



HAL
open science

Converb constructions and clause chaining in Cushitic

Yvonne Treis, Martine Vanhove

► **To cite this version:**

Yvonne Treis, Martine Vanhove. Converb constructions and clause chaining in Cushitic. Alexandra Y. Aikhenvald & Hannah Sarvasy. Clause chaining in the languages of the world, Oxford University Press, In press. hal-03673209

HAL Id: hal-03673209

<https://hal.science/hal-03673209>

Submitted on 19 May 2022

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

Converb constructions and clause chaining in Cushitic

Yvonne Treis & Martine Vanhove

Abstract

This chapter describes the morphology and syntax of converbs in eleven Cushitic languages, with a special focus on Beja and Kambaata. Cushitic converbs are used in clause-chaining function but chains are considerably shorter than in e.g. Papuan languages. In some languages, converbal clauses qualify as embedded clauses. Across the Cushitic family, converbs display considerable formal and functional variation. On a morphological cline of finiteness, converbs range from strictly nonfinite to partially finite forms. Between one and six converb types, with different degrees of semantic specialization, are distinguished in individual languages. Only in one genetic subgrouping are converbs marked for switch-reference. The final part of this chapter discusses the use of converbs beyond clause combining and provides examples of lexicalization and grammaticalization. Most importantly, converbs are shown to form part of complex predicates.

20.1 Introduction

Cushitic, a group of 30-40 languages, constitutes one branch of the Afroasiatic phylum. The languages are spread in East Africa from Sudan in the north to Tanzania in the south and were traditionally divided into four sub-branches: North, Central, East and South, a classification still widely used by specialists today. More recent research has led to a reorganization into three sub-branches: northern, central, and eastern; the southern branch, which includes Dahalo, Iraqw, Gorwaa, Alagwa and Burunge as well as the extinct languages Kw'adza and Aasáx, has been reclassified into the eastern branch (Tosco 2000: 89, 108; Mous 2012: 342). First comprehensive descriptions of Cushitic language were already produced in the 19th century, but most Cushitic minority languages started to become known in the 1970s (cf. Sasse 1981: 187–201). Since then the description of individual languages has been steadily improving, and Glottolog currently lists 149 publications categorized as “grammar” (> 100 pages) and 251 “grammar sketches”. The figures may not be entirely accurate but represent a good estimate.

Cushitic languages are rich in morphology, with suffixes (a majority), prefixes, infixes (rare), ablaut, stem alternations, reduplication and tonal/stress morphemes. They are predominantly head-final, and dependent or non-final clauses usually precede the matrix or final clause; deviations from this word order are possible in some languages, e.g. Beja, in pragmatically marked contexts. There is a robust noun-verb distinction, but properties may be expressed by adjectives, stative verbs, or nouns, depending on the semantic type and the language. Other common word classes are pronouns, ideophones and interjections, whereas adpositions, conjunctions, and adverbs are generally small word classes, if not lacking altogether. All Cushitic languages have relative clauses, which often constitute the basis of adverbial and complement clauses, all marked by conjunctions or dependent subordinating morphemes. Adverbial clauses contain finite verb forms and are thus called “balanced” in accordance with Noonan (1985). Verbs in relative clauses, i.e. relative verbs, are morphologically distinct from the converbs treated in detail in this chapter. Coordination or juxtaposition may also be used to mark sequences of events, but what exactly prompts speakers to choose one or another device remains unclear from the available descriptions. See Mous (2012) for a detailed typological profile of Cushitic.

We concentrate in this chapter on the synchronic uses of converbs as the major intra-sentential clause chaining device. Clause chaining is considered here as “the use of non-finite

forms [or forms reduced in finiteness] not headed by a conjunction with temporal or circumstantial meaning” (Myhill & Hibiya 1988: 363) and in which final-clause TAM has scope over preceding clauses. We define a converb as a dependent verb form that is part of a language’s verb paradigms; it is nonfinite or reduced in finiteness and primarily used in adverbial function (i.e. is of non-argumental, non-adnominal function) as well as in clause chaining. Generally, converbs do not combine with subordinators or coordinators.¹ Our definition does not strictly comply with that of Haspelmath (1995), who requires converbs to be non-finite, but is more in line with Ebert’s (2008) cline of prototypicality, where the most prototypical converb is a non-finite verb form, and with Azeb & Dimmendaal’s (2006) discussion of non-finite and semi-finite converbs in African languages.

In Cushitic descriptions, the term “converb” was introduced twice, first in Hetzron’s sketch of Awngi (CC) (1969: 14f.), to which Sim (1989: 149) made reference in his description of Hadiyya (HEC). Hetzron himself had adopted the term from Polotsky’s (1951) study of the grammar of Gurage (Ethio-Semitic). Secondly, inspired by typological works such as Haspelmath (1995) and van der Auwera (1998), Crass (2005: 175ff.) applied the term “converb” to various subordinate paradigms in K’abeena (HEC). In his wake, other comparative publications on “converbs” followed (e.g. Ebert et al. 2008; Azeb & Dimmendaal 2006; Treis 2012a). Even though “converb” has become an established term in Cushitic linguistics for a dependent verb form in adverbial function that is morphologically clearly distinct from both main clause verbs and (often relative-based) adverbial clause verbs, it is far from being uncontested and still competes with “gerund”, “gerundive”, “participle” and “infinitive”. The term “medial verb” is hardly used in Cushitic linguistics; see only early works on Hadiyya (Sim 1989; Perrett 2000), which use the label for the verb forms that are later called “converbs” (Tadesse 2015).

In this chapter, we describe converb constructions in eleven Cushitic languages from a typological perspective; the choice of these languages was determined by the availability of data and descriptions: Beja (North-Cushitic – NC) (§20.2.1), Xamtanga and Awngi (Central-Cushitic – CC) (§20.2.2), Oromo, Afar (Lowland East-Cushitic – LEC) (§20.2.3), as well as Highland East-Cushitic (HEC) (§20.2.4). To the best of our knowledge, converbs are not reported to exist in most other Lowland East-Cushitic languages (Mous 2012: 395; Azeb & Dimmendaal 2006: 403; Banti 2010: 67), and in the South Cushitic branch. We do not exclude that Central and East Cushitic languages that are not discussed here may have converbs but we have no data to (dis)prove this. Section 20.3 presents a summary of the Cushitic converb systems, and Section 20.4 addresses other uses of converbs including bridging linkage.

20.2 Converbs as clause chaining devices in individual languages

20.2.1 North Cushitic: Beja

The following overview is based on a sample of 2.5 hours of annotated data, mainly narratives (49 texts, almost two hours long), one 10mn conversation, one language play, two jokes, two pear stories (cf. Chafe 1975), and three procedural texts.

Beja has four converbs, labelled general, anteriority, simultaneity and manner. Their respective number of occurrences in the sample are: (i) 443 anteriority converbs, all in clause chains; (ii) 348 simultaneity converbs, out of which 331 are in clause chains; (iii) 497 manner converbs, out of which 190 are in clause chains; and (iv) 158 general converbs, out of which 51 are in clause chains. Whereas the general, anteriority, and simultaneity converbs are invariable, the manner converb varies, under certain conditions, with the gender of the object

¹ There are certain exceptional contexts where converbs are coordinated; cf. (6), (15) and (46). See also §20.2.4.4 on the use of a coordinator as a DS-marking device in Sidaama.

(Vanhove 2016: 330). TAM, person or number are not marked in any of them. Converbs are shorter than main verbs and only made up of the verb stem plus suffixes, which mark four (prototypical) inter-clausal relations. Verb class 2 (V2)² uses the same stem for all verb forms, while verb class 1 (V1) has different stems for different verbal categories. For V1, the stem of the converb is the same as the imperative. Beja converb clauses differ from balanced subordinate clauses by the absence of dedicated subordinating particles or a relativization strategy. The clause following the last converb may be an adverbial subordinate clause with a finite verb, itself followed by a matrix clause.

The general, anteriority and manner converbs cannot be used in the negative polarity. Negation in the final clause has only scope over this clause, not on the clause with the converb. Only the simultaneity converb can be negated, but it requires a different negative construction than a balanced adverbial clause (the prohibitive instead of the negative optative). Beja, unlike some other Cushitic languages (see below §20.2.2 and §20.2.4), has no specialized negative converb.

The anteriority converb (called sequential in Vanhove 2017), the most frequent converb in the Beja corpus (443 occ.), expresses that an event is completed before the next one occurs. It is characterized by the suffixes *-ti:t* (V1) / *-e:ti:t* (V2) (1). These suffixes may go back to a combination of the suffixes of the general converb *-ti* (V1) / *-e:ti* (V2) (see below) with the enclitic coordinator *=t* of finite verb forms.

The subject of the converb is mostly co-referent with that of the following clause (1), and marginally not co-referent (2). As mentioned above, the anteriority converb is only used in clause chaining. The sequence of events expressed differs morphologically and syntactically from simple coordination: Synchronically, there is no coordination marker, and the converb clause cannot be postposed to the final clause (whereas coordinated predicates are not necessarily chronologically ordered and can be switched). The maximum length of clause chains observed in narratives is five (including the final clause).

- (1) *gaw=i:b ass-e:ti:t // 339 hank?ale:=t=e:*
house=LOC.SG shut-ANT.CONVB . feces=INDF.F=POSS.3PL.ACC
lakkat-e:ti:t / 415 fa.mit-ti:t / 674
pick.up-ANT.CONVB . smear\INTS-ANT.CONVB .
i=gid k^wa:s-ti:t ho:j dann?i
DEF.M=collar create-ANT.CONVB ABL.3 do\IMPERV.[3SG]
‘She shuts her in a house, and she picks up her feces, and she smears her with it all over, and she makes her a collar out of it, they said.’ (BEJ_MV_NARR_36_HUNCHBACK_366-372)³

- (2) *o:n o:=jha:m / 672 ?a:ladɣ-e:ti:t*
PROX.SG.M.ACC DEF.SG.M.ACC=leopard . tease-ANT.CONVB
dh=o:k tik^w-i=ho:b / 318 ti-nʔi-ja
DIR=POSS.2SG.ACC go_down-AOR.3SG.M=when . 2SG-hit\IMPERV-M
‘After you’ve teased this leopard, when it comes down towards you, will you hit it?’
(BEJ_MV_NARR_15_leopard_038-042)

In both verb classes, the simultaneity converb is formed with the suffix *-e:*. As the second most frequent converb (328 occ.), it is used in SS and, less frequently, in DS configurations

² V2s are conjugated with suffixes in indicative paradigms, V1s with prefixes (Vanhove 2017: 62f.).

³ The Beja examples are extracted from Vanhove’s online corpus available at <https://corporan.humanum.fr/Archives/corpus.php>. / stands for a minor prosodic break, // for a major one. Figures indicate the length of pauses in milliseconds.

(3). Most often, only one simultaneity converb precedes the final clause. If the same converb is repeated, it adds a durative value to the depicted event (4).

- (3) *ontʔa fassa~sal-e:* / *w=ha'wa:d dha:j jʔ-i:ni* /
 now cut~PLAC-SIM.CONVB . DEF.SG.M=night DIR come-IMPERV.3SG.M .
 ‘Now, while he is cutting them, night comes upon him.’
 (BEJ_MV_NARR_17_shoemaker_072-073)

- (4) *ame:~sa~sʔ-e:* *ame:~sa~sʔ-e:*
 PASS.INTS-PLAC~sit\MID-SIM.CONVB PASS.INTS-PLAC~sit\MID-SIM.CONVB
ame:~sa~sʔ-e: / *BI_775 u:=biri*
 PASS.INTS-PLAC~sit\MID-SIM.CONVB . DEF.SG.M.NOM=rain
ʔa~ʔak^w-i /
 PLAC~drip-AOR.3SG.M .
 ‘While I remained seated for a long time, the rain was dripping.’
 (BEJ_MV_NARR_01_shelter_095-097)

There are a few exceptions to the preceding remark about the length of clause chains which may go up to three (including the final clause) if the two converbs belong to the same semantic domain of motion. There is only one example of this type in the sample (5).

- (5) *su:r baj-e:* *hi:re:r-e:* // 1082 *gana:j* //
 before go\INTS-SIM.CONVB walk-SIM.CONVB . gazelle .
 181 *wali:k-i:ni=b* *e:-msiw* //
 call-IMPERV.3SG.M=REL 1SG-hear\INTS.IMPERV .
 ‘While I am going ahead and walking, I hear a gazelle calling.’
 (BEJ_MV_NARR_05_eritrea_248-252)

If the converbs do not belong to the same semantic domain, they need to be followed by the nominal coordinator =*wa* ‘and’ (6). This is the case in five instances.

