from a fusion of 3HON *-een* and NCO *-u'naan^{i}*.

[26] The morpheme *-takk* could be further segmented into *-t* second person and *-akk* non-first person plural.

[27] C represents a copy of preceding single stem-final consonants. The plural imperative triggers gemination but no palatalisation in Sidaama; see *it-té* 'Eat (PL)!' in Kawachi (2007: 426).

2SG and *-tin* 2PL, the two negative allomorphs *-oot* and *-oont* and the imperative morphemes, which are also attested in the affirmative.

In Gedeo, the affirmative imperatives are marked in the same way as in Sidaama (K. Wedekind 1990: 306). The negative imperative morphemes *-t-ott'-e'e* 2SG-NEG-IMP and *-tin-okk'-e'e* 2PL-NEG-IMP contain the regular subject agreement morphemes *-t* 2SG / *-tin* 2PL, the two negative allomorphs *-ott'* and *-okk'* and an additional morpheme *-e'e*, which could be related to the affirmative imperative morpheme. Alternatively, the negation of the imperative can be indicated with the particle *mee*, as in *mee marr-i* 'Don't (SG) go!'.[28]

In Burji, the imperative is marked by 2SG *-i* and 2PL *-ee* in the affirmative and by 2SG *-aash-i* and 2PL *-akk-ee* in the negative (K. Wedekind 1990: 546). Compared to other HEC languages, it is striking that the Burji negative imperatives are devoid of any subject agreement morphology; the expected morphemes would have been 2SG *-d/-t/-š* and 2PL *-šing/-cing/-jing*. It is also noteworthy that the imperative negative allomorphs *-aash* and *-akk* are cognate with the negative jussive morpheme *-akki*; see, e.g., *mar-akki* 'Let me/him/her/them not go!' (K. Wedekind 1990: 546) and §3.5 below.

Table 6. Negative imperatives in HEC

	IMP.NEG morpheme	Asymmetry AFF vs. NEG.IMP	NEG morpheme restricted to IMP
Hadiyya	-itt/-ott	yes	yes
Libido	-itt	yes	yes
Kambaata	-oot/-oochch	yes	yes
Alaaba	-óot/-occ	yes	yes
K'abeena	-ot/-c	yes	yes
Sidaama	-oot/-oont	yes	yes
Gedeo	-ott'/-okk'	yes	yes
Burji	-aash/-akk	no	no

In contrast to the formal heterogeneity in the domain of standard negation (§3.1), the morphemes used to negate imperative verbs are cognate in most HEC languages and consist of a vowel *o* and a plosive *t*, which is palatalised to *c* in the plural allomorph in the Kambaata subgroup and realised as ejective in Gedeo.[29] The negative imperative morpheme of Burji stands out from the rest. All HEC languages except Burji have a separate negation strategy for their imperative forms. The affirmative and negative verbs are structurally asymmetrical except in Burji: while the affirmative imperative forms lack the regular subject agreement morphology, the negative imperative verbs require it. Burji goes its own way in the negation of imperatives, although the marking of *affirmative* imperatives is clearly equivalent to that in other HEC languages.

In van der Auwera and Lejeune's (2008) typology of negative imperatives, all HEC languages (except Burji) belong to Type 4, which encompasses those languages

[28] K. Wedekind (1990: 306) states that the particle *mee* is borrowed from the neighbouring Lowland East Cushitic language Oromo. According to Dabala Goshu (pers. comm.), however, *mee* is a particle meaning 'please' in Oromo (see also Gragg 1982) and not a negative morpheme.

[29] It is not clear how the plural allomorph of Gedeo (*-okk'*) relates to the singular allomorph and to the negative imperative morphemes attested in the other HEC languages.

in which the negative imperative "uses a construction other than the second singular [affirmative] imperative" (see the asymmetry in subject agreement marking between affirmative and negative forms) and "a sentential negative strategy not found in […] declaratives" (see the use of different negative morphemes for imperatives and standard negation all over HEC) (2008: 1). Burji belongs to the cross-linguistically more common Type 2 of languages in which a different strategy is applied for standard negation and for the negation of imperatives but in which the structure of the affirmative and negative imperatives is the same (apart from the presence of the negative morpheme).

3.5. Jussive clause negation

In the literature on Ethiopian languages, imperative and jussive verbs forms are often presented in a joint paradigm because they are functionally similar and form a complementary set. Imperatives and jussives encode directives to second persons and, via second persons, to non-second persons, respectively. Imperative forms fit into the gaps that the jussive paradigm leaves in the second persons; see the complementary imperative-jussive paradigm of Kambaata in Table 7, in which the imperative cells are marked in bold.

Table 7. Kambaata jussive and imperative paradigm

	AFFIRMATIVE	NEGATIVE
1SG	´-∅-u	-∅-ú-nka
2SG	**´-(i)**	**-t-oot-(i)**
3M	´-∅-un, (*in blessings*) ´-∅-u	-∅-ún-ka
3F/PL	´-t-un, (*in blessings*) ´-t-u	-t-ún-ka
3HON	-éen-un	-een-ún-ka
1PL	-n-ó ~ ´-n-un ~ ´-n-u	-n-ún-ka *or* -n-ú-nka
2PL/HON	**(P/G) -é ~ -iyyé**	**-t-éen-oochch-e**

Apart from Kambaata, complementary imperative-jussive paradigms are found in all other HEC languages. In spite of constituting a joint paradigm, jussive and imperative verb forms do not share any morphological material; they are structurally distinct in all HEC languages except Burji: (i) Imperative morphemes are marked by an *i* or *e* vowel, while jussive morphemes are characterised by an *u* or *o* vowel; (ii) affirmative jussives are marked for subject agreement[30] whereas affirmative imperatives are not (cf. §3.4); and, finally, (iii) different negative morphemes are used for imperatives and jussives.

In Kambaata, negative jussives are based on the affirmatives and differ with respect to the position of stress and the presence of the negative morpheme -(*n*)*ka*, which is not used in any other grammatical context; see the affirmative and negative forms in ex. (21).

