

Switch-reference and Omotic-Cushitic language contact in Southwest Ethiopia

Yvonne Treis

▶ **To cite this version:**

Yvonne Treis. Switch-reference and Omotic-Cushitic language contact in Southwest Ethiopia. Journal of Language Contact, 2012, 5 (1), pp.80-116. 10.1163/187740912X624469 . hal-00713224

HAL Id: hal-00713224
https://hal.science/hal-00713224

Submitted on 29 Jun 2012

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.

Switch-reference and Omotic-Cushitic Language Contact in Southwest Ethiopia

Yvonne Treis

LLACAN (CNRS, INALCO), Villejuif, France

Abstract

Africa has up until now been considered a continent where switch-reference systems are extremely rare. This study shows that there is a confined area in the South of Ethiopia where many Omotic languages and a few Cushitic languages have fully grammaticalised switch-reference systems on dependent (co-)subordinate non-final verbs, so-called converbs. The paper describes in detail the switch-reference system of Kambaata (Cushitic) and gives an overview of the distribution of switch-reference systems in Ethiopia in general. It is argued that switch-reference marking in Cushitic languages is the result of contact with neighbouring Omotic languages.

Keywords

Switch-reference, converb, Cushitic, Omotic, borrowing, contact-induced grammaticalisation

1. Introduction

Ethiopia is the home of languages that belong to three families of the Afroasiatic phylum, i.e. Semitic, Cushitic and Omotic languages. Along the Western border of Ethiopia, Nilo-Saharan languages of the Eastern Sudanic and Koman branches are spoken. The geographical area that this article is concerned with, i.e. the South-western corner of Ethiopia, is the linguistically most heterogeneous area of the country, where the majority of Omotic languages, the Surmic (East Sudanic) languages and most small Cushitic and Semitic languages are spoken.

Language contact research in Ethiopia has a long tradition and may be said to have started with Leslau's work of 1945. Ferguson's seminal paper of 1976 set the stage for the study of the Ethiopian Language Area. (For a succinct summary of the research history, see Crass, 2006). Especially the last decade has seen a growing interest in the study of areal phenomena in Ethiopia (e.g. Crass and Bisang, 2004; Crass and Meyer, 2008; Crass and Meyer, 2007, 2009 and the papers published therein; Tosco, 2000b, 2008; Zaborski, 2001). Much of the language contact research, however, has concentrated on the discussion of the boundaries of the Ethiopian (or Ethio-Eritrean) sprachbund and the features that can (or cannot) be employed to define it and on determining the influence of Cushitic languages on Ethiopian Semitic languages of the area. Due to our still patchy (but steadily growing) knowledge of Omotic languages, we have little substantial knowledge so far about the impact of Omotic languages on their neighbours and about the contribution Omotic languages have made to the development of the Ethiopian convergence area or micro-areas of the convergence area.[1]

In contrast to earlier works on language contact in Ethiopia, the present article elaborates on a case of Omotic influence on the grammar of Cushitic languages. It will be argued that the switch-reference systems found in four Highland East Cushitic languages in Southwest Ethiopia have been induced by neighbouring North Omotic languages.

The structure of the present article is as follows. In §2, I will give a brief introduction into the concept of switch-reference and the distribution of switch-reference in Africa. §3 is a detailed case study of the hitherto undescribed switch-reference system of Kambaata (Cushitic). In §4, I will provide a survey of switch-reference systems in Cushitic languages.

[1] Little attention has also been paid to the influence on and by Nilo-Saharan languages (but see Bender, 2003; Tosco, 2000b, 2008).

§5 will draw together information on switch-reference marking in Omotic languages. §6 will summarise the distribution of switch-reference in Ethiopia and discuss possible historical scenarios that could account for the development of switch-reference in Cushitic. §7 concludes the paper.

2. Switch-reference

2.1. Switch-reference as a grammatical category

Languages make use of different grammatical devices to keep track of entities that have been introduced into the discourse (cf. Comrie, 1998). With respect to African languages, logophoricity is the most extensively discussed reference-tracking device operating across clauses (e.g. Hagège, 1974; Curnow, 2002; Güldemann, 2003, to name but a few works from the extensive literature). Logophoricity is a coreference-encoding strategy by which a special pronoun (the logophoric pronoun) or, less commonly, a particular verb form is used in a subordinate clause that is dependent on a matrix verb of speech or thought in order to signal that the subject of the matrix clause and the subject (or another argument) of the dependent clause are coreferential.

Switch-reference (henceforth abbreviated SR) is another cross-linguistically common device used to track referents across clauses. Verbal affixes on dependent verbs indicate that arguments (usually the subjects) of two subsequent clauses are (non-)coreferential. A language with a grammaticalised SR system "provides its speakers with a set of verb markers from which they must choose, to indicate whether or not the events share the same major protagonist" (Stirling, 2006: 316). SR systems are well known from Papuan, Australian and American languages and there is a large body of literature dealing with SR systems in individual languages of these areas (see e.g. the overview articles by Austin (1981) and Roberts (1997)). A simple example of SR marking in the Papuan language Usan is given in (1).

(1) (a) *ye* *nam* *su-ab* *isomei*
I tree cut-SS I_went_down
'I cut the tree and went down.'

(b) *ye* *nam* *su-ine* *isorei*
I tree cut-DS it_went_down
'I cut the tree down.' (Haiman and Munro 1983b: xi; Stirling 1993: 14)

Usan is a clause-chaining language which marks on medial verbs whether the next adjacent verb has the same (1a) or a different (1b) subject referent. In many languages, both subject continuity and subject discontinuity are marked overtly as in Usan. In other languages, either subject continuity or subject discontinuity is left unmarked; cross-linguistically, the opposition between unmarked SS and marked DS tends to be more common (Stirling 1993: 30f).