- (6) *wa:w-e:=wa* / *BI_643 tu:=nʔi*
 weep-SIM.CONVB=COORD . DEF.SG.F.NOM=fire
da:r=o:=ji *di:-je:=wa* /
 place=POSS.1SG.ACC=COP.3SG say-SIM.CONVB=COORD .
 485 *bak tʔi-it=e:t* *ʔi:ba:b* / *BI_500 hadr-ja*
 thus resemble-VN=REL.F travel\N.AC . attend-PERV.3SG.
 ‘While he was crying, and while he was telling to himself: ‘Hell is my destiny’, he assisted to a story like that. (BEJ_MV_NARR_14_sijadok_373-377)

The simultaneity converbal clause is the only one that can also take a concessive value in some contexts, as in (7). However, examples are too few to provide a possible explanation to this semantic interpretation.

- (7) *t=ittifa:g-ija:j* *ha:-je:* *han ʔa:si:-ji:ni*
 DEF.F=accord-SGV be.there-SIM.CONVB also disobey-IMPERV.3SG.M
 ‘Even if there is an agreement, he could disobey.’ (BEJ_MV_CONV_01_RICH_SP2_304-305)

The simultaneity converb is the sole converb that can be used negatively, giving a privative meaning to the clause. The prohibitive marker *ba:=* is simply added to V2 converbs. V1s lose their suffix *-e:*, and the negator *ba:=* is added to a different stem, that of the prohibitive (8). The scope of negation is limited to the converbal clause.

- (8) *ba:=haji:d* *gi:g-ja:n*
 NEG.PROHIB=sew\SIM.CONVB leave-PERV.3PL
 ‘They left without sewing.’ (BEJ_MV_NARR_17_shoemaker_057)

The manner converb, the third most frequent form in clause chains (190 occ. out of a total of 497 manner converbs), is marked with a suffix *-a* in both verb classes. The converb and final clauses always share the subject and also the object, whose gender is indexed on the converb (F = *t*, M \emptyset). The number of chained clauses rarely exceeds two; a clause chain of three clauses is only attested once (9). The main semantic value is the expression of the manner in which the event of the following clause is realized.

- (9) *fassal-a:=t* *da:-s-a:=t*
cut-MNR.CONVB=INDF.F do-CAUS-MNR.CONVB=INDF.F
i-k^wa:si
3SG.M-create\IMPERV
‘He is creating them (the shoes f.) by cutting them and putting them down.
(BEJ_MV_NARR_17_shoemaker_112)

Occasionally, the converb has a purpose interpretation, as in (10).

- (10) *i=ka:m=iji* *haraw-a* / 269
DEF.M=camel=POSS.1SG.GEN seek-MNR.CONVB .
a-dif=ho:b //
1SG-leave\PERV=when .
‘When I left in order to look for my camel...’ (BEJ_MV_NARR_01_shelter_010-012)

The general converb, without a specialized prototypical meaning, is marked by the suffixes *-ti* (V1) / *-e:ti* (V2). It is the least frequent converb with only 51 occurrences in chaining constructions (out of a total of 157 occurrences of the general converb). It is always used in SS configurations. Clause chains with only the general converb are limited to three clauses, including the final clause. The two main inter-clausal relations marked by the use of this converb are: (i) direction if the predicate in the final clause is a motion verb (29 occ.) (11); (ii) the manner in which motion or breaking and cutting events are performed (20 occ.) (12), and (iii) rarely manner with stative verbs (2 occ.) (13).

- (11) *baru:k* *tik^w-e:ti* *e:tne:=he:b* *han* /
2SG.M.NOM go.down-GENL.CONVB come\IMPERV.2SG.M=OBJ.1SG Q.PLR .
‘Do you come down to me?’ (BEJ_MV_NARR_18_Adam_devil_118)
- (12) *k^wit-ti* *qib-s-i*
kick-GENL.CONVB fall-CAUS-AOR.3SG
‘He made him fall with a trip.’ (BEJ_MV_NARR_46_tirik_103)
- (13) *fi^gaq-ti* *i-nnhi:s*
wash\MID-GENL.CONVB 3SG.M-become.clean\IMPERV
‘He becomes clean by washing.’ (BEJ_MV_NARR_14_sjadok_354)

In five occurrences, the converb clause establishes a purpose relationship with the following motion verb (14).

- (14) *u:=dhaj=ka* *j²-e:ti:t* *ho:si*
DEF.SG.M.NOM=people=DISTR come-ANT.CONVB ABL.1SG
dilib-ti *e:-je:j-na*
buy-GENL.CONVB 3-come\IMPERV-PL
‘All the people come and they come to buy them from me.’
(BEJ_MV_NARR_17_shoemaker_156)

To sum up, Beja has one monosemous specialized converb, the anterior converb. Two specialized converbs have a prototypical meaning and a marginal one, the simultaneity converb which can also be used (in a minority of cases) with a concessive meaning, and the

manner converb which may also mark purpose, marginally. The meaning of the so-called general converb is highly contextual, with direction and manner meanings almost on a par (the latter overlapping with the manner converb, but only for a semantic subset of verbs in the final clause), and purpose in a minority of cases (here also overlapping with the marginal use of the manner converb).

20.2.2 Central Cushitic

20.2.2.1 Xamtanga

Xamtanga has only a single affirmative converb, a general converb, which is used, depending on the context, to express a sequence of events, simultaneity of events or the manner in which the main event is carried out. The converb is shorter and less finite than main verbs and only indexes the subject (which are zero morphemes in 1SG and 3MSG), while it cannot be otherwise inflected for TAM (Table 1). Converbs in clause chains are always used in SS configurations.

Table 1. The converb forms of *k'äb*- ‘cut’ (adapted from Darmon 2015: 128)

| | | | |
|------|----------------|-----|-----------------|
| 1SG | <i>k'äb</i> | 1PL | <i>k'äb-in</i> |
| 2SG | <i>k'äb-ir</i> | 2PL | <i>k'äb-irn</i> |
| 3MSG | <i>k'äb</i> | 3PL | <i>k'äb-iŋ</i> |
| 3FSG | <i>k'äb-ir</i> | | |

In the most detailed available description of Xamtanga, Darmon (2015), the author does not take a position on the syntactic status of bare converb clauses, but states that it is “not augmented by any other kind of element indicating [its] semantic relationship with the situation depicted in the matrix clause” (Darmon 2015: 266), a criterion which indicates clause chaining. Note however, that Xamtanga also has a series of adverbial clauses (conditional, concessive, temporal, simultaneous, posterior) that are overtly marked as subordinate by independent or suffixed subordinators on the converb form in the affirmative polarity (Darmon 2015: 241–266), and in which, unlike in clause chains, the converb may or may not share the subject with the following verb. Note also that the coordinator morpheme *ya* may occur with the converb, but mostly in a bridging linkage construction (see Section 20.4.4).

The general converb in clause chains is semantically vague (Darmon 2015: 271). Ex. (15)⁴ shows the anteriority meaning in a non-elicited narrative.

- (15) *ŋgil* *xiy-äw* *dir* *win-u*
 3M.SG.LOC be.big-3M.SG forest COP-PERV[3M.SG]
dir-dyän-t *k'äb-iŋ* *ya*
 forest-DEF-ACC cut-3PL.[.CONVB] COORD
ŋgil *ŋita=ŋin-t'* *täss-iŋ*
 3M.SG.LOC 3PL.POSS=house-PL build-3PL[.CONVB]
s'ibb-änäw *kirm-u-ŋ*
 live-VN start-PERV-3PL

‘There, there was a big forest. They cut the forest, they built their houses there, and they started to settle.’ (Darmon 2015: 316)

In (16), the converb expresses simultaneity.

- (16) *mi* *gräbä-z* *x^w-a-y-näk'=im* *k'äddis-in*

⁴ The glosses of all examples quoted from the literature have been adapted.

bread morning-DAT eat-IMPERV-NEG-1PL=M attend.the.Mass-1PL[.CONVB]
x^wä-n-äk^w-in
 eat-1PL-IMPERV-1pl
 ‘We do not eat bread in the morning, we eat (for the first time of the day) as we attend the Mass’ (Darmon 2015: 270)

In an appropriate context, the general converb may also adopt a manner interpretation. Unlike anteriority and simultaneity interpretations, the manner meaning is restricted to utterances in which one converb occurs before or after the main verb (17).

- (17) *nän täznan-išt-ir-aŋg^wäs g^wäyy-ir ki=s’am^t-i-ğik’...*
 now relax-MEDP3-2SG-DUR sit-2SG[.CONVB] 2SG.POSS=friend\PL-DEF-COMIT
 ‘Now you are relaxing by staying with your friends...’ (Darmon 2015: 270)

Xamtanga also has a negative converb, marked by *-ink’ä*, which does not index the subject and serves to express a privative meaning (18) The negative converb is also found in combination with *bäwil* or *bäwiğ(ä)* ‘before’ to express posteriority (Darmon 2015: 251f.).

- (18) *ŋi=xir-tä-s g^wi ŋi=gas’-id*
 3M.SG.POSS=sleep-NOMZ-ABL get.up[3M.SG.CONVB] 3M.SG.POSS=face-DEF
aqa-r ŋi=t’amänä-d x^w-ink’ä
 wash-MEDP1[3M.SG.CONVB] 3M.SG.POSS=breakfast-DEF eat-NEG.CONVB
kin-d-iŋ ŋin-i-z=ig^wä fi-r-u
 learn-MEDP2-NOMZ house-DEF-GEN=to go-MEDP1-PERV[3M.SG]
 ‘He woke up, washed his face, and went to school without (even) eating his breakfast.’
 (Darmon 2015: 267)

The four short narrative texts in Darmon (2015: 315–328), which count a total of 88 clauses, 33 being clause chains, provide only one sequence of three general converbs (19), four of two converbs, all with a anteriority meaning, eleven sequences of one converb plus the final verb (one with an anteriority value, the others expressing either simultaneity or manner), and two sequences of a negative converb and a final clause.

- (19) *yäw nän k^wäšš ik’ tä-r-iŋ ya*
 INTERJ at.that.time add[3M.SG.CONVB] man\PL come-3PL[.CONVB] COORD
wit-ik’^w g^wäyy-iŋ... s’ibb-änäw kirm-u-ŋ yaw
 small-3PL sit-3PL[.CONVB] live-VN start-PERV-3PL INTRJ
 ‘[T]hen again other men came, they remained small (in number) and they started to live (like that).’ (Darmon 2015: 318)

20.2.2.2 Awngi

Hetzron (1969: 14–15) reports about an “anterior” converb in Awngi, not marked for TAM but indexing the subject. As shown in Table 2 for the verb *des-* ‘study’ (segmentation ours), seven persons are distinguished.

Table 2. Converb inflection in Awngi

| | |
|-----|-------------------|
| 1SG | <i>des-ata</i> |
| 2SG | <i>des-tata</i> |
| 3M | <i>des-amá</i> |
| 3F | <i>des-tata</i> |
| 1PL | <i>des-nana</i> |
| 2PL | <i>des-tákamá</i> |
| 3PL | <i>des-kamá</i> |

Hetzron only mentions the use of the converb in clause chaining, to express a sequence of events (20) or a manner in which an event is carried out (21). It may be more suitably labeled a “general” converb, rather than an “anterior” converb.

- (20) *kaní-da mač-eta kánt!*
 tree-LOC climb-1SG.CONVB look.2SG.IMP]
 ‘Climb on the tree and look!’ (Hetzron 1969: 15; segmentation and glossing ours)
- (21) (...) *ántakíntakí zur-kamá fay-η-ô jemerúnà*
 here.and.there turn-3PL.CONVB search-VN-ACC start-3PL.PERV
 ‘(...) they began to search turning here and there!’ (Hetzron 1969: 15; segmentation and glossing ours)

Hetzron (1969: 11) presents an example containing a sequence of five converbs that aptly illustrates the use of converbs in clause chaining.⁵

20.2.3 Lowland East Cushitic

In Lowland East Cushitic, only Oromo and the closely related languages Saho and Afar are reported to have converbs; cf. Banti (2010) for a detailed description. We focus here on Oromo and Afar.

20.2.3.1 Oromo

Banti (2010) shows that Oromo has two invariable converbs, plus four which he calls “converb equivalents” and which we will not consider further, as they do not fulfil our definition of converbs (§20.1).

The anteriority converb in *-náan* is used in SS (22) and DS contexts (23). As (23) shows, the anteriority converb also allows for a causal interpretation.

- (22) [*ishée-n túmbóo xúux-úu dhiif-náan*] *hin-fúrdat-te*
 3F-NOM tobacco smoke-INFIN stop-ANT.CONVB FOC-become.fat-3F.PER
 ‘She became fat after she stopped smoking tobacco.’ (Banti 2010: 37f.)
- (23) [*heddúu of-náan*] *pholis-ní ná dhaab-e*
 much drive-ANT.CONVB police-M.NOM 1SG.ACC stop-3M.PER
 ‘Because I was driving fast, the police stopped me.’ (Owens 1985: 151; quoted after Banti 2000: 37)

The simultaneity converb in *-áa*, is restricted to SS contexts (24). This converb form is said to be “primarily a verbal noun” (Banti 2010: 38); as such it can be used as a subject or object argument, e.g. of ‘remember’ and ‘help’. Conflating the adverbial and argumental function and not being primarily used adverbially, the *-áa*-form does not strictly correspond to our converb definition.