[30] Note that the subject agreement morpheme is zero in 1SG, 3M and (in some languages) 3PL verb forms.

KAMBAATA (own field data)

(21) íse qans-it-án le'-ís-s-un
3F.NOM breastfeed-3F-ICO grow-CAUS-3F-JUS
dul-am-ún-*ka*!
slaughter-PASS-3M.JUS-*NEG*
'Let her breastfeed and raise (him), don't let him / he may not be butchered!'

There are hardly any differences in the jussive formation in the languages of the Kambaata subgroup. In Alaaba and K'abeena, the jussive is marked by a morpheme (3rd person) *-un* / (1st person) *-o* in the affirmative and an additional *-(n)ka* in the negative (Schneider-Blum 2007: 224, Crass 2005: 171-4).

In Sidaama, the affirmative jussive is marked by *-o*, to which the *-nke* is added in the negation; see ex. (22). According to Anbessa (2000: 78), there is an optional morpheme *-na* on affirmative jussives in the third person. Apart from using *-nke*, the standard negation proclitic *di=* (§3.1) can be used to negate jussive forms (Kawachi 2007: 427).

SIDAAMA (Kawachi 2007: 439; glosses adjusted)

(22) min-i-kki mulla ikk-o-*nke*!
house-M.NOM.MOD-2SG.POSS empty become-3M.JUS-*NEG*
'May your house not be deprived!'

For Hadiyya, the following jussive morphemes are provided in the literature: *-ona* for affirmative and *-oonne*[31] for negative jussives (Sim 1985: 16, 1989: 145, 158); almost identical morphemes are found in Libido: *-ona* and *-oone* (Joachim Crass, pers. comm.). The Hadiyya affirmative jussive can probably be further segmented into *-o-na* (see the optional *-na* morpheme on affirmative jussives in Sidaama above), the negative jussive accordingly into *-oo-nne*. The jussive morpheme itself would thus be *-o(o)* and the negative morpheme *-nne*, which is most likely cognate with Sidaama *-nke*.

Affirmative jussives in Gedeo are marked by *-óo*(*-waali*) (K. Wedekind 1985: 86, 97); they can only be rendered negative in periphrases with the verb *gop'-* 'fail'.

In Burji, the negative jussive is not based on the affirmative forms. The affirmative forms are marked by (1st person) *-u*(*-waa*) / (3rd person) *-oo*(*ni*) after the subject agreement morphemes, whereas the negative forms are unmarked for subject agreement and invariantly characterised by the morpheme *-akki* (K. Wedekind 1990: 546), which is the morpheme also used to negate the imperative (§3.4).

Table 8. Negative jussives in HEC

	NEG morpheme	Asymmetry AFF vs. NEG.JUS	NEG morpheme restricted to JUS
Hadiyya	-nne	no	yes
Libido	-ne	no	yes
Kambaata	-(n)ka	no	yes
Alaaba	-(n)ka	no	yes
K'abeena	-(n)ka	no	yes

[31] The morpheme is written *-oone* in Sim (1985) and *-oonne* in Sim (1989).

Sidaama	-nke (*or* di=)	no	yes (no)
Gedeo	–	–	–
Burji	-akki	yes	no

If we compare the morphological means and the structural features of negative jussives in the individual HEC languages (Table 8), we notice that Burji occupies a special place due to the use of a morpheme which is (probably) not cognate to the negative jussive morphemes used in the other languages[32] and due to the subject marking asymmetry between the affirmative and negative jussive paradigm, which is not observed in the other languages. With respect to the negation of jussives, Gedeo, too, contrasts with the remainder of HEC, because it lacks negative morphology for jussives altogether and only allows periphrastic negation. Given the discrepancies in the negation strategy between Gedeo or Burji on the one hand and nHEC and Sidaama on the other hand, it has to be stressed that the *affirmative* jussive morpheme (a vowel *o* or *u*) is shared by all languages.

3.6. Converb clause negation

All HEC languages (except possibly Gedeo) have at least one paradigm of converbs, i.e. dependent non-final verbs in adverbial function.[33] Converbs are often interpreted as encoding a temporal relation to the next higher clause but, depending on the context, they can also encode other adverbial relations, such as manner, reason, purpose, condition etc. The semantic interpretation of converbs is vague. Some HEC languages have a unique negation strategy for converb clauses.

Kambaata differentiates between perfective and imperfective converbs, which encode, simply speaking, that an event expressed in a clause is anterior or simultaneous to the event expressed in the main clause or the next higher clause. In ex. (23), the actions of crying and running are simultaneous to stumbling, while stumbling, falling and cutting oneself happen consecutively.

KAMBAATA (own field data)

(23) cíil-u am-a-sí zakk-óon yaar-*án*
infant-M.NOM mother-F.GEN-3M.POSS after-M.LOC cry-*3M.ICO*

dagud-*án* qo'll-*í* úbb gag-i-sí
run-*3M.ICO* stumble-*3M.PCO* fall.*3M.PCO* self-M.GEN-3M.POSS

inq-óon yabur-ú-s (...) mu'rr-ée'u
tooth-F.ICP lip-M.ACC-3M.POSS cut-3M.PFV
'Running in tears behind his mother, a little boy stumbled, fell down (and) cut his lip (...) with his own teeth.'

Subject change between a converb clause and a subsequent clause is indicated by the different subject (DS) morpheme *-yan*, irrespective of the aspect of the converb; consider the DS-marked perfective converb in ex. (24).

[32] The Burji imperative and jussive negative morpheme *-akki*, segmented into *-a* and *-kki* by K. Wedekind (1990: 546), could be cognate with the Sidaama relative negator *-kki* (§3.6).
[33] The evidence for Gedeo is not clear.

KAMBAATA (own field data)

(24) íchchi-*yan* xíjj-o-s
eat.3M.PCO-*DS* make_sick-3M.PRF-3M.OBJ
'He ate (the food) (and) it made him sick.'

The negative morpheme on the main verb often has scope over (a) preceding converb(s); see ex. (25).