2.2. Switch-reference in Africa

African languages have so far only played a marginal role in the typological literature on SR (Haiman and Munro, 1983a; Stirling, 1993). This is because SR marking systems are in fact uncommon on the continent. Moreover, most African examples referred to in the literature are non-canonical or disputable cases of SR. The Grassland Bantu languages Noni and Bafut, the Cross River language Gokana and the Nilotic language Lango are African languages that

are mentioned in works dealing with SR cross-linguistically (see e.g. Stirling (1993: 51f); Stirling (2006: 317)). However, Noni and Bafut are non-canonical (Wiesemann, 1982), because, unlike Usan in (1), they do not employ *verbal* morphology but particles or pronouns to encode the referential (non-)identity of subjects. Gokana (Hyman and Comrie, 1981) marks coreference of arguments only in clauses after *verbs of speech and thought* or after a clause-subordinating morpheme that has grammaticalised out of the verb 'say'; Gokana is thus best analysed as marking logophoricity, even though it marks coreference by verbal morphology. Lango (Noonan, 1992: 199f, 225f, 240f) employs a particular subject prefix on verbs to encode logophoricity and not, as mentioned in the literature, switch-reference.[2]

Admittedly, the boundaries between logophoricity and SR are sometimes hard to draw and it is imaginable that logophoric pronouns or logophoric verbal morphology develop into SR markers if they come to be used not only in clauses dependent on verbs of speech or thought but any kind of verb – a development which can be seen in its early stages in Gokana (Hyman and Comrie, 1981) and in an advanced stage in the Central Sudanic language Ngiti (Kutsch-Lojenga, 1994: 208-16); note that in these cases subject *continuity* becomes the marked form in a SR system, as logophoricity is a *co*reference-encoding device.

African languages like Bafut, Noni and Ngiti can be considered SR languages if the definition of a SR system does not make reference to the morphological status of the marking device and thus allows the inclusion of non-canonical languages that mark SR pronominally (rather than by verbal morphology). In the following, however, we will only be concerned with canonical languages that have verbal affixes on dependent verbs indicating obligatorily that subjects of adjacent clauses are the same or different (Haiman, 1983: 105; Stirling, 2006).

Ronald Sim's unpublished PhD thesis (1989) on predicate conjoining in Hadiyya, a Cushitic language, was the first work to draw attention to a canonical SR system in an African language. Unfortunately, his work has only became generally available in 2011 when it was digitised by the British Library; it is thus mentioned only in the bibliography of the most comprehensive typological work on SR, Stirling (1993). Concluding his analysis of the Hadiyya SR system, Sim expressed the conjecture that the Ethiopic area "may well provide other African exemplars of the [SR] device" (1989: 421). Sim's assumption proved true in the coming years and SR marking on converbs is mentioned in Breeze's grammatical sketch of Bench (1990: 28, 32) and in an unpublished PhD thesis by Nicholas Taylor (1994: 87-90, 248-51) on Gamo, an Omotic language of the Central Ometo dialect cluster. In Azeb Amha's grammar of Maale (South Ometo), SR marking is also dealt with (2001: 196-99). The author claims that SR marking is "widely attested in Omotic and in Cushitic languages" (2001: 196) and makes reference to works on Wolaitta, Bench and Zayse,[3] which are all Omotic, while it remains unsaid which Cushitic languages apart from Hadiyya could have a SR system.

This paper is intended, among others, to show how widespread SR marking actually is in Ethiopia. In the course of the article the main reason why African languages have not figured prominently in typological studies on SR will become clear: African languages that have canonical SR systems are among the lesser known languages on the continent and most descriptions that include information on SR have only occurred recently. Therefore, it is time to take a fresh look at what African languages can contribute to the discussion on SR in general and their diachrony in particular. The following discussion will draw on publications and theses, most of which have only become available in the last few years, and on my own field notes. I will show that there is a confined geographical area in the Southwest of Ethiopia in which several languages have grammaticalised SR morphemes on converbs and I will

[2] I am grateful to Mechthild Reh (2011 p.c.) for pointing out the Lango and Ngiti grammars to me.

[3] Azeb (2001: 196) refers to Hayward's (1990a) sketch of Zayse but I am unable to find therein any statement about or example of SR marking.

argue that the distribution of SR systems can partly be attributed to language contact between North Omotic and Highland East Cushitic languages. Languages with switch-reference systems belong to only two families of the Afroasiatic language phylum, viz. Omotic and Cushitic.

The case study in the following section will give a detailed account of the SR system of the Cushitic language Kambaata and set the scene for the survey of SR in Ethiopia in §4-5.

3. Case study: Switch-reference in Kambaata

Kambaata belongs to the Highland East Cushitic language branch. The immediate neighbours of the Kambaata are speakers of other Highland East Cushitic languages (Hadiyya, Alaaba) and Ometo languages of the Omotic family (Wolaitta, Dawro). Kambaata is an exclusively suffixing language; it is both head- and dependent marking with an elaborate case system and subject agreement on verbs. Arguments of clauses can be freely omitted if they are retrievable from the context. Like most languages with SR systems, Kambaata is a consistently head-final language; hence dependent clauses precede independent main clauses. The main verb (or copula) is the last constituent in a sentence. Kambaata distinguishes between fully finite main clause verbs