- (24) [*Kulaníi-n nyaach-áa*] *deem-te*
 NAME-NOM eat-SIM.CONVB go-3F.PER
 ‘Kulanii went while eating.’ (Banti 2010: 39)

⁵ Hetzron also presents other subordinate verbs, among them the “subjunctive” and the “temporal” (1969: 16, 21), which could possibly be interpreted as purpose converb and as simultaneity converb, respectively. We do not discuss them further since Hetzron’s discussion is too sketchy and examples too few to draw a definite conclusion.

20.2.3.2 Afar

Afar verb forms fall into three morphological classes (Hassan Kamil 2015: 297): verbs with inflectional prefixes and suffixes (V1), verbs with inflectional suffixes (V2), and stative verbs with inflectional suffixes (V3). These verb classes partly determine how a converb is marked.

The question of how many and which types of converbs Afar has is impossible to resolve, as the available descriptions differ in important respects. In a review of the literature, Banti (2010) settles on two simultaneity converbs, one being limited to SS contexts, the other allowing for both SS and DS configurations. Semantic differences between the simultaneity converbs are said to be hard to pin down (2010: 52f.). Furthermore, Banti finds the evidence for anteriority converbs in Afar inconclusive (2010: 58ff.) but proposes a negative converb (2010: 63ff.).

In contrast, in a more recent grammatical description, Hassan Kamil (2015: 314; 442–448) presents four seemingly separate semantic types of converbs, all of them (in agreement with Banti) nonfinite. The simultaneity converb, as illustrated in the first clause of (25), ends in *-ih* (V1), *-ah* (V2) or *-ih* (V3, if SS) / *-uk* (V3, if DS), i.e. the choice of allomorphs is determined by word class and, in V3, by subject (dis-)continuity.

- (25) *amá úrru idáltu=h án-ih dité=t andafáll-uk*
 DEM children old=POSTP be-SIM.CONVB darkness=POSTP hit-MNR.CONVB
laſó líifi=l árd-uk ƣarsá=k doſ háq-ak
 day heat=POSTP run-MNR.CONVB forehead=POSTP sweat shed-MNR.CONVB
kiiswá sunkú=l akkáſ-uk geyá=m keení=h
 bags shoulder=POSTP carry-MNR.CONVB find.1SG.IMPERV=DEP 3PL=POSTP
báah-ak eynebé
 bring-MNR.CONVB raise.1SG.PERV

‘As an old man, I raised these children, bumping into obstacles in the dark, running in the heat during the day, sweating on my forehead, carrying bags on my shoulders and bringing them what I could find.’ (Hassan Kamil 2015: 442f., translation from French)

Whereas Banti (2010: 53) shows the simultaneity converbs being used to express the manner in which an event is carried out, Hassan Kamil identifies a formally distinct manner converb in *-uk* (V1/V3) and *-ak* (V2), as in (25), which may also express a conditional relationship (26) (2015: 444f.).

- (26) *rob rád-ak ƣaysó geelinó*
 rain fall-MNR.CONVB pastures find.1PL.FUT
 ‘If it rains, we’ll find pastures.’ (Hassan Kamil 2015: 445, translation from French)

For Hassan Kamil (2015: 444), the verb form in *-ínnuk* qualifies as an anteriority converb, which can, however, only be realized for the non-stative V1 and V2 verbs (27).

- (27) *dagóm yaab-ínnuk kahhá-iyyé*
 a.little talk-ANT.CONVB silence-say.3M.SG.PERV
 ‘After he had talked a bit, he fell silent.’ (Hassan Kamil 2015: 444, translation from French)

A cause converb in *-ínnuh* (V1/V2), *-ínuh* (V3) is said to be obsolete (Hassan Kamil 2015: 446). In contrast to Banti (2010), Hassan Kamil does not posit a negative converb but shows instead that converbs are negated periphrastically (2015: 326).

20.2.4 Highland East Cushitic

The HEC languages form a subgroup of closely related languages. As argued in Treis (2012a), HEC has developed switch-reference marking on converb clauses under the influence of neighboring Omotic languages. Most languages distinguish between an

anteriority (semantically general) converb and a simultaneity converb. Languages of the Kambaata group (including K’abeena and Alaaba) and the Hadiyya group (including Libido) have a dedicated negative converb and at least one purpose converb. Converbs are in general morphologically simpler than main verbs and reduced in finiteness (but see Hadiyya below).

20.2.4.1 Kambaata (with Alaaba and K’abeena)

The description of Kambaata is based on a variety of sources collected in the past two decades in the field; the corpus includes recordings of natural speech events, notes of overheard utterances and elicited data as well as data from local publications.

Kambaata differentiates five converbs: anteriority, simultaneity, negative, and SS and DS purpose converbs (Table 3 and Table 4). The morphological makeup of all converbs is identical. The verb stem is followed by a slot of subject indexes (which are \emptyset in the 1SG/3M) and a slot for the respective converb marker (Table 3). While affirmative declarative main verbs and relative verbs are characterized by two discontinuous subject-indexing slots, converbs are structurally simple verb forms and mark the subject only once. Converbs cannot be independently marked for mood or tense, but the distinction between anteriority and simultaneity converb could be analyzed as a perfective-imperfective aspectual distinction.⁶

Table 3. Converb inflection in Kambaata (part 1)

| | | ANT(-DS) | SIM(-DS) |
|------|----|--------------------------------|-------------------------|
| 1SG | 3M | ʼ(PAL/GEM)- \emptyset (-yan) | - \emptyset -án(-yan) |
| 2SG | 3F | ʼ- <i>t</i> (-yan) | - <i>t</i> -án(-yan) |
| 3HON | | -éen(-yan) | -éen-án(-yan) |
| 1PL | | ʼ- <i>n</i> (-yan) | - <i>n</i> -án(-yan) |
| 2PL | | -téen(-yan) | -téen-án(-yan) |

Table 4. Converb inflection in Kambaata (part 2)

| | | NEG | PURP.SS | PURP.DS |
|------|----|----------------------|---------------------|-----------------------|
| 1SG | 3M | - \emptyset -úʼnna | - \emptyset -ó-ta | ʼ- \emptyset -un-ta |
| 2SG | 3F | - <i>t</i> -úʼnna | - <i>t</i> -ó-ta | ʼ- <i>t</i> -un-ta |
| 3HON | | -éen-úʼnna | -éen-ó-ta | -éen-un-ta |
| 1PL | | - <i>n</i> -úʼnna | - <i>n</i> -ó-ta | ʼ- <i>n</i> -un-ta |
| 2PL | | -teen-úʼnna | -teen-ó-ta | -teen-un-ta |

The anteriority converb marker is realized suprasegmentally as stress on the subject index for 3HON and 2PL or, in other persons, on the last vowel of the verb stem preceding the subject index. The simultaneity converb has the marker -án after the subject index. Both converbs are unmarked if the subject is shared with the controlling clause (28)⁷ and obligatorily marked by -yan (DS) if the subject changes between the converb and the next clause (29). Note that the bracketing of the converb clauses in the examples reflects only one possible analysis; rather than assuming a sequence of cosubordinate converb clauses, there is evidence (see below) that the converb clauses are embedded.

(28) [Cúil-u am-a-sí zakk-óon yaar-án]

⁶ In main verbs, Kambaata distinguishes between imperfective, perfective, perfect and progressive aspect. In other publications on Kambaata, the anteriority converb is called “perfective converb” and the simultaneity converb “imperfective converb”. The terms “anteriority” and “simultaneity” are here chosen to guarantee comparability across the chapter.

⁷ The Kambaata data is written in the official orthography (cf. Treis 2008: 73–80; Alemu 2016). Data from publications published in Kambaata have been segmented, glossed and translated by the first author.

infant-M.NOM mother-F.GEN-3M.POSS after-M.LOC cry-[3M.]SIM.CONVB
 [dagud-án] [qo'll-í] [úbb]
 run-[3M.]SIM.CONVB stumble-[3M.]ANT.CONVB fall-[3M.]ANT.CONVB
 gag-i-sí inq-óon yabur-ú-s (...) mu'rr-ée'u
 self-M.GEN-3M.POSS tooth-F.ICP lip-M.ACC-3M.POSS cut.MID-3M.PERV
 'Running in tears after his mother, the little boy stumbled, fell down, (and) cut his lip (...) with his own teeth.'

Switch-reference marking is strictly subject-oriented. DS marking is even triggered when the subjects are in a part-whole or inclusion relationship. In (29), the subject changes from 'man' in the first clause to an unexpressed *ír-u* 'land, weather' in the second clause, and then back to 'man' as subject of the final main verb. In our database not more than two subject changes per sentence are attested across converb clauses, see also (36).

- (29) [Mán-ch-u gid-áan uurr-í-yan]
 person-SGV-M.NOM cold-M.LOC come.to.a.standstill-3M.ANT.CONVB-DS
 [gíjj-i-yan-s] hux-áyoo'u
 become.tactile.cold-3M.ANT.CONVB-DS-3M.OBJ shiver-3M.PROG
 'The man is standing in the cold, he freezes (lit. it [= land, weather] colds him) and he is shivering.' (Kambaata Education Bureau 1995: 5)

The semantic relation between the anteriority converb clause and the superordinate clause is fairly vague. It is often interpreted as expressing a sequence of events, as in (28) and (29). However, the anteriority converb clause can also express accompanying circumstances and the manner of an event, as the second converb in (30) shows. Given an appropriate context, the semantic relation between a converb clause and a controlling clause verb may also have a purposive, concessive, conditional (cf. the first converb in (30)) or causal interpretation.

- (30) Hakka-daa-nú [maláb-u-s xall-í mát-e od-áan
 which.M.OBL-COND-ADD honey-M.NOM-DEF only-M.GEN one-F.OBL item-F.LOC
 íkk] [cilíl=y-í]
 become.enough.[3M.]ANT.CONVB fill.up.to.the.brim=say-[3M.]ANT.CONVB
 wíim-u has-is-áno-s
 fill-M.NOM want-CAUS1-3M.IMPERV-3M.OBJ
 'In any case, if the honey is only enough for a single pot, it has to fill (it) up to the brim.'

The simultaneity converb expresses that the event in the converb and the controlling clause are simultaneous. Either a punctual event in the controlling clause happens while the event of the simultaneity converb is ongoing ('when'), as in (28), or two events happen in parallel for a period of time ('while'), as in (31). The gradual ('bit by bit') delay (of the closing hour), as expressed in the first converb clause, extends ('adds to') the playing time. In an afterthought, the speaker mentions that the extension of the playing time happens while the day of the circumcision approaches.

- (31) [Bar-éechch bar-í shíq=a'-án] barg-áno,
 day-M.ABL day-M.ACC move.up.a.bit=do-[3M.]SIM.CONVB add-3M.IMPERV
 [bár-u onxah-áni-yan]
 day-M.NOM come.closer-[3M.]SIM.CONVB-DS
 'From day to day, they (= the friends of the boy) bit by bit extend (the playing time), while the day (of his circumcision) approaches.'

The dedicated negative converb has three realizations in free variation: *-ú'nna*, *-u'nnáan* or *-u'nnáachch*, of which the first is given in Table 3. Subject (dis-)continuity remains

unmarked in negative converbs clauses and negative converbs are used both in SS and, as in (32), in DS contexts. The negative converb expresses privativity (‘without’) (32) or posteriority (‘before’) (33).

- (32) (...) [*mexx-uhú-u* *kaa'll-u'nna<'ée>chch*]
 single-M.NOM-ADD help-[3M.]NEG.CONVB<1SG.OBJ>
dág-u *hasíshsh-o-'e*
 find-M.NOM be.necessary-3M.PERV-1SG.OBJ
 ‘(...) I needed to find (a solution) (lit. finding (a solution) was necessary for me) without anybody helping me.’ (Saint-Exupéry 2018: 22)

- (33) [*Béet-u-'* *reh-u'nnáachch*] *esáani-n*
 son-M.NOM-1SG.POSS die-[3M.]NEG.CONVB 1SG.ICP-EMPH
da'll-ít *ké'-i*
 do.quickly-2SG.ANT.CONVB get.up-2SG.IMP
 ‘Get up (and come) with me quickly before my son dies.’

Kambaata has a dedicated SS purpose converb, marked by *-óta* (‘in order to VERB’), as in (34), and a dedicated DS purpose converb, marked by *-unta* (‘so that (SUBJECT) VERBS’), as in (35). There is no corresponding negative purpose converb, but a negative simulative clause (Treis 2017: 111ff.) is employed instead.