KAMBAATA (own field data)

(25) ka xeen-á min-í áag-g
DDEM1.M.ACC rain-M.ACC house-M.ACC enter-2SG.PCO

birr-iis-sáanti-*ba'*-i?
stop-CAUS-2SG.IPFV-*NEG*-Q
'Don't you enter a house (to) take shelter from (lit. "make stop") the rain?'
(*'Do you enter a house not (to) take shelter from (lit. "make stop") the rain?')

Converb clauses can, however, also be negated separately. Negative converbs are characterised by a morpheme with three free allomorphs *-ú'nna*, *-u'nnáan* and *-u'nnáachch*.[34] The distinction between imperfective and perfective converbs and between same subject (unmarked) and different subject converbs is neutralised in the negation; there is but one negative converb paradigm. Consider the negative converbs in a different subject context in ex. (26) and in a same subject context in ex. (27).

KAMBAATA (own field data)

(26) án dag-*u'nnáan* reh-ée=hann-íichch
1SG.NOM know-1SG.*NCO* die-3M.PFV.REL=NMLZ-M.ABL

zakk-íin (…)
after-M.ICP
'After he had died unbeknown to me (…).' (lit. "After he had died, I not knowing (…).")

(27) (…) qishixx-it-*u'nnáan* oodan-t-áyyoo'u íkke
feel_sorry-3F-*NCO* argue(.PASS)-3F-PROG PST/IRR
'(…) she was arguing without feeling sorry (for him).'

The negative converb does not only express 'not V-ing / not having V-ed' or 'without V-ing / without having V-ed' but it may also encode a relation of posteriority between two clauses; it is thus often translated as 'before V-ing'; see ex. (28).

KAMBAATA (own field data)

(28) huj-íta xoof-f-*u'nnáachch* waal-tún-ka
work-F.ACC finish-3F-*NCO* come-3F.JUS-NEG
'Don't let her come before she has finished the work!'

[34] The negative converb morphemes are segmentable into *-ú'nn-a*, *-u'nn-áan* and *-u'nn-áachch*. Historically, the final elements are case markers: *´-a* marks the oblique, *-áan* the locative or instrumental-comitative-perlative and *-áachch* the ablative case; see Table 7 in Treis (2008a: 103).

In K'abeena and Alaaba, the negative converb is marked by *-u'náan*^{i} (Crass 2005: 185, Schneider-Blum 2007: 266f).[35]

In Hadiyya and Libido negative converbs are marked by *-oo'n* (Sim 1989: 154f, 158, 311f: "'without'-form")[36] and *-o'n*^{i} (Crass forthcoming: Table 8), respectively. The negative converb morphemes of the Hadiyya subgroup are thus cognate with the negative morphemes of the Kambaata subgroup.[37] Consider ex. (29).

HADIYYA (Sim 1989: 311; glosses adjusted)

(29) an ka maarage maatirik fatana mass-*oo'n*
1SG this year matric exam take-1SG.*NCO*

ur-oommo-yyo
leave-1SG.IPFV-NEG
'This year I will not quit without taking the matric examination.'

Sidaama has perfective and imperfective converbs, which are treated under the labels "connective" verb and person-marked "infinitive" verb by Kawachi (2007). There are two possibilities to negate these clauses, none of which implies the use of a morpheme that is cognate with the negative converb morphemes in the Kambaata or Hadiyya subgroups. The converbs in Sidaama can be negated with the standard negator *di=* (§3.1) (Kawachi 2007: 292) or by replacing it with a perfective verb plus an ending *-kki-nni* (Kawachi 2007: 382, 407). The *-kki-*morpheme is also the relative clause negator (§3.7); the morpheme *-nni* is analysed as the ablative/instrumental case morpheme by Kawachi. Consider ex. (30) and (31), which contains an affirmative perfective converb and a negative converb, respectively.

SIDAAMA (Kawachi 2007: 251, 407; glosses adjusted)

(30) kuni isi *it-e* gat-is-ino=ho
this 3M.NOM *eat-3M.PCO* become_saved-CAUS-3M.PRF=M.COP
'This is his leftover (lit. "This is the one that he ate and saved.").'

(31) sagalé *it-i-kki-nni* ha'r-ino-hura daafur-i
food.ACC *eat-3M.PFV-NEG-INS* go-3M.PRF-BEC get_tired-3M.PFV
'Because he went without having [eaten, Y.T.] food, he got tired.'

Gedeo does not seem to have converbs; sentence-final and non-final verbs differ only with respect to the presence of a so-called "conclusive" (i.e. declarative) morpheme (K. Wedekind 1990: 244).

[35] The K'abeena and Alaaba negative morpheme thus corresponds to the "locative" allomorph in Kambaata (fn. 34). Like in Kambaata, the aspect distinctions made for affirmative converbs are neutralised in the negation. In Alaaba, no distinction between SS and DS converbs is made in the negation (K'abeena does not seem to mark converbs for subject change at all). Note that Schneider-Blum uses the term "posteriority verbs" for negative converbs (2007: 266f).

[36] Sim (1989: 154) also mentions a "little evidenced form" in *-ee'n* and thus assumes that the negative morpheme is *-'n* rather than *-oo'n*. In Kambaata, the negative converb can also contain a long *ee* in the 3HON form: *dag-een-u'nnáan* 'without 3HON knowing' and *dag-ee'nnáan* 'without 3HON knowing' are free variants.

[37] Note, however, that Libido and Hadiyya lack the traces of case-marking that are attested on negative converbs in the Kambaata subgroup (cf. fn. 34 and 35).

K. Wedekind (1990: 546) provides an affirmative converb paradigm for Burji but it is nowhere stated how this paradigm is negated.