- (34) *Malab-ú* *soroob-aammí* *j-eechch-úta* [*zúishsh-u*
 honey-M.ACC harvest-1SG.IMPERV.REL time-SGV-F.ACC bees-M.NOM
wom-á *fushsh-óta*] *qurbaabb-á*
 king-M.ACC come.out.CAUS1-[3M.]PURP.CONVB.SS queen.cell-M.ACC
makk-íshsh-ee=da *múrr* *kam-áamm*
 be.made-CAUS1-3M.PER.REL=COND cut.[1SG.]ANT.CONVB do.completely-1SG.IMPERV
 ‘If the bees have built queen cells to produce a (new) queen (lit. king), I cut them away when I harvest honey.’

- (35) [*Ku* *án* *y-aammí* *xáh-u*
 ADJ.DEM.M.NOM 1SG.NOM say-1SG.IMPERV.REL thing-M.NOM
hór-u<n>ku-s (...) *oos-óo* *ág-unta-ssa*]
 all-M.NOM<EMPH>-DEF children-F.DAT enter-[3M.]PURP.CONVB.DS-3PL.OBJ
dan-aam-ú *misil-á* *ke'-ís-i-ssa*
 beauty-PROP-M.NOM picture-M.ACC rise-CAUS1-2SG.IMP-3PL.OBJ
 ‘Draw (lit. raise) a beautiful picture so that the children (...) understand all what I tell (you) (lit. so that all what I tell you enters the children).’ (Saint-Exupéry 2018: 24)

Object marking on converbs is restricted and dependent on the type of converb and its context of use. Except when used in questions (§20.4.3), anterior and simultaneity converbs allow object marking only on DS-forms; see (29). In contrast, negative and purpose converbs can suffix or infix object pronouns, see (32) and (35), in any context.

Converb clauses are subordinate to the immediately following clause or to the clause in which they are embedded. Embedding cannot be proven when sentence-initial NPs are arguments of both the following converb(s) and the next higher verb(s). However, (36) demonstrates that the DS simultaneity converb clause is inside a discontinuous controlling

clause headed by ‘cut’, as the NP ‘finger of your foot’ can only be analyzed as the direct object of ‘cut’ but not as an argument of ‘drink’, ‘get drunk’ and ‘fall’.⁸

- (36) [kazzammáan-u lokk-a-kkí zuru ’mm-áta [ág-g
 this.year-M.OBL foot-F.GEN-2SG.POSS finger-F.ACC drink-2SG.ANT.CONVB
 dimb-ít úb-b
 get.drunk-2SG.ANT.CONVB fall-2SG.ANT.CONVB
 birqiiqq-itáni-yan] got-íichch-u
 toss.turn.on.the.ground-2SG.SIM.CONVB-DS hyenas-SGV-M.NOM
 múrr-i-yan] haakiim-í min-éen fayy-íteent
 cut-[3M.]ANT.CONVB-DS doctor-M.GEN house-M.LOC recover-2SG.PER
 ‘(Earlier) this year, (when) you drank (alcohol), got drunk, fell down, tossed and turned on
 the ground (unconscious), a hyena bit (lit. cut) off (one of) your toe(s), and you recovered in
 the hospital.’

A second important argument supporting the analysis of Kambaata converb clauses as embedded comes from cleft constructions. As any other phrasal or clausal constituent in Kambaata, converb clauses can be clefted in order to focus them. The focused constituent becomes the non-verbal predicate of the sentence, as the clefted anteriority converb clause in (37); the remainder of the sentence is relativized, nominalized and marked for nominative case, and then functions as the subject of the non-verbal predicate. Focus is marked by small caps in the free translation.

- (37) [Izeechch-o-sí heereechch-u afuushsh-aqq-ée j-áata
 bride-F.GEN-DEF brother.in.law-M.NOM put-MID-3M.PERV.REL time-F.ACC
 heereechch-óohaa-n-s [hitt-íta y-í-yye⁹-et
 sister.in.law-F.DAT-LNK-3M.POSS like.this-F.ACC say-[3M.]ANT.CONVB-LNK-COP3
 íkke]_{NV-PREDICATE} aass-ee-sé-ehu]_{SUBJECT} “[...]”
 PAST give-3M.PERV-3F.OBJ.REL-NMLZ1.M.NOM
 ‘When the bride’s brother-in-law put (the honey into the bridal hut), he gave (it) to his sister-
 in-law, SAYING AS FOLLOWS (lit. it was saying like this (that) he gave (it) to his sister-in-
 law): “[...]”’

The order of subject and predicate is free in cleft sentences. The predicate expressing the focused constituent can either precede (38), be found inside (37) or follow the subject expressing the backgrounded constituent (39).

- (38) “[Harr-ée buud-áan wor-éeni-yane-et]_{NV-PREDICATE}
 donkeys-F.GEN horn-M.LOC pour.in-3HON.ANT.CONVB-DS-COP3
 [ag-aammí-ihu]_{SUBJECT}” y-áno
 drink-1SG.IMPERV.REL-NMLZ1.M.NOM say-3M.IMPERV
 ‘He says: “I drink (it) WHEN ONE SERVES (IT) IN A DONKEY HORN (lit. it is one¹⁰ having
 poured (it) into a donkey horn (that) I drink it).”’
- (39) [Xink-úta alaphph-eennó-ohu]_{SUBJECT} [lal-lam-í
 riddle-F.ACC play-3HON.IMPERV.REL-NMLZ1.M.NOM REDUP-two-M.DAT

⁸ A reviewer questioned that example (36) was an argument in favor of considering converb clauses as embedded and suggested that it rather shows that subjects or objects can be fronted and topicalized. While this might be true for this particular example, a topicalization analysis cannot be applied to all instances in which an argument of the main verb precedes the converb clause.

⁹ The occurrence of the linker is morphophonologically conditioned.

¹⁰ The 3HON subject index is used for honorific singular third persons and for impersonal subjects.

ih-eenáne-et]_{NV-PREDICATE}

become-**3HON.SIM.CONVB-COP3**

‘One plays riddles IN PAIRS (lit. it is one being in pairs (that) one plays riddles).’ (Kambaata Education Bureau 1989: 4. 80)

Ex. (40) provides further evidence that Kambaata converb clauses are subordinate. Constituents of the superordinate main clause (e.g. the subject) can be questioned and extracted.

- (40) [[*Bajíg-u* *alachch-á=b-a* *mar-áni-yan*] *ga’-í*
 NAME-M.NOM play-F.GEN=PLC-M.ACC go-[**3M.**]SIM.CONVB-DS call-[**3M.**]ANT.CONVB

fanqashsh-ee-sí-t]_{SUBJECT} [*áye-et* *íkke?*]_{NV-PREDICATE}
 return-3M.PERV-3M.OBJ.REL-NMLZ.M.NOM who.M.NOM-COP3 PAST
 ‘(When) Bajigo (was) going to the playground, WHO (lit. it was who (that)) called (him) and
 made him return?’ (Kambaata Education Bureau 1989: 3. 99)

Recall from above that converb clauses can also occur after their controlling clause in an afterthought (31). Thus Kambaata converb clauses fulfill at least four of Haspelmath’s criteria for subordination, namely position inside the superordinate clause, variable position with respect to the superordinate clause, restrictiveness and focusability, and possibility of extraction (1995: 12–17).

Although sequences of four (possibly even more) converb clauses and a following relative or main verb clause are attested, cf. (36), it is most common to have only one or two converb clauses in a sequence. Besides converb clauses, the ubiquitous relative clauses contribute to the syntactic complexity (and sometimes paragraph-like length) of Kambaata clauses. Apart from converb clauses in adverbial function, Kambaata also has relative-based adverbial clauses, e.g. temporal (cf. the sentence-initial clauses in (34) and (37)), conditional, concessive, reason, purpose, comparative and similitive clauses. If one assumes a finiteness continuum from fully infinite to fully finite verb forms, relative verbs are more finite than converbs. They are based on declarative main verb forms, make a distinction between four aspectual values and index the subject in two morphological slots, which yields 7 different subject indexes. Relative verbs are negated with a dedicated relative negator (Treis 2022a).

Like Kambaata, Alaaba and K’abeena have anteriority, simultaneity, negative and purpose converbs (Schneider-Blum 2007: 241–268; Crass 2005: 175–188). Only the Alaaba anteriority converb seems to be marked for switch-reference (Schneider-Blum 2007: 257), while there is no clear evidence of switch-reference marking in K’abeena. Both Alaaba and K’abeena use their only purpose converb in SS and DS contexts; this converb is cognate to the SS form in Kambaata.

20.2.4.2 Hadiyya

Sim (1989) was the first linguist to draw attention to a switch-reference marking system in a Cushitic language. Both Sim and Perrett (2000) use the labels “medial verbs” for Hadiyya converbs, arguing that “[t]he main construction in which these verbs are used is a clause chaining construction. Several clauses can be linked by these forms, with no overt sign of conjunction” (Perrett 2000: 83).

Hadiyya has converb forms of different degrees of morphological complexity and finiteness. The anteriority and simultaneity converbs are morphologically more complex than those found elsewhere in HEC and comparable to its main verb forms. The anteriority converb, is characterized by the converb marker *-a(a)* (Sim 1989: 150; Perrett 2000: 85), which is minimally preceded by one subject index (Table 5). In certain persons, a second subject index has to be or can be suffixed verb-finally.

Table 5. Converb inflection in Hadiyya (part 1)*

| | ANT.SS | SIM | NEG | PURP.SS | PURP.DS |
|------|----------------------|-----------------------|--------------------|--------------------|-------------------|
| 1SG | -Ø- aa (-mma) | -Ø- u-mm-uyy | -Ø- oo'n | -Ø- eena | -Ø- ona |
| 2SG | - t-aa | - t-uyy | - t-oo'n | - t-eena | - t-ona |
| 3M | -Ø- aa (-kka) | -Ø- u-kk-uyy | -Ø- oo'n | -Ø- eena | -Ø- ona |
| 3F | - t-a- 'a | - t-u- 'uyy | - t-oo'n | - t-eena | - t-ona |
| 3HON | - akk-a- 'a | - akk-u- 'uyy | - akk-oo'n | - akk-eena | - akk-ona |
| 1PL | - n-aa (-mma) | - n-u-mm-uyy | - n-oo'n | - n-eena | - n-ona |
| 2PL | - takk-a- 'a | - takk-u- 'uyy | - takk-oo'n | - takk-eena | - takk-ona |

*Table based on data in Perrett (2000: 84f.) and Sim (1989: 151, 154), converb markers bold, subject indexes non-bold.

Restricted to SS contexts, the anteriority converb is semantically relatively vague but mainly used for the expression of sequential events in clause chains – see the first clause in (41) – and the manner in which events expressed in a following clause are carried out (Sim 1989: 381–386; Perrett 2000: 142–146).

- (41) [bolucco? mine-nne mal-l-aa-mma]
wedding.GEN house-LOC go-1PL-ANT.CONVB-1PL
[[uww-akk-o?] hurbaat-a i<n>t-u<mm>uyya]
give-IMPERS-PERV.REL food-ACC eat<1PL>-SIM.CONV<1PL>
[ududd ee hurbaata-nne tak-u-kk-aare]
mess.NOM that food-LOC drip-PERV-3M-ANT.CONVB[.DS]
keese š-in-oo-mm-o
you.ACC kill-1PL-IMPERS-1PL-DEC
‘When we go to the wedding house, while we are eating the food which they give us, if the mess drips on that food we will kill you.’ (Perrett 2000: 139)

In Tadesse (2015: 205–209), we find chains with up to 4 anteriority converbs in sequential function plus a sentence-final fully finite main verb.

Unlike in Kambaata (§20.2.4.1) and Sidaama (§20.2.4.4), the Hadiyya DS anteriority forms¹¹ are not directly based on the SS converb but on the “imperfect”, “simple perfect” (our gloss PERV) and “present perfect” (our gloss PRF) declarative main verbs, devoid of the final declarative marker in the “imperfect” and “simple perfect” and with special subject indexes in 2SG and 3M (Table 6). To this truncated, but morphologically still fairly complex, main verb form, the anteriority converb marker *-aa(-re)* (realized *-haa(-re)* after *o*) is suffixed.¹² The converb marker on a shortened main verb alone qualifies it as a DS form, *-re* is optional (Perrett 2000: 147).¹³

Table 6. Converb inflection in Hadiyya (part 2)*

| | ANT.DS (“imperfect”) | ANT.DS (“simple perfect”) | ANT.DS (“present perfect”) |
|--|-------------------------|------------------------------|-------------------------------|
| | | | |

¹¹ Tadesse (2015) analyzes them as conditional verbs and makes no reference to earlier works on Hadiyya converbs.

¹² Note all morphological questions regarding the DS converb forms can be resolved, as Sim (1989) does not segment his data and Perrett (2000) does not discuss the “perfect” converb.

¹³ It is unclear what determines whether the “imperfect”, “simple perfect” or “present perfect” form is chosen. Perrett (2000: 148) states that their choice is “in the majority of cases” determined by the “tense” of the final verb determines – which is, however, not the case in (41) quoted her own work.

| | | | |
|------|-------------------------|-------------------------|-----------------------------------|
| 1SG | -Ø-oo-mm-aa(-re) | -Ø-u-mm-aa(-re) | -Ø-aa-mm-<u>o</u>-haa(-re) |
| 2SG | -t-oo-’aa(-re) | -t-Ø-aa(-re) | -t-aa-tt-<u>o</u>-haa(-re) |
| 3M | -Ø-oo-haa(-re) | -Ø-u-kk-aa(-re) | -Ø-aa-kk-<u>o</u>-haa(-re) |
| 3F | -t-am-aa(-re) | -t-o-’aa(-re) | -t-o-’-<u>o</u>-haa(-re) |
| 3HON | -akk-am-aa(-re) | -akk-o-’aa(-re) | -akk-o-’-<u>o</u>-haa(-re) |
| 1PL | -n-oo-mm-aa(-re) | -n-u-mm-aa(-re) | -n-aa-mm-<u>o</u>-haa(-re) |
| 2PL | -takk-am-aa(-re) | -takk-o-’aa(-re) | -takk-o-’-<u>o</u>-haa(re) |

*Table based on data in Perrett (2000: 86) and Sim (1989: 150), aspect and converb markers bold, subject indexes non-bold.

In (41), the third converb clause requires a DS form of ‘drip’ because the subject switches from ‘mess’ to 1PL in the following clause. Ex. (41) is also illustrative of the fact that relative clauses and other clauses that are peripheral to the clause chain can be skipped over (cf. Treis 2012a: 92f. for Kambaata). The converb of ‘go’ is a SS form, although the subsequent relative verb ‘(which) they give’ has a different subject. The relative verb is disregarded and instead the converb of ‘go’ signals that it shares a subject with ‘eat’.

Although Sim and Perrett speak of medial clauses, there is evidence that Hadiyya converb clauses are (or can be) embedded, i.e. subordinate clauses. In (42), the DS converb clause is inserted into the main clause after the main clause subject.

- (42) *beet* [*manc* *woʔo* *uww-ukk-aare*]
 boy.NOM man.NOM water.ACC give-3M.PERV-ANT.CONVB[.DS]
ag-aa *godd-ukk-o*
 drink-3M.ANT.CONVB become.satisfied-3M.PERV-DEC
 ‘The man gave (the boy) water, (and) the boy was satisfied.’ (Sim 1989: 428, translation adapted)

Hadiyya also has a simultaneity converb (Sim 1989: 153; Perrett 2000: 84), used in SS or, as in (41), in DS contexts. It is characterized by an ending *-(u-)uyy(a)*, combined with a simple or double subject index.

As shown in Table 5, the Hadiyya negative converb is marked by a single subject index plus *-oo’ne* (Sim 1989: 154f.; Tadesse 2015: 205–206) and only seems to express privativity.¹⁴ Furthermore, Hadiyya has a SS and a DS purpose converb paradigm. Purpose converbs have a single subject index followed by *-eena* (SS) or *-ona* (DS).

20.2.4.3 Libido

The converb system of Libido, a language closely related to Hadiyya, is fairly elaborate (Table 7), even if we exclude all the verb forms that Crass (n.d.) labels converb but that do not correspond to our definition, since they are based on relative or fully finite main verb forms plus a subordinating suffix.

Table 7. Converb inflection in Libido (Crass n.d.)*

| | | ANT | SIM | NEG | PURP[.SS]* | HYPOTH |
|-----|----|--------------------------|-----------------|-----------------------------|----------------------------|------------------------------|
| 1SG | 3M | -Ø-ⁱ | -Ø-aʔi | -Ø-oʔnⁱ | -Ø-en^a | -Ø-aaʔnⁱ |
| 2SG | 3F | -t-ⁱ | -t-aʔi | -t-oʔnⁱ | -t-en^a | -t-aaʔnⁱ |
| 1PL | | -n-ⁱ | -n-aʔi | -n-oʔnⁱ | -n-en^a | -n-aaʔnⁱ |
| 2PL | | -tak-ⁱ | -tak-aʔi | -tak-oʔnⁱ | -tak-en^a | -tak-aaʔnⁱ |
| 3PL | | -ak-ⁱ | -ak-aʔi | -ak-oʔnⁱ | -ak-en^a | -ak-aaʔnⁱ |

*No paradigm of the different subject purpose converb is provided in Crass (n.d.), although it probably exists.

¹⁴ All posteriority examples in the literature contain a sequence of the negative converb and ‘precede’.

Based on morphological criteria, Crass distinguishes between simple and complex converb paradigms; solely the first type will concern us here. Among the simple converbs, which have only a single subject-indexing slot and a converb marker, we find a semantically general anteriority converb, which is marked by subject index followed by an unstressed, devoiced *-i*. Its use is illustrated in (43).

- (43) (...) [sulsoʔa ʔatt 'is-s-ⁱ] woddaaʔlon^a
 minced.meat.ACC prepare.well-3F-ANT.CONVB lover.DAT
 [ʔit-on^a] hinc'-aa-toʔo
 eat-[3M.]PURP.CONVB.DS be.near-TRN-3F.PERV
 '(...) she prepared minced meat and served it (lit. made it near), so that the lover might eat it.' (Crass n.d.)

The simultaneity converb is marked by *-aʔi* (44). The negative converb, which expresses privativity or, as in (45), posteriority, has the marker *-oʔnⁱ*, cognate to that of Hadiyya and Kambaata.

- (44) [baʔ-áʔi] mat ʔoraaro ʔafuko.
 go-[3M.]SIM.CONVB one.MODIF river.ACC arrive.3M.PERV
 'On his way (lit. while going) he arrived at a river.' (Crass n.d.)
- (45) (...) [guull-it-óʔni-m] t'aleʔi káaron-dayⁱ ʔuwe y-uko
 finish-3F-NEG.CONVB-EMPH only now.DAT-but give.2SG.IMP say-3M.PERV
 '(...) and before she finished, he said, "Give it (to me) just this once".' (Crass n.d.)

Libido has a purpose converb marked by *-en^a* (cognate with the Hadiyya SS form), which the texts show to be used in SS contexts; in (46), two coordinated purpose clauses are embedded into the main clause. Crass does not explicitly mention a DS counterpart, but there seems to be a DS purpose converb, ending in *-on^a* (43) that is partly isomorphic to the jussive main verb (and cognate with the Hadiyya DS form).

- (46) (...) gotícci ʔemeemcotannⁱ mino [ʔitt'a liiraʔmato
 hyena.SGV.NOM rabbit.SGV.F.GLI house.ACC 3M.ACC happiness.ACC
 kur-ena-na] [ʔiséna-m galata
 tell-[3M.]PURP.CONVB.SS-COORD 3F.DAT-EMPH thanks.ACC
 ʔaf-is-en^a] baʔ-uko
 arrive-CAUS-[3M.]PURP.CONVB.SS go-3M.PERV
 '(...) the hyena went to the rabbit's burrow to tell (her) of his happiness and to say thank you (lit. make arrive thanks to her).' (Crass n.d.)

The last semantically specialized simple converb is the hypothetical-conditional converb marked by *-aaʔ(-)nⁱ*.

- (47) (...) [sibaat-t-aaʔnⁱ] muunteettiira-ššo
 be.hungry-2SG-HYPOTH.CONVB belch.2SG.APOD-NEG
 'If you were hungry, you would not have belched.' (Crass n.d.)

Crass (n.d.) does not mention whether converbs are sensitive to switch reference. The Libido verb form cognate to the DS anteriority converb in Hadiyya is glossed as "conditional" and used in ss and DS contexts in the texts.

20.2.4.4 Sidaama

Sidaama has an anteriority converb, labelled "connective verb", and a simultaneity converb, labelled "infinitive" by Kawachi (2007: 414–425), respectively (Table 8). Sidaama has no

dedicated negative converb but uses a relative-based adverbial clause to express ‘without, before VERBing’ (2007: 382, 407).

Table 8. Converb inflection in Sidaama (Kawachi 2007: 414)

| | | ANT(=DS) | SIM+SS | SIM=DS |
|-----|-------|--------------|------------|------------|
| 1SG | 3M | -Ø-e(=nna) | -Ø-a-nni | -Ø-a=nna |
| 2SG | 3F/PL | -t-e(=nna) | -t-a-nni | -t-a=nna |
| 1PL | | -n-e(=nna) | -n-a-nni | -n-a=nna |
| 2PL | | -tin-e(=nna) | -tin-a-nni | -tin-a=nna |

In the converb paradigms, the subject-indexing system is reduced from eight to four: 1M.SG/1F.SG/3M, 2M.SG/2F.SG/3F, 1PL and 2PL. In the converb forms, the subject index follows the verbal stem and precedes the converb suffix *-e* or *-a* (Kawachi 2007: 414). Furthermore, converbs are marked for subject (dis-)continuity: the enclitic *=nna* (‘and’) signals DS (Kawachi 2007: 279f., 501ff.), as in (48), while SS is unmarked in the case of anteriority converbs; simultaneity converbs mark SS and DS by *-nni*¹⁵ and *=nna*, respectively. Object marking seems to be restricted to DS converbs (49), as no object-marked SS converbs are attested in Kawachi’s grammar.

- (48) [Laše šalak'-e=nna] lekka-si hiikk'-an-tu
 NAME.M.NOM slip-[3M.]ANT.CONVB=DS leg.F.NOM-3M.POSS break-PASS-3F.PERV
 ‘Lashe slipped, and his legs got broken.’ (Kawachi 2007: 279)

- (49) [harriššo gan-t-e=nna-'e hog-id-u-mm-o
 sun.F.NOM hit-3F-ANT.CONVB=DS-1SG.OBJ become.thirsty-mid-1M.SG.PERV
 ‘Because the sun hit me, I (M) got thirsty.’ (Kawachi 2007: 415)

The anteriority converb is semantically rather vague. It typically expresses an event that precedes the event in the controlling clause in time; temporally adjacent events lends themselves to be interpreted as being in a causal relationship, as in (49). Chains of anteriority converbs expressing several sequential events are attested: the examples in Kawachi’s grammar contain up to four chained anteriority converbs plus a final main verb (2007: 415f). The anteriority converb may also state the manner of the event in the controlling clause, e.g. a translational motion event (Kawachi 2007: 416).

The simultaneity converb is used for relations of simultaneity (50), manner or purpose (Kawachi 2007: 380ff.) between the converb clause and the controlling clause.

- (50) [sagalé ra'-is-id-d-a-nni] angá
 food.ACC become.cooked-CAUS-MID-3F-SIM.CONVB-SS hand.ACC
 giid-itu
 burn.MID-3F.PERV
 ‘While cooking, she burned her hand.’ (Kawachi 2007: 381)

Sidaama does not have dedicated purpose converbs.

20.2.4.5 Gedeo

Even though the labels vary, all sources on Gedeo agree that the language has an anteriority converb (51), consisting of a subject index plus *-e'*, *-e* or no additional ending, depending on the source consulted (Gasparini 1994: 62; Eyob 2015: 176–181; Wedekind 1990: 60) (Table 9).

¹⁵ The morpheme receives various glosses in the grammar, we gloss it as SS.

Table 9. Converb inflection in Gedeo*

| | | ANT | SIM-SS | SIM-DS |
|-----|-----|---------|------------|------------|
| 1SG | 3M | -Ø-e' | -Ø-a'-ni | -Ø-a'-na |
| 2SG | 3F | -t-e' | -t-a'-ni | -t-a'-na |
| 1PL | 3PL | -n-e' | -n-a'-ni | -n-a'-na |
| 2PL | | -tin-e' | -tin-a'-ni | -tin-a'-na |

*Converb paradigms reconstructed on the basis of the information in Gasparini (1994).

- (51) [gorsa gorsa diipi'ni ke'-nè] [anshe'-nè]
 morning morning bed.ABL get.up-1PL.ANT.CONVB wash-1PL.ANT.CONVB
 oddo'w-inànnon
 get.dressed-1PL.IMPERV[?]
 'Every morning we get up from bed, wash ourselves and put on our dress.' (Gasparini 1994: 96, tentative glossing ours)

Gasparini (1994: 62) also mentions a simultaneity converb (“gerund contemporaneous”), which is obligatorily marked for subject (dis-)continuity; cf. (52)-(53); the form is cognate to that of Sidaama (Table 8). No source on Gedeo mentions DS marking on the anteriority converb. However, some of the many unglossed examples in Gasparini (1994) hint at the possibility that this converb, too, like his Sidaama counterpart, is marked for DS by *-na*. Switch-reference marking in Gedeo remains to be examined in more detail.