Table 9 shows that only nHEC languages have a separate negative converb morpheme:

Table 9. Negative converbs in HEC

	NEG morpheme	Separate NEG strategy
Hadiyya	-oo'n ~ -ee'n	yes
Libido	-o'n^{i}	yes
Kambaata	-ú'nna ~ -u'nnáan ~ -u'nnáachch	yes
Alaaba	-u'náan^{i}	yes
K'abeena	-u'náan^{i}	yes
Sidaama	di= *or* -kki	no (cf. §3.1 and §3.7)
Gedeo	–	
Burji	(*no data*)	

Some grammars treat purposive verbs as a subtype of converbs due to their structural similarities; see, for instance, the K'abeena "purpose clause converb" marked by *-ot*^{a}, as in *hi'r-it-ót*^{a} buy-2SG-PURP 'in order to buy' (Crass 2005: 187f). In contrast to the type of (semantically vague) converb discussed so far, purposive verbs only allow a purposive interpretation. If a language has a separate negation strategy for "normal" converbs, the strategy does not apply to purposive verbs; instead the negative relative strategy (cf. §3.7) is exploited.

3.7. Relative clause negation

In HEC languages relative clauses and head nouns are simply juxtaposed; the HEC languages neither have relative verbal morphology nor relative pronouns. The final verb of a relative clause may be marked suprasegmentally (e.g. in Kambaata by final stress) or be slightly shorter than the main clause verb (e.g. in Hadiyya where final segments of the verb are dropped).

Apart from being based on converbs (§3.6) or verbal nouns (§3.8), subordinate clauses (i.e. adverbial clauses and complement clauses) are based on relative clauses; these relative clauses are either headless or headed by nouns (e.g. 'time', 'reason') or enclitics. If a language has a separate negation strategy for relative clauses, it consequently applies the same strategy to all relative-based subordinate clauses.

In Kambaata, relative clauses are headed by verb forms which differ from declarative main verbs predominately with respect to their stress pattern;[38] relative verbs are usually stressed on the final syllable, as seen in ex. (32)-(33).

KAMBAATA (own field data)

(32) mánch-u hujáchch-o
man.SG-M.NOM work-3M.PRF
'The man has worked.'

[38] There are minor segmental differences for some verb forms. Main declarative and relative verb forms are stressed identically in the progressive paradigm and part of the perfective paradigm. For details see Treis (2008b).

(33) hujachch-ó mánch-u
work-3M.PRF.REL man.SG-M.NOM
'the man who has worked'

Whilst declarative main verbs are negated with *-ba'a* (§3.1), a separate strategy is applied to negate relative clauses; consider the negative relative paradigm in Table 10.

Table 10. The structure of negative relative verb forms in Kambaata

Verb stem	+	Subject agreement	+	NEG	+	Case/gender morphology		
	1SG; 3M	*-Ø*		*-umb*		*-ú*	*-ú-ta*	ACC
	2SG; 3F/PL	*-t*				*-u*	*-u-t*	NOM
	3HON	*-een*				*-o ~ -ua*	*-o ~ -uta*	OBL
	1PL	*-n*				M	F	
	2PL/HON	*-teen*						

In contrast to affirmative relative verbs, negative relative verbs are verb-adjective hybrids (participles) in Kambaata (Treis forthcoming). As shown in Table 10, the first slot after the verbal stem contains the subject agreement morphemes. While affirmative relative verbs (like declarative main verbs) distinguish seven persons, the person distinctions are reduced to five in the negative relative paradigm. In the next following slot, we find the negative morpheme *-umb*. Aspect is not marked on negative relative verbs; the aspectual distinctions indicated on affirmative relative verbs (imperfective, perfective, perfect and progressive) are completely neutralised in the negation. The negative morpheme *-umb* is followed by adjectival case and gender morphology which indicates agreement with the head noun; in ex. (34), the verb *qas-úmb-u* agrees in masculine gender and nominative case with the head noun *wéeshsh-u*. Affirmative relative verbs do *not* agree with their head nouns in case and gender.

KAMBAATA (own field data)

(34) zíi'r-u qas-*úmb*-u wéeshsh-u
type_of_vermin-M.NOM pierce-3M.*NREL*-M.NOM enset(.SG)-M.NOM
hór-unku meco'-áam-u-a
all-M.NOM<N> leaf_sheath-PROP-M.PRED-M.COP
'All enset plants that are not affected (lit. 'pierced') by the *ziir'a*-vermin develop (thick) leaf sheaths.'

The negative relative morpheme *-umb* could be further segmented into *-um-b*. Thus the formal resemblance to the morpheme sequence *-im-bá('a)* of non-imperfective negative main verbs (cf. §3.1) becomes clearer. The element *-b* in *-um-b* is likely to be cognate with the standard negative morpheme *-ba'a*. The origin and function of *-um* (and of *-im* in non-imperfective main verbs) is unknown.

If relative-based adverbial and complement clauses are negated, the *-umb-* morpheme occurs, too; see the negative concessive conditional clause in ex. (35).

KAMBAATA (own field data)

(35) hoolám-u-s dúubb
many-M.NOM-3M.POSS be_satisfied.3M.PCO

it-*umb*-o=ddáa kóma gal-áno-ba'a
eat-3M.*NREL*-M.OBL=COND.CRD empty pass_the_night-3M.IPFV-NEG
'Even if many do not eat until they are full, (at least) they do not pass the night hungry.'

The Kambaata negative relative morpheme *-umb* is not attested elsewhere in HEC, not even in the most closely related languages. In K'abeena, negative relative verbs are marked by the morpheme *-ba'i* (Crass 2005: 287), which Crass segments further into *-ba* (the standard negative suffix) and *-'i* (the relativising suffix) (cf. ex. (13)). In Alaaba (Schneider-Blum 2007: 251f), relative verbs are either negated with *-ba'i* or *-bba*; the conditioning factors for the use of either morpheme remain obscure. As many subordinate clauses are relative based, *-ba'i* and *-bba* are used when these clauses are negated; see, e.g., Schneider-Blum (2007: 353, ex. 1126).

Examples from texts provided in Sim (1989) show that the morpheme (-)*bee'* is used to negate relative clauses in Hadiyya.[39]

HADIYYA (Sim 1989: 467, 470; glosses adjusted)

(36) at t'an-too-*bee'* luc mah lucc-im bee'e
2SG be_able-2SG.IPFV.REL-*NEG* thing what thing-ADD not_exist
'(…) there is nothing you cannot do.' (lit. "There is no thing, whatever thing that you are not able (to do);" Y.T.)

The morpheme (-)*bee'* is also used to negate relative-based adverbial clauses; consider the negative purpose clause ending in 'like' in ex. (37).

HADIYYA (Sim 1989: 466; glosses adjusted)

(37) (…) kiin annann ih-amo-*bee'*-isa
2SG.DAT separate be-3PL.IPFV.REL-*NEG*-like

maase'-loo'-is-ina keese uunt'inaammo
bless-2SG.IPFV.REL-like-M.DAT 2SG.ACC ask.1PL.PRF
'We have asked (…) that you bless them that they be not separate from you.'

The negator (-)*bee'* is clearly related to the negative existential verb *bee'e* 'not be (present)', which has been discussed in §3.2 and which also occurs as the final verb in ex. (36). More precisely, (-)*bee'* can be assumed to be the relative form of *bee'e*, because final vowels of pre-nominal modifiers are regularly dropped; see the independent adjective *geejj-a* 'fat' vs. the modifying form in *geejj beeto* 'fat boy' (Sim 1989: 129) and the independent verb form *mass-oommo* 'I (will) take' and the relative verb form *mass-oomm* 'which I (will) take' (Sim 1989: 142, 152).

According to Joachim Crass (pers. com.), relative and relative-based adverbial clauses in Libido are negated with *-beekk'*^{i} ~ *-bee* (cf. the negative existential verb negation in §3.2).

[39] Sim (1985, 1989) is not consistent in treating the morpheme as a suffix or free-standing morpheme.

In Sidaama, relative clauses, as well as adverbial and complement clauses based on relative clauses, are negated with the suffix *-kki* (Kawachi 2007: 432-437), which we have already seen in §3.6. In ex. (38) the noun *sagalé* 'food' is modified by a negative relative clause; ex. (39) illustrates the negation of a complement clause.

SIDAAMA (Kawachi 2007: 432, 433; glosses adjusted)

(38) hiito č'oomm-i-t-anno-*kki* sagalé k'itt'eess-atta?
how become_tasty-EP-3F-IPFV-*NEG* food.ACC prepare-2F.SG.IPFV
'How come you (SG.F) prepare such bad food (lit. "How do you prepare food that does not become tasty")?'

(39) miné-se hir-t-anno-*kki*=ta kul-t-u-nke
house.ACC-3F.POSS sell-3F-IPFV-*NEG*=F.COMP tell-3F-PFV-1PL.OBJ
'She told us that she would not sell her house.'

The negation of relative clauses or other subordinate clauses in Gedeo is not discussed by K. Wedekind (1990) but note that the purpose clause in ex. (40) contains the standard negator *-baa* (§3.1).

GEDEO (K. Wedekind 1990: 152, 328; glosses adjusted)

(40) (…) reensha-nni fed'eecci gatt-a-*baa*-ssha!
corpse-INS any.SG stay-?.IPFV-*NEG*-like
'(…) shall abstain from approaching dead bodies (lit. "(…) so that ('like') they don't stay with corpses;" Y.T.)!'

Information on relative clause negation in Burji is missing in the descriptions. However, two morphological formulas provided by K. Wedekind (1990: 499) suggest that Burji uses the standard negator for purpose and conditional clauses and, therefore, probably also for other adverbial clauses and for relative clauses.

Table 11. Relative clause negation in HEC

	NEG morpheme	Strategy restricted to NEG.REL
Hadiyya	-bee'	no (cf. §3.2)
Libido	-bee ~ -beekk'[i]	no (cf. §3.2)
Kambaata	-umb-	yes
Alaaba	-ba'i	no (cf. §3.1)
K'abeena	-ba(-)'i	no (cf. §3.1)
Sidaama	-kki	no (cf. §3.6)
Gedeo	-baa	no (cf. §3.1)
Burji	-ey('i)	no (cf. §3.1)

Table 11 gives a picture of the diverse strategies used in HEC for the negation of relative clauses and relative-based adverbial and complement clauses. The languages of the Hadiyya subgroup apply a strategy not attested elsewhere in HEC: they add a relativised negative existential verb to relative clauses. Kambaata takes a unique position, because it has a separate negation strategy for this clause type. Furthermore, Kambaata is the only HEC language in which negated relative verbs combine verbal and adjectival features (for more information see Treis forthcoming). In K'abeena,

Alaaba, Gedeo and Burji, the morpheme used for relative clause negation is identical to or hardly different from the standard negator. Sidaama uses the same morpheme for relative negation and converb negation.

3.8. Verbal noun clause negation

There is no HEC language with a separate negation strategy for clauses headed by verbal nouns (also called "infinitives" in the individual grammatical descriptions). Instead, the relative negation strategy (§3.7) is applied or the clause is negated periphrastically. This can be illustrated with examples from Kambaata. For the periphrastic negation, Kambaata makes use of the verb *hoog-* 'not do; lack'. Compare ex. (41), containing a complement clause headed by the verbal noun *waal-ú*, with ex. (42), in which the verbal noun of a complement clause is negated periphrastically.

KAMBAATA (own field data)

(41) beré Duuraam-íta *waal-ú-s* maccoocc-éemm
yesterday D.-F.ACC *come-M.ACC-3M.POSS* hear-1SG.PFV
'I heard that he came (lit. "his coming") to Duuraame yesterday.'

(42) íi *waal-ú* *hoog-ú* dag-áno-ba'a
1SG.GEN *come-M.ACC* *not_do-M.ACC* know-3M.IPFV-NEG
'He does not know that I did not come (lit. "my not coming").'

Certain adverbial clauses (e.g. manner clauses, purpose clauses) in Kambaata are headed by verbal nouns which are marked for non-core case forms (e.g. instrumental-comitative-perlative case, dative case). These clauses can be negated periphrastically or, alternatively, be replaced by relative-based negative adverbial clauses. The periphrastically negated counterpart of *qoraphph-íin* take_care-M.ICP 'by taking care' is given in ex. (43).