- (52) [ani barat-a'-ni] haaso'-àbo'non
 1SG.NOM study-[1SG.]SIM.CONVB-SS talk-1SG.IMPERV[?].NEG
 'While I study, I don't talk.' (Gasparini 1994: 62, tentative glossing ours)
- (53) [ani barat-a'-na] haasot-tingoqe!
 1SG.NOM study-[1SG.]SIM.CONVB-DS talk-2PL.IMP.NEG
 'While I study, don't talk.' (Gasparini 1994: 62, glossing ours)

All converb paradigms in Table 9 are characterized by a simple morphological makeup, and they are used without a subordinator or coordinator. The evidence on a potential purpose converb in Gedeo is not conclusive.

20.2.4.6 Burji

Tesfaye (2015: 278–283) reports about a single converb paradigm in Burji (Table 10), which indexes the subject (5 indexes are distinguished) and is said to be marked by a suffix *-j*. The addition of an extra-short devoiced vowel could, however, also be the default realization of C-final words.

Table 10. Anteriority converb in Burji (Tesfaye 2015: 279f.)

| | | |
|-----|----|---------|
| 1SG | 3M | -Ø-j |
| 2SG | 3F | -f-j |
| 1PL | | -n-i' |
| 2PL | | -fing-j |
| 3PL | | -ng-j |

As seen in (54), the converb is used to express sequences of events and qualifies thus as an anteriority converb. However, one of the examples presented in Tesfaye (2015) also shows it expressing manner (55).

- (54) ?ifeé [már-tf-j] tf'eéh-j

3F.ACC go-2SG-ANT.CONVB call-2SG.IMP

‘Go and call her!’ (Tesfaye 2015: 282)

- (55) [ʔaʃiny dʒebbattf-ing-j] hudʒ-eed-an-ʃin-oonánni (...)
 2PL.NOM be.strong-2PL-ANT.CONVB work-MID-PERV-2PL-COND
 ‘If you work hard, (...)’ (Tesfaye 2015: 245)

Burji has a purposive verb form in *-uwaa* (Tesfaye 2015: 272f.), which is not analyzed as a converb by the other but which may be formally and functionally related to the purposive converb described for other HEC languages above. This verb form requires further investigation.

20.3 Cushitic converb systems

Even though Cushitic constitutes an indisputable genetic unit, the languages display interesting variation in many respects: how many converbs are distinguished, which semantic relations are expressed by converbs, which grammatical categories are marked on converbs, and to which degree converbs are (non-)finite, whether converbs are marked for switch-reference, and, finally, how functionally versatile converbs are in individual languages (§20.4). Table 11 summarizes the commonalities and differences of converbs across the family.

Table 11. Cushitic converb systems

| | NC | CC | | LEC | | HEC | | | | | |
|--------------------|-----|-----|-----|-----|------|-----|--------------------|-----|-----|-------|-------|
| | Bj. | Xm. | Aw. | Or. | Af.* | Kb. | Hd. | Lb. | Sd. | Gd. | Br. |
| # of converb types | 4 | 1 | 1 | 2 | 3 | 5 | 5 (6) ⁺ | 6 | 2 | 2 (?) | 1 (?) |
| Anteriority | Y | N | N | Y | Y | Y | Y | Y | Y | Y | Y |
| Manner | Y | N | N | N | Y | N | N | N | N | N | N |
| Simultaneity | Y | N | N | Y | Y | Y | Y | Y | Y | Y | N |
| Purpose | N | N | N | N | N | Y | Y | Y | N | (?) | (?) |
| General | Y | Y | Y | N | N | N | N | N | N | N | N |
| Negative | N | N | N | N | N | Y | Y | Y | N | N | N |
| Conditional | N | N | N | N | N | N | N | Y | N | N | N |
| Subject-indexing | N | Y | Y | N | N | Y | Y | Y | Y | Y | Y |
| Indexing reduced | - | N | N | - | - | Y | N | Y | Y | Y | N |
| SR-marking | N | N | N | N | N | (Y) | (Y) | N | (Y) | (Y) | N |

*As the description of Afar are irreconcilable, the information is here based on Hassan Kamil (2015).

⁺The DS anteriority converb of Hadiyya has a different morphological makeup and may be counted as a separate converb type.

(Y) = true for certain converbs, (?) = information inconclusive

Central Cushitic has the lowest number of converbs whereas HEC languages show the most elaborate systems, with Libido being the most diverse. If a language has more than one converb, it has a dedicated simultaneity converb. If a language has only a single converb, it can either be a general converb not expressing any specific adverbial relation or an anteriority converb, which is predominately used to express sequences of events, but also often permits other interpretations. The distinction between general and anteriority converbs in languages that have only a single converb paradigm may well turn out to be unnecessary once we learn more details about the use of these converbs in little known languages like, e.g., Burji. Only Beja and Afar have a dedicated manner converb, whereas other languages either employ the anteriority or the simultaneity converb to express a manner relation. Purpose converbs are typical of HEC. Conditional converbs seem to be attested only in Libido (HEC).

All languages with a dedicated negative converb – alongside several affirmative converbs – are found in the HEC branch. Irrespective of whether a language actually has a dedicated negative converb, converb clauses can often be negated individually. There are no systematic cross-Cushitic studies on whether (or when) the negation of the final clause has scope over converb clauses. In Beja, negation in the final clause does not take converb clauses under its scope (see section 20.2.1). In Kambaata, however, converb clauses may (56) or may not (57) be interpreted as negative when final clause is negated; the conditioning factors are yet unknown.

(56) *lám-it* *am-á* *óos-ut* *iill-ít*
two-F.NOM mother-F.GEN children-F.NOM reach-3F.ANT.CONVB

sunq-aqq-an-táa-ba'a

kiss-MID-PASS-3F.IMPERV-NEG

'The two siblings do not meet (and) do not kiss each other.'

(57) *isu-sí-i* *aaqq-ít* *isooní-i* *duub-b-im-bá'a*
3M.ACC-DEF-ADD take-3F.ANT.CONVB 3M.LOC-ADD be.satisfied-3F-NIPFV-NEG

'She too him, too, (and/but) wasn't satisfied with them either.'

Half of the languages that have subject-indexing converbs employ a reduced indexing system on converbs, if compared to main verb forms in the same language. The other half of the languages have the same number of distinctions in converbal and other verbal paradigms. Information about object marking has not been included in Table 11, as most languages of our sample do not mark objects on verbs at all and, consequently, not on converbs either. Kambaata and Sidaama have bound object markers on the verb; however, they are only found on certain converb types, namely DS-converbs and, in Kambaata, on negative and purpose converbs. Beja has enclitic object pronouns on finite verbs, but object indexing on the manner converb only.

Switch-reference marking is restricted to HEC and comes in two shapes. On the one hand, there are converb types of which the unmarked form is used in SS contexts whereas a DS-marked form occurs discontinuous subjects; see, e.g., the anteriority and simultaneity converbs in Kambaata. On the other hand, converbs may be double-marked, with both a marked SS form and a marked DS form; this is the case for all purpose converbs and for the simultaneity converbs in Sidaama and Gedeo. Not all converb types in a language participate in the switch-reference marking system. Negative converbs are generally insensitive to subject (dis-)continuity. In Hadiyya, also the simultaneity converb can occur both in SS and DS contexts. All languages that have switch-reference sensitive converbs index the subject on SS as well as on DS converbs.

To the best of our knowledge, the diachronic development of Cushitic converb marking as so far not been studied. At the current state of research, the following preliminary observations are possible:

Not surprisingly, the formal links between the converb markers in the fairly closely related HEC languages are most apparent. Apart from Hadiyya, which has a very unusual converb system from a HEC perspective, HEC languages have converbs that are marked by subject indexes (often from a reduced set) plus a converb marker. The anteriority converbs in HEC (apart from Hadiyya) are, at most, marked by a short front vowel *e* or *i*, which gets devoiced or entirely dropped in some languages. Simultaneity converb markers in HEC (apart from Hadiyya) are characterized by an *a*-vowel; Burji does, as far as we know, have no simultaneity converb.

The purposive converb markers for different subject contexts, *-ona* (DS) in Hadiyya and Libido, and both purposive converb markers in Kambaata, *'un(-)ta* (DS) and *-ó(-)ta* of

Kambaata¹⁶ are cognate and related to the jussive morphology in each of the languages. It is still unclear how the SS marker *-eena* of Hadiyya and Libido fits into the picture. Once more information on Gedeo and Burji purposive verbs becomes available, we might be able to reconstruct a shared HEC form.

The negative converb markers in Hadiyya, Libido and Kambaata are obviously cognates and have the form *-o(o)ʔnV* or *-uʔnV* (Treis 2012b: 44). It cannot be ruled out that the negative converb suffix of Xamtanga, *-ink'ä*, is also cognate, but we have no evidence to substantiate this hypothesis.

The development of switch-reference marking on anteriority and simultaneity converbs in HEC is likely to be attributable to contact with neighbouring Omotic languages and rather a case of pattern (but not matter) borrowing (Treis 2012a).

It is not immediately apparent how the converb morphology of HEC relates to that of Beja, Central Cushitic and Lowland East Cushitic – here a thorough comparison and reconstruction of the verbal morphology would be required. No hypothetical form-meaning correspondences between the actual HEC converb markers and that in other languages can be proposed; even though various *a-* and *e-*-based suffixes are also found elsewhere, any hypotheses about possible links would be unsubstantiated.

Due to the heterogeneity of the data, it is impossible to make any generalizing quantitative statements about the length of clause chains across the Cushitic languages; only some additional comments can here be provided. Afar, with a series of five manner converbs, and Beja and Awngi, with a series of five anterior converbs, have the longest chains observed. It is also the anterior converb that occurs in the longest chains in Kambaata, Hadiyya and Sidaama with four in a row, while other converb types occur in shorter chains. As regards the remaining languages of our study, only shorter sequences are attested in the examples of the available grammars; an evaluation of the length of Libido clause chains would require a manual count of Crass's (n.d.) extensive text collection. It should be noted in addition that (at least some, possibly all) Cushitic languages allow sequences of different converb types, as e.g. simultaneity and manner in Afar (25), anteriority and purpose in Libido (43), anterior and general in Beja (14), or simultaneity, anterior and general in the following Beja example.

- (58) *gad-e:* *hagit-ti:t* *w=ja:s* *qa:b-e:ti*
 stop-SIM.CONVB wait-ANT.CONVB DEF.SG.M=dog run-GENL.CONVB
jʔ-i
 come-AOR.3SG
 'While it stopped, it waited and the dog came running.'
 (BEJ_MV_NARR_50_fox_hunt_017-019)

In spite of those limitations, the observed data seems to be indicative that the maximum clause chain length in Cushitic is by far smaller than that found, for instance, in Papuan languages; see Nungon for which chains up to 22 clauses are reported in Sarvasy (2021). The average chain length (including the final clause) in Cushitic does certainly not go beyond three or four.

While we have already briefly addressed ways of combining clauses that are different from converb constructions, it remains to be stated that Cushitic languages also have the possibility to coordinate fully finite independent clauses, which appears not to be frequent, though. Darmon (2015: 304) reports about Xamtanga that main clauses are coordinated with an enclitic *=m* when two clauses do not share the same subject, a general converb is used in the first clause. In Beja, the use of the coordinating enclitic *=t* is actually far less used than the anteriority converb, with only 244 tokens as opposed to 443 in the Beja sample.

¹⁶ Diachronically, the additional *-ta*-element in Kambaata goes back to a non-nominative demonstrative.

20.4. Other uses of converbs

This section discusses the other uses of converbs based on the available literature, i.e. in complex predicates (§20.4.1), as a complementation strategy (§20.4.2), in independent clauses (§20.4.3) and in bridging linkage (20.4.4). The last sub-section addresses lexicalization targets of converbs (§20.4.5). This overview may be incomplete as not all descriptions mention such uses.

20.4.1 Converbs in complex predicates

In the literature on Cushitic languages, we find ample evidence of converbs being used in complex predicates, both synchronically (the perspective we adopt) and diachronically, involving processes of grammaticalization (for a Cushitic overview, see Vanhove 2020). In the history of Highland East Cushitic, combinations of a converb and a copula or an existential verb have fused into morphologically complex verb forms (Tosco 1996). Only selected examples of converbs in complex predicates can be presented here.

The progressive aspect is in many languages expressed by a simultaneity converb plus an existential verb or copula, e.g. in Oromo (Banti 2010: 38), Afar (Hassan Kamil 2015: 319f.), Gedeo (Gasparini 1994: 62) and Kambaata (Treis 2022b: §5). Sidaama (Kawachi 2007: 288, 773) progressive constructions consist of a simultaneity converb (for action verbs), as in (59), or an anteriority converb (for change-of-state verbs) plus a perfect existential verb.