KAMBAATA (Kambaatissata 8: 49)

(43) *qoraphph-ú* *hoog-íini-n* zuru'mm-áakk-a-ssa
take_care-M.ACC *not_do-M.ICP-N* finger-PL-F.NOM-3PL.POSS
mazeek-k-aníi qonxol-t-aníi mar-t-áa'u
be_wounded-3F-ICO.CRD become_a_stump-3F-ICO.CRD go-3F-IPFV
'If care is not taken (lit. "with/by not taking care"), their fingers are wounded, (then) become stumps and are (finally) lost.'

Compare also the affirmative purpose clause (headed by a dative verbal noun) in ex. (44) and the corresponding negative relative-based purpose clause headed by 'like' in ex. (45).

KAMBAATA (own field data)

(44) jeechch-óon *waal-íi* laag-áta áag!
time.SG-F.LOC *come-M.DAT* word-F.ACC enter.IMP.SG
'Promise to come in time!'

(45) jeechch-ú-’ *ba’-is-úmb-o=g-a*
time-F.ACC-1SG.POSS *spoil-CAUS-NREL-M.OBL=like-M.OBL*

laag-áta áag!
word-F.ACC enter.IMP.SG
‘Promise not to waste my time!’

In Libido, the negative relative strategy (cf. §3.7) is applied to verbal nouns. The negative suffix is added to a shortened verbal noun suffix; the verbal noun suffix is then again repeated in its full form after the negative morpheme: *waar-imma* come-VN ‘coming’ → *waar-im-beekk’-imma* come-VN-NEG-VN ‘not coming’ (Joachim Crass, pers. comm.).

In Sidaama, verbal nouns are negated with the proclitic *di=* if they precede the main verb; see ex. (46). No other negation strategy for verbal nouns (e.g. in subject position) is mentioned in Kawachi (2007).[40]

SIDAAMA (Kawachi 2007: 289)

(46) laše gobbaanni *di*=godo’l-a bat’-anno
Lashe.M.NOM outside.LOC *NEG*=play-INF like-3M.IPFV
‘Lashe likes not playing outside (but doing something else outside).’

The negation of verbal nouns is often not explicitly mentioned in the individual grammatical descriptions. Therefore, no information is available on the strategies applied in this domain in Alaaba, K’abeena, Hadiyya, Gedeo, and Burji.

4. HEC negative morphology and negation strategies: A summary

In HEC languages, a considerable number of different negative morphemes are found, because different clause types require different negation strategies. Apart from this, the formal diversity is reflected in the low degree of cognate negative morphology, which is surprising, given the genetic proximity and the significant amount of lexical material and grammatical features that are shared by the languages otherwise (cf. Hudson 1981, 1989). An overview of the forms and functions of all negative morphemes discussed in the preceding sections is given in Table 12. The negation of deverbal noun clauses (§3.8) and clauses with non-verbal predicates (§3.3) has been left out because no language is known to have a separate strategy in these domains.

[40] Note that Kawachi treats verbal nouns (ending in *-a*) together with partially finite non-final verb forms (which I call “converbs”) under the heading “infinitive” (2007: 417-25).

Table 12. Clausal negation in HEC summarised

	Standard (ST)	Existential (EX)	Imperative (IMP)	Jussive (JUS)	Converb (CVB)	Relative (REL)
Hadiyya	-yyo	bee'e (cf. REL)	-itt; -ott	-nne	-oo'n; -ee'n	-bee' (cf. EX)
Libido	-ssho	bee'e ~ beekk'e	-itt	-ne	-o'n[i]	-bee / -beekk'[i] (cf. EX)
Kambaata	-ba('a)	-ba('a) (cf. ST)	-oot; -oocc	-(n)ka	-ú'nna; -u'nnáan; -u'nnáachch	-um(-)b-
Alaaba	-ba'[a]	-ba'[a] (cf. ST)	-óot; -occ	-(n)ka	-u'náan[i]	-ba'i (cf. ST)
K'abeena	-ba	-ba (cf. ST)	-ot; -c	-(n)ka	-u'náan[i]	-ba(-)'i (cf. ST)
Sidaama	di=	di= (cf. ST)	-oot; -oont	-nke *or* di= (cf. ST)	-kki (cf. REL) *or* di= (cf. ST)	-kki (cf. CVB)
Gedeo	-baa; -bo'	-baa (cf. ST)	-ott'; -okk'	–	–	-baa (cf. ST)
Burji	-ey'i	-ey'i (cf. ST)	-aash; -akk	-akki (cf. IMP)	(*no data*)	-ey('i)

In Table 13, the data is schematised and the morphemes are represented by letters from A to H. Starting with letter A in the cell at the top left (Hadiyya: standard negation), going from top to bottom in each column and proceeding from left to right up to the last cell at the bottom left (Burji: relative negation), a new letter is used whenever a morpheme occurs a cognate of which has not yet occurred before in the table. If the cognateness of morphemes is not immediately apparent but nevertheless plausible, as is the case for all morphemes subsumed under B, lower case letters (a-c) are added to the individual morphemes of this "cognate group" (see below the reasons for assuming Ba, Bb and Bc to be cognate).

Table 13. Clausal negation in HEC schematised

		ST	EX	IMP	JUS	CVB	REL	# NEG/lg
H. group	Hadiyya	A	Bb	E	G	H	Bb	5
	Libido	A	Bb	E	G	H	Bb	5
K. group	Kambaata	Ba	Ba	E	G	H	Bc	5
	Alaaba	Ba	Ba	E	G	H	Ba	4
	K'abeena	Ba	Ba	E	G	H	Ba	4
	Sidaama	C	C	E	G *or* C	F *or* C	F	4
	Gedeo	Ba	Ba	E	–	–	Ba	2
	Burji	D	D	F	F	?	D	2 (?)
	# NEG/domain	4	3	2	2	2	3	

Table 13 shows that eight (A-H) not obviously related morphemes are used for clausal negation in HEC. Hadiyya, Libido and Kambaata have the highest number of different negative morphemes (5), while Gedeo and Burji have the smallest number (2). Across languages, the domains of standard negation (ST), existential clause negation (EX) and relative clause negation (REL) are those where the highest diversity is attested (4 or 3 non-cognate morphemes in each column), while the encoding of imperative and jussive negation is more uniform.