- (59) *wošičč-u nafaro-ho dut-anni no*
 dog-M.NOM compound-M.LOC bark-[3M.]SIM.CONVB exist.3.PER
 ‘The dog is barking in the compound.’ (Kawachi 2007: 363)

Various descriptions mention that complex predicates with a converb and a ‘be verb’ or copula encode a (past) perfect; see Perrett (2000: 145) and Crass (n.d.) on Hadiyya and Libido anteriority converbs as well as Vanhove (2016: 138f.) on the Beja manner converb.¹⁷ A complex “generic” perfect predicate with the Xamtanga converb is illustrated in (60).

- (60) *Addis Abäba=m säraš-in ik^w-in-u-n*
 Addis Abäba=M work-1PL[.CONVB] COP-1PL-PERV-1PL
 ‘We have worked in Addis Abäba as well.’ (Darmon 2015: 211)

The “experiential” perfect (‘have (n)ever VERBED’) is often expressed by a complex predicate consisting of a anteriority or general converb plus a verb form of ‘know’, e.g. in K’abeena (61), Libido and Oromo (Crass & Meyer 2008: 244), Sidaama (Kawachi 2007: 218), Kambaata (Treis 2021: 327–331) and Xamtanga (Darmon 2015: 212).

- (61) *’ameerikaani ’oroo-teeni kas-seenta-’i?*
 America.LOC go-2PL.ANT.CONVB know-2PL.PERV-Q
 ‘Have you ever been to America?’ (Crass & Meyer 2008: 244)

Periphrastic future predicates may also contain converbs. In Beja (Vanhove 2016: 140f.), the manner converb combines with ‘say’ to express a volitional future. In Kambaata, the intentional/imminent future is a complex verb form made up of a SS purpose converb plus the identificational copula -*V_t* (Treis 2011).

In Beja, the combination of a general converb, which is especially frequent in complex predicates (107 out of the 158 total occurrences of this converb in the language sample), with the verb *bʔ* ‘to lie down’ (62) expresses terminativity (Vanhove 2016: 143) and represents a typological *rarum*.

- (62) *dirar-ti bʔ-e:n=e:b o:=do:r /*
 dine\MID-GENL.CONVB lie.down-IMPERV.3PL=REL.SG.M DEF.SG.M.ACC=time .

¹⁷ The manner converb is predominately used in complex predicates: 307 out of 497 occurrences.

‘When they finish dining...’ (BEJ_MV_NARR_34_Donkeyman_49)

The aspectual, modal and intersubjective functions of certain complex predicates consisting of a converb and a main verb from a restricted set (e.g. ‘get up’, ‘take’, ‘give up’, ‘refuse’) are hard to describe and still poorly investigated.¹⁸ One such complex predicate is the Xamtanga construction formed with a converb and ‘leave’ (63), which expresses that a participant or the speaker is positively or negatively affected by the event (Darmon 2015: 196–200).

- (63) *ifära-y-z-u* *s'ibk'ä-d* *k'äb* *bät'-u-n*
 child-DEF-GEN-HEAD.SG hair-DEF cut[.1SG.CONVB] leave-PERV-1SG
 ‘I cut the child’s hair (to make him happy/against his will).’ (lit. I cut and left the child’s hair.) (Darmon 2015: 199)

None of the complex predicate construction mentioned in this section are expandable into bona fide two-clause chains, and no constituents, e.g. noun phrases, can be inserted between the converb and the following verb or copula.

20.4.2 Converbs as complementation strategy

In many Cushitic languages, converbs are used in clauses that are subordinate to certain complement-taking verbs (e.g. perception verbs). It is common to find examples in which the witnessed event is expressed in a simultaneity converb clause (marked for DS if the language marks switch-reference); see (64) for Sidaama, Treis (2009: 320; 2012a: 91) for Kambaata, Banti (2010: 56) for northern Saho, and the Beja example in (65). In Awngi, the converb is found in clauses subordinate to ‘find’ and ‘finish’ (Hetzron 1969: 15).

- (64) *hinč'ilallo* *hiikk'-an-ta=na* *isi* *la'-i*
 mirror.F.NOM break-PASS-3F.SG.SIM.CONVB=and 3M.NOM see-3M.PERV
 ‘As the mirror got broken, he saw it.’ (Kawachi 2007: 415), or: ‘He saw that the mirror got broken.’

- (65) *hi:re:r-e:* *rh-an*
 walk-SIM.CONVB see-PERV.1SG
 ‘I saw her walking.’ (BEJ_MV_NARR_01_shelter_115)

In Hadiyya, purpose converbs are attested in complement clauses of desiderative, manipulative and modal verbs (Perrett 2000: 209–213) (66), which is also reported for Kambaata (Treis 2010).

- (66) [*ee* *manc* *leh-u-kk-isa* *mann* *hund-ina-m*
 DEM man die-PERV-3M-SIML men all-DAT-CONJV
arad-ona] *asse'-akk-am-o*
 announce-[3M.]PURP.CONVB.DS send-IMPERS-IMPERV-DEC
 ‘They (impersonal) send someone to announce to everyone that that man (has) died.’ (Perrett 2000: 79)

20.4.3 Independent use of converbs

Some descriptions state explicitly that converbs never constitute an utterance of their own, cf. e.g. Darmon (2015: 266) on Xamtanga, and from our own fieldwork we know that Beja converbs have no independent uses. In contrast, there is evidence that at least the languages of the Kambaata group permit converbs as the final verb in questions. The anteriority converb is used in questions about a completed event (perfective) – see (67) from Kambaata – and the simultaneity converb in questions about ongoing or future events (imperfective) – see (68)

¹⁸ But see (67) for a Kambaata example of converb + ‘refuse’ and Vanhove (2017: 144–148) for Beja.

from K’abeena. Unlike in its “regular” use, converbs in questions permit the suffixation of pronominal objects in K’abeena and Kambaata.

- (67) *Marbaat-á-s m-íi xa’-ís-s*
 lamp-M.ACC-DEF what-M.DAT go.out-CAUS1-2SG.ANT.CONVB
kán-t-i-la?
 refuse-2SG-ANT.CONVB-MIT
 ‘Why have you put out the lamp?’ (Saint-Exupéry 2018: 49)

- (68) *ma’assⁱ ’ossut^a kan-ta<’>n<e>* (...) (...)
 why sleep.F.ACC prevent-2SG.SIM.CONVB<1SG.OBJ>
 ‘Why do you prevent me from sleeping?’ (...) (Crass 2005: 286, translation from German)

In addition, Kambaata uses anteriority converbs as final verbs in congratulations (69).

- (69) *Éman fá’-i*
 congratulations.INTERJ be.saved-[2SG.]ANT.CONVB
 ‘Congratulations, you were spared!’ (Possible context: Addressee has escaped an accident.)

20.4.4 Use of converbs in bridging linkage

In Beja, bridging linkage is mainly done with temporal clauses (Vanhove 2017: 232f.). In the majority of cases, only the predicate of the previous clause is repeated, but it is also possible (and not rare) to repeat the whole preceding clause with its main, or even peripheral arguments. As regards converbs, only the general converb can be used in bridging contexts, and this only very occasionally. In the 2.5 hours of data, there are only two occurrences (70).

- (70) *i-nd?i:r e:n // 1151 d?ar-ti*
 3SG.M-marry\IMPERV say\PERV.3PL . marry-GENL.CONVB
fir?a-ti:t ha:j gi:g-i:n
 go.out-ANT.CONVB COMMIT leave-AOR.3PL
 ‘He marries her, they said. He married her, and after they went out, they left with her.’
 (BEJ_MV_NARR_36_HUNCHBACK_515-517)

Xamtanga also makes frequent use of its general converb as a bridging linkage device. The recapitulating clause is usually followed by the coordinator *ya* (Darmon 2015: 268), which links it to the following one. Ex. (71) illustrates that not only the verb itself but also its arguments can be repeated.

- (71) *k’uršan-dyän-t t’ik’l-iŋ mikän-i-z yiw-iŋ-äk^w*
 money-DEF-ACC collect-3PL[.CONVB] church-DEF-DAT give-3pl-IMPERV
mikän-i-z yiw-iŋ ya ...
 church-DEF-DAT give-3pl[.CONVB] CONN
 ‘They collect the money and they give it to the church. They give it to the church and ...’ (Darmon 2015: 268)

In Kambaata, relative-based temporal adverbial clauses with *zakkün* ‘after’ rather than converb clauses are used for bridging linkage. In descriptions of other languages, bridging linkage is not addressed.

20.4.5 Lexicalized converbs

Through frequent use, converbs may turn into morphologically frozen forms. In Kambaata, the anteriority converb of ‘not do, not be’ serves as disjunctive ‘or’ (72).

- (72) (...) *mán-chu-u-s shuma’-anó j-áata*
 people-SGV-M.NOM-DEF pee-3M.IMPERV.REL time-F.ACC
hóogg wól-e gajaajj-óon mal-á-s

not.do.[3M.]ANT.CONVB other-F.OBL reason-F.ICP pustule-F.ACC-DEF

úll (...)

touch.[3M.]ANT.CONVB

‘(...) when the person pees or when he touches the pustules for another reason.’ (Kambaata Education Bureau 1989: 6.133)

The contrastive sentence connective *ihukkaarem* in Hadiyya goes back to a DS converb form of ‘be(come)’ (Perrett 2000: 150) and seems literally translatable as ‘it being (so)’.

In Beja, the general converb of the verb ‘go’, *be:ti*, is lexicalized as a directional postposition ‘towards’ (73). The adverbs *ʔasti* ‘up’ and *nʔati* ‘down’ originate from general converb forms of the obsolete position verbs *ʔas* ‘be up’ and *nʔa* ‘be down’ (74).

(73) *o:=rba* *be:ti* *hi:re:r-i* *a-ni* /
 DEF.SG.M.ACC=mountain **towards** walk-FUT 1SG-say\PERV
 ‘I’ll be walking towards the hill.’ (BEJ_MV_NARR_05_eritrea_195)

(74) *ʔas-ti* *re:w-a=t* *aka-je:* /
 be.up-GENL.CONVB climb-CONVB.MNR=INDF.F become-SIM.CONVB .
 ‘while I was climbing up...’ (BEJ_MV_NARR_49_well_039)

The general converb of ‘let’, *ʔif:ti*, is lexicalized as a preverbal privative particle ‘without’.

(75) *ʔif-ti* *gi:g-i:ni* //
 let-GENL.CONVB leave-IMPERV.3SG.M .
 ‘He leaves without them.’ (BEJ_MV_NARR_18_Adam_devil_289)

20.5. Conclusion

Converbs in the Cushitic languages range on a morphological cline of finiteness from strictly nonfinite forms to forms restricted in finiteness. The North Cushitic and Lowland East-Cushitic languages all have nonfinite converbs, while Central and Highland East-Cushitic converbs also have subject indexes, in more or less elaborate paradigms. Some Cushitic converbs are semantically specialized (with possible marginal polysemy), while others such as the “general” and “anteriority” converbs do not necessarily express a specific adverbial relation (cf. Coupe 2006: 149) and could be labeled “contextual” converbs (see Nedjalkov 1995: 106–110). Cushitic converb clauses are all used in dependent clauses, but for some languages it is difficult to decide whether they are cosubordinate (as in clause-chaining languages) or rather subordinate (embedded). Using the subordination criteria proposed in Haspelmath (1995: 12–17), i.e. position inside the superordinate clause, variable position with respect to the superordinate clause, restrictiveness and focusability, and possibility of extraction, Kambaata converbal clauses (and possibly other HEC languages) qualify as embedded. Certain converbs in other Cushitic languages, see most Beja converbs and the LEC converbs, most probably conflate the adverbial modification and narrative chaining functions, very much like those found in South and Central Asia (Bickel 1998: 394f.; Johanson 1995: 321f.), while other converbs are strictly clause-chaining devices, such as the anteriority converb of Beja and Awngi, the general converb of Xamtanga, and therefore functionally equivalent to medial verbs in Papuan languages.

Noteworthy, but certainly not unique in languages with converbs, is the ubiquitous grammaticalization of converbs into complex predicates for the expression of various TAM values. Conversely, Cushitic converbs seem to be rarely used beyond the expression of interclausal relations. Bridging linkage with converbs seems limited, if at all attested in some (most?) languages.

More research is definitely needed to explore the extended uses of converbs. We also lack quantitative studies of the maximal and average clause chain length. The

contradistinction between converb constructions and other coordinating and subordinating constructions are still to be examined with a pragmatic approach. Last but not least, the historical development of converbs is an open research question.