Furthermore, Table 13 illustrates the following patterns: Standard negators are used for existential clauses in all languages except the Hadiyya subgroup (see ST and EX columns). For the negation of imperatives and jussives different strategies are applied in all languages except Burji (see IMP and JUS columns); furthermore, the negation of imperative and/or jussive is always distinct from the negation of other clauses in the same language. Separate negative converb morphology (CVB column) is only attested in the Hadiyya and Kambaata subgroups. The picture for relative negation (REL column) is quite diverse; it is either (i) modelled after the standard negation (Alaaba, K'abeena, Gedeo), (ii) the relative negator is a negative existential verb (Hadiyya, Libido), (iii) the relative negator is also used for converb clauses (Sidaama), or (iv) a separate strategy is applied (Kambaata).

The standard negators in Kambaata *-ba(ʼa)*, Alaaba *-baʼ*^{a}, K'abeena *-ba* and Gedeo *-baa*, and even the consonant *b* in the negative relative morpheme *-um(-)b* in Kambaata, can probably be connected with the Proto-HEC verb **ba'-* 'be lost' (Hudson 1989: 94). Negative-implicative verbs are known to be common sources of negative morphemes in the languages of the world (Miestamo 2007: 567). The link between the standard negators in Kambaata, Alaaba, K'abeena and Gedeo and the relative negator *-um(-)b* in Kambaata is not immediately apparent but becomes clear when historical sources are consulted. Data collected by Leslau in the 1950s (cf. ex.

(47)) shows that the Kambaata negative relative marker used to consist of *-um(-)ba*, the latter morpheme being clearly cognate to the standard negator *-ba*(*'a*).

KAMBAATA (Leslau 1952: 355, 356; glosses Y.T.)

(47) woqär-um *ba* manč-u
hit-? *NEG* man.SG-M.ACC
'the man who did not hit', 'the man who does not hit'

KAMBAATA (own data)

(48) woqqar-*um(-)b*-ú manch-ú
hit-*3M.NREL*-M.ACC man.SG-M.ACC
'the man who did not hit', 'the man who does not hit'

In the last decades, the final *a*-vowel of the negative morpheme (-)*ba* was replaced by adjectival case/gender morphology, e.g. *-ú* for M.ACC (cf. (48)), so that today Kambaata makes a distinction between a main clause negation strategy and a relative clause negation strategy; this distinction, however, is a very recent development, which is not shared by any of the closely related languages.

Despite being plausible, it is difficult to prove the grammaticalisation of the verb **ba'-* 'be lost' into the negative B-morpheme, all the more so because the occurrence of negative morphemes containing a consonant *b* and a low vowel goes far beyond Highland East Cushitic and is, for instance, also attested in various Omotic languages, e.g. in the imperfective main verb negator *-ba(a)s* and the negative existential verb *bayy-* in Baskeet (North Omotic, Ometo cluster); see *ootts-á-d-e* 'she/it works' vs. *ootts-á-bas-e* 'it/she does not work' and *wód'-e* 'there is' vs. *báyy-e* 'there is not' (own field data). Another point which makes a fairly recent grammaticalisation of **ba'-* 'be lost' into the negative B-morpheme less likely is the observation that the individual reflexes of **ba'-* 'be lost' do not seem to be used for periphrastic negation in any HEC language today.

In Kambaata, it is the verb *hoog-* 'not do' but not *ba'-* 'be lost' which is used for negative periphrases (§3.8). Gedeo makes use of the verb *gop'-* 'loose, miss, lack' (Hudson 1989: 242) rather than *ba'-* 'be lost' to negate jussive verbs, which cannot be negated inflectionally, cf. (49).

GEDEO (K. Wedekind 1985: 97; glosses Y.T.)

(49) mar-á *gop'*-óowaali
go-INF *loose*-3M.JUS
'May he fail to go!'

No plausible hypotheses can so far be formulated about the origin of other negative morphemes in HEC. They seem to be ancient elements whose sources and grammaticalisation paths are unknown. It is even hardly possible to link the HEC negators to formally similar negative morphemes elsewhere in Cushitic.[41] In this regard, Appleyard (1984: 216) stated:

[41] See, however, Appleyard's very tentative proposal to link the Central Cushitic negative morpheme **-t(i)* to Sidaama *di=* (1984: 216).

> Taken together with the wide variety of negative formants in Cushitic and the general independence of each language or group of languages in its negative markers and patterns, this would suggest that no common system can be reconstructed for Proto-Cushitic.

Although it proves difficult to establish any formal links between the negative morphemes in HEC and other Cushitic languages, it is interesting to see that the division of labour of different negative morphemes in HEC is quite similar to that found in Central Cushitic. Appleyard (1984) shows that there is typically a three-way contrast between the negation of declarative main clauses, subordinate clauses (i.e. usually relative clauses) and imperatives clauses in Central Cushitic; as we have seen above, this contrast also figures very prominently in HEC.[42]

5. Negation and the internal classification of HEC

Based on a comparative grammatical and lexical survey, Hudson proposed to arrange the HEC languages in a "family vine" rather than a family tree, because he observed a "continuum of relatedness within the HEC group" (Hudson 1981: 102), with geographically adjacent languages (cf. the map in Figure 1) sharing significantly more features than languages that are geographically separate. Does the analysis of negation strategies contribute to our understanding about the genetic relations between the languages of the HEC branch of Cushitic?