Abbreviations

| | |
|--------|-----------------------------------|
| ADJ | adjectival |
| ABL | ablative |
| ACC | accusative |
| ADD | additive |
| ANT | anteriority |
| AOR | aurist |
| APOD | apodosis |
| ASS | assertive |
| BI | breath intake |
| CAUS | causative |
| CC | Central Cushitic |
| COMIT | comitative |
| COND | conditional |
| COORD | coordinative |
| CONVB | converb |
| COP | copula |
| DAT | dative |
| DEC | declarative |
| DEF | definite |
| DEM | demonstrative |
| DEP | dependent |
| DIR | directional |
| DISTR | distributive |
| DS | different subject |
| DUR | durative |
| EMPH | emphasis |
| EP | epenthesis |
| F | feminine |
| FOC | focus |
| FUT | future |
| GEM | gemination |
| GEN | genitive |
| GENL | general |
| GLI | genitive-locative-instrumental |
| HEC | Highland East-Cushitic |
| HYPOTH | hypothetical-conditional |
| ICP | instrumental-comitative-perlative |
| IMP | imperative |
| IMPER | imperfect |
| IMPERS | impersonal |
| IMPERV | imperfective |
| INFIN | infinitive |
| INST | instrumental |
| INTS | intensive |
| INTERJ | interjection |
| LEC | Lowland East-Cushitic |
| LNK | linker |
| LOC | locative |
| M | masculine |

| | |
|--------|---|
| MNR | manner |
| MEDP | medio-passive |
| MID | middle |
| MIT | mitigator |
| MODIF | modifier case |
| N.AC | action noun |
| NC | North-Cushitic |
| NEG | negation |
| NIPFV | non-imperfective |
| NOMZ | nominalizer |
| NOM | nominative |
| OBJ | object |
| OBL | oblique |
| PAL | palatalization |
| PASS | passive |
| PAST | past |
| PER | perfect |
| PERV | perfective |
| PL | plural |
| PLAC | pluractional |
| POSS | possessive |
| POSTP | postposition |
| PRAG | pragmatically determined morpheme, still to be analyzed |
| PROG | progressive |
| PROHIB | prohibitive |
| PROP | proprietary |
| PURP | purpose/purposive |
| Q | question |
| Q.PLR | polar question |
| REDUP | reduplication |
| REL | relative |
| SG | singular |
| SGV | singulative |
| SIM | simultaneity |
| SIML | simulative |
| SS | same subject |
| TRN | transitivizer |
| VN | verbal noun |

References

- Alemu Banta Atara. 2016. *Kookaata: Kambaatissa-Amaarsa-Ingiliizissa laaga doonnuta [Kambaata-Amharic-English dictionary]*. Addis Ababa: Berhanena Selam Printing.
- Auwers, Johan van der. 1998. Defining converbs. In Leonid Kulikov & Heinz Vater (eds.), *Typology of verbal categories: papers presented to Vladimir Nedjalkov on the occasion of his 70th birthday*, 273–282. Tübingen: Max Niemeyer.
- Azeb Amha & Gerrit J. Dimmendaal. 2006. Converbs in an African perspective. In Felix K. Ameka, Alan Dench & Nicholas Evans (eds.), *Catching language: The standing challenge of grammar writing*, 393–440. Berlin: Mouton de Gruyter.
- Banti, Giorgio. 2010. Remarks on the typology of converbs and their functional equivalents in East Cushitic. *Frankfurter Afrikanistische Arbeitsblätter* 19 (2007): 31-80 (Special issue Converbs, medial verbs, clause chaining and related issues, ed. by Sascha Voellmin, Azeb Amha, Christian J. Rapold and Silvia Zaugg-Coretti).
- Bickel, Balthasar. 1998. Review article: Converbs in cross-linguistic perspective. *Linguistic Typology* 2(3). 381–397.

- Chafe, Wallace. 1975. *The pear film*. Berkeley, CA: University of California at Berkeley.
<http://www.linguistics.ucsb.edu/faculty/chafe/pearfilm.htm>.
- Coupe, A. R. 2006. Converbs. In Keith Brown (ed.), *Encyclopedia of languages and linguistics*, 145–152. 2nd edn. Oxford: Elsevier.
- Crass, Joachim. 2005. *Das K'abeena. Deskriptive Grammatik einer hochlandostkuschitischen Sprache* (Cushitic Language Studies 23). Cologne: Rüdiger Köppe.
- Crass, Joachim. n.d. [Collection of transcribed, glossed and translated Libido texts].
- Crass, Joachim & Ronny Meyer. 2008. Ethiopia. In Bernd Heine & Derek Nurse (eds.), *A linguistic geography of Africa*, 228–249. Cambridge: Cambridge University Press.
- Darmon, Chloé. 2015. *A morphosyntactic description of Xamtanga, an Agaw (Central Cushitic) language of the northern Ethiopian highlands*. Lyon: Université Lumière Lyon 2 (PhD dissertation).
- Ebert, Karen H. 2008. Forms and functions of converbs. In Karen H. Ebert, Johanna Mattissen & Rafael Suter (eds.), *From Siberia to Ethiopia. Converbs from a cross-linguistic perspective*, 7–33. Zürich: Universität Zürich, Seminar für Allgemeine Sprachwissenschaft.
- Ebert, Karen H., Johanna Mattissen & Rafael Suter (eds.). 2008. *From Siberia to Ethiopia: Converbs from a cross-linguistic perspective*. Zürich: Universität Zürich, Seminar für Allgemeine Sprachwissenschaft.
- Eyob Kelemework Wolde. 2015. *A grammar of Gedeo: A Cushitic language of Ethiopia*. Hyderabad: Osmania University (PhD dissertation).
- Gasparini, Armido. 1994. *Grammatica Gede'o*. Trieste: Università di Trieste.
- Haspelmath, Martin. 1995. The converb as a cross-linguistically valid category. In Martin Haspelmath & Ekkehard König (eds.), *Converbs in cross-linguistic perspective: structure and meaning of adverbial verb forms – adverbial participles, gerunds*, 1–55. Berlin: Mouton de Gruyter.
- Hassan Kamil, Mohamed. 2015. *L'afar: Description grammaticale d'une langue couchitique (Djibouti, Érythrée et Éthiopie)*. Paris: Inalco (PhD dissertation).
- Hetzron, Robert. 1969. *The verbal system of Southern Agaw*. Berkeley: University of California Press.
- Johanson, Lars. 1995. On Turkic converb clauses. In Martin Haspelmath & Ekkehard König (eds.), *Converbs in cross-linguistic perspective: Structure and meaning of adverbial verb forms - adverbial participles, gerunds*, 313–347. Berlin: Mouton de Gruyter.
- Kambaata Education Bureau. 1989. *Kambaatissata: Rosaanchi maxaafa [Kambaata language: School book]*. 8 vols. Hawassa: Southern Nations, Nationalities, and Peoples Regional State.
- Kambaata Education Bureau. 1995. *Sayinsa: Rosaanchi maxaafa. Wona kifila [Science. Student textbook. First grade]*. 8 vols. Hawassa: Southern Nations, Nationalities, and Peoples Regional State.
- Kawachi, Kazuhiro. 2007. *A grammar of Sidaama (Sidamo), a Cushitic language of Ethiopia*. Buffalo: State University of New York at Buffalo (PhD dissertation).
- Mous, Maarten. 2012. Cushitic. In Zygmunt Frajzyngier & Erin Shay (eds.), *Afroasiatic languages*, 342–422. Cambridge: Cambridge University Press.
- Myhill, John & Junko Hibiya. 1988. The discourse function of clause-chaining. In John Haiman & Sandra A. Thompson (eds.), *Clause combining in grammar and discourse*, 361–398. Amsterdam: John Benjamins.
- Nedjalkov, Vladimir P. 1995. Some typological parameters of converbs. In Martin Haspelmath & Ekkehard König (eds.), *Converbs in cross-linguistic perspective: Structure and meaning of adverbial verb forms - adverbial participles, gerunds*, 97–136. Berlin: Mouton de Gruyter.
- Noonan, Michael. 1985. Complementation. In Timothy Shopen (ed.), *Language typology and syntactic description*, vol. 2, 42–141. Cambridge: Cambridge University Press.
- Owens, Jonathan. 1985. *A grammar of Harar Oromo (Northeastern Ethiopia)*. Hamburg: Helmut Buske.
- Perrett, Denise Lesley. 2000. *The dynamics of tense construal in Hadiyya*. London: University of London (PhD dissertation).
- Polotsky, Hans Jacob. 1951. *Notes on Gurage grammar*. Jerusalem: The Israel Oriental Society.
- Saint-Exupéry, Antoine de. 2018. *Qakkichchu Laaha [The Little Prince]*. (Trans.) Deginet Wotango Doyiso & Yvonne Treis. Neckarsteinach: Tintenfaß.

- Sarvasy, Hannah S. 2021. Quantifying clause chains in Nungon texts. *Studies in Language*. John Benjamins. <https://doi.org/10.1075/sl.19058.sar>.
- Sasse, Hans-Jürgen. 1981. Die kuschitischen Sprachen. In Bernd Heine, Thilo C. Schadeberg & Ekkehard Wolff (eds.), *Die Sprachen Afrikas*, 187–215. Hamburg: Helmut Buske.
- Schneider-Blum, Gertrud. 2007. *A grammar of Alaaba. A Highland East Cushitic language of Ethiopia*. Cologne: Rüdiger Köppe.
- Sim, Ronald. 1989. *Predicate conjoining in Hadiyya: a head-driven PS grammar*. Edinburgh: University of Edinburgh Unpublished PhD Thesis.
- Tadesse Sibamo Garkebo. 2015. *Documentation and description of Hadiyya (a Highland East Cushitic language of Ethiopia)*. Addis Ababa: University of Addis Ababa (PhD dissertation).
- Tesfaye Baye Assefa. 2015. *A descriptive grammar of Burji*. Addis Ababa: Addis Ababa University (PhD dissertation).
- Tosco, Mauro. 1996. The northern Highland East Cushitic verb in an areal perspective. In Catherine Griefenow-Mewis & Rainer M. Voigt (eds.), *Cushitic and Omotic languages. Proceedings of the Third International Symposium, Berlin, March 17-19, 1994*, 71–99. Cologne: Köppe.
- Tosco, Mauro. 2000. Cushitic overview. *Journal of Ethiopian Studies* 33(2). 87–121.
- Treis, Yvonne. 2008. *A grammar of Kambaata. Part 1: Phonology, morphology, and non-verbal predication*. Cologne: Rüdiger Köppe.
- Treis, Yvonne. 2009. Perception verbs and taste adjectives in Kambaata and beyond. In Anne Storch (ed.), *Perception of the invisible. Religion, historical semantics and the role of perceptive verbs*, 313–346. Cologne: Rüdiger Köppe.
- Treis, Yvonne. 2010. Purpose-encoding strategies in Kambaata. *Afrika und Übersee* 91. 1–38.
- Treis, Yvonne. 2011. Expressing future time reference in Kambaata. *Nordic Journal of African Studies* 20(2). 132–149.
- Treis, Yvonne. 2012a. Switch-reference and Omotic-Cushitic language contact in Southwest Ethiopia. *Journal of Language Contact* 5(1). 80–116.
- Treis, Yvonne. 2012b. Negation in Highland East Cushitic. In Ghil'ad Zuckermann (ed.), *Burning issues in Afro-Asiatic linguistics*, 20–61. Newcastle upon Tyne: Cambridge Scholars Publishing.
- Treis, Yvonne. 2017. Similitive morphemes as purpose clause markers in Ethiopia and beyond. In Yvonne Treis & Martine Vanhove (eds.), *Similitive and equative constructions: A cross-linguistic perspective* (Typological Studies in Language 117), 91–142. Amsterdam: Benjamins.
- Treis, Yvonne. 2021. The expression of phasal polarity in Kambaata (Cushitic). In Raija Kramer (ed.), *The expression of phasal polarity in African languages* (Empirical Approaches to Language Typology 63), 309–332. Berlin: De Gruyter Mouton.
- Treis, Yvonne. 2022a. Negation in Kambaata. In Matti Miestamo & Ljuba Veselinova (eds.), *Negation in the languages of the world*, xxx–xxx. Berlin: Language Science Press.
- Treis, Yvonne. 2022b. The apprehensive in Kambaata (Cushitic): Form, meaning and origin. In Martina Faller, Eva Schultze-Berndt & Marine Vuillemer (eds.), *Apprehensional constructions in a cross-linguistic perspective* (Research on Comparative Grammar), xxx–xxx. Berlin: Language Science Press.
- Vanhove, Martine. 2016. The manner converb in Beja (Cushitic) and its refinitization. In Claudine Chamoreau & Zarina Estrada-Fernández (eds.), *Finiteness and nominalization*, 323–344. Amsterdam: John Benjamins.
- Vanhove, Martine. 2017. *Le bedja*. Leuven: Peeters.
- Vanhove, Martine. 2020. Grammaticalization in Cushitic, with special reference to Beja. In Andrej Malchukov & Walter Bisang (eds.), *Handbook on grammaticalization scenarios: Cross-linguistic variation and universal tendencies*, vol. Vol. 2: Grammaticalization scenarios from Africa, the Americas, and Pacific, 659–694. Berlin: De Gruyter Mouton.
- Wedekind, Klaus. 1990. *Generating narratives: Interrelations of knowledge, text variants and Cushitic focus strategies*. Berlin: Mouton de Gruyter.