The analysis of negation confirms evidence that Burji has to be set apart from the rest of HEC (Hudson 1981: 115). Apart from the possible (but, admittedly, very tentative) link of its jussive/imperative negator *-akk(i)* to the Sidaama relative/converb clause negator *-kki* (morpheme F), Burji does not seem to share cognate negative morphemes with any other HEC language. It does share the pattern of applying different negation strategies to declarative and non-declarative main clauses; however, this feature is very common in many Cushitic languages (see Appleyard 1984) and thus possibly inherited from the proto-stage. Conversely, the structural differences in the marking of imperatives and jussives in Burji and in the remainder of HEC are striking. Not only is the *same* negation strategy applied to imperatives and jussives in Burji but negative forms also lack the subject agreement morphology that is present in all negative jussive and imperative forms of other HEC languages.[43]

The analysis of negation does not provide evidence for the claim that Sidaama and Burji are significantly closer to Gedeo than other languages are (Hudson 1981: 112). The only cognate negative morpheme between Gedeo and Sidaama, the negative imperative, is also shared by the Kambaata and Hadiyya sub-group.[44] Moreover, the standard negative morpheme links Gedeo to the Kambaata group rather than to Sidaama. Apart from this, however, the Gedeo verbal system (incl. the verbal categories marked inflectionally) is generally quite unlike that of all other HEC languages.[45] The lack of a negative jussive paradigm is a noteworthy gap in the Gedeo

[42] Note that Appleyard does not discuss the negation of jussives in Central Cushitic.

[43] Recall from §3.1 above that the morphological makeup of affirmative declarative main verbs in Burji is also significantly different from that in other HEC languages.

[44] Note, however, that Gedeo's negative imperative morpheme is significantly different; it contains ejective stops (*tt'* and *kk'*) while the other languages have plain stops or affricates (*t*(*t*) and *c*(*c*)) (see Table 12).

[45] See the vast number of affirmative and negative paradigms in different tenses, aspects and moods, which do not seem to have parallels elsewhere in HEC, as presented in K. Wedekind (1990: 301-306).

verbal system. Commonalities between Gedeo and Burji are also hard to find, aside from the mere number of negative morphemes, which is two in both languages. The lack of a separate negation strategy for relative clauses, which is a feature of Gedeo and Burji, is also characteristic of Alaaba and K'abeena. To summarise, the analysis of negation does also give Gedeo a quite isolated position in HEC, though not as isolated as that of Burji.

In spite of the unique proclitic negative morpheme *di=*, whose existence makes Sidaama stand out in a discussion of negation in HEC, Sidaama can be linked to the Kambaata and the Hadiyya group. The verbal systems of Sidaama, the Kambaata subgroup and the Hadiyya subgroup are very similar; see, for instance, that all these languages (with the exception of K'abeena) distinguish between an imperfective and two non-imperfective (i.e. perfective and perfect) main verb paradigms and that the aspectual distinction between perfective and perfect is neutralised in the negation (with the exception of Libido) (§3.1). Furthermore, there are visibly cognate morphemes used for the negation of imperatives and jussives in these languages. Like in Kambaata and Hadiyya, Sidaama does not utilise the standard negation strategy to negate relative clauses.

The Hadiyya group stands out as the group which has suppletive negative existentials which are also used to negate relative clauses. The Kambaata group does not indicate existential negation by suppletion and thus patterns with Sidaama and the rest of HEC. The existence of separate negative converb forms, however, links the Hadiyya subgroup to the Kambaata subgroup, while Sidaama lacks a separate strategy here. The data on negation thus confirms the intermediate position of the Kambaata subgroup between the Hadiyya subgroup and Sidaama (cf. Hudson 1981: 112).

To conclude, the analysis of negation does not constitute a serious challenge to Hudson's (1981) classification, which was proposed at a time when all the grammars on HEC languages that we have today where not yet written.

6. Conclusion

This chapter has analysed the forms and functions of negative morphemes in eight Highland East Cushitic languages and dialects. Six different clause types have been distinguished (cf. Table 12 and 13) in order to account for the division of labour of the negative morphemes. It has been shown that every HEC language has at least two different negative morphemes, which are applied to declarative and non-declarative clauses (i.e. imperative and jussive clauses, respectively). This minimal distinction is made in Burji. Gedeo has two negative morphemes but three strategies, because it requires periphrastic negation in jussive clauses. If a HEC language has more than two negative morphemes, it uses one additional morpheme to distinguish between imperative and jussive clauses and one to mark converb clauses differently from main clauses (K'abeena and Alaaba) or relative clauses differently from main clauses (Sidaama). Languages which have five negative morphemes (Kambaata, Hadiyya, Libido) make a distinction between declarative main clauses, imperative, jussive, converb and relative clauses. If there is a separate existential clause negator (Hadiyya, Libido), it is used for relative clauses, too; thus the number of negative morphemes does not exceed five.

Apart from this, Gedeo does not seem to have converbs, unlike all other HEC languages. (But a note of caution is in order here: The impression that Gedeo's verbal system is unusual might be due to K. Wedekind's opaque terminology and writing style.)

The formal diversity in the domain of negation that has been discussed above is surprising in view of the considerable amount of lexicon and grammatical features (cf. Hudson 1981, 1989) that are otherwise shared by HEC languages and that make these languages a distinct sub-group of East Cushitic. The present chapter could only attempt to *describe* this formal diversity but, unfortunately, it had to leave the question of how to *explain* this diversity unanswered. It is hoped that future comparative studies of negation in East Cushitic languages outside HEC will help us shed light on the origin of some negative morphemes and help us decide which negative morphemes have been retained from an earlier stage and which morphemes have been innovated.

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Abbreviations

The following additional abbreviations that are not listed in the Leipzig glossing rules have been used: ADD addition; AFF affirmative; BEC reason clause; CRD coordination; DS different subject; EP epenthesis; G gemination; HON honorific; ICO imperfective converb; ICP instrumental-comitative-perlative case; JUS jussive; MOD modified; N pragmatically determined morpheme (still unanalysed); NCO negative converb; NREL negative relative; P palatalization; PCO perfective converb; PROP proprietive; VN verbal noun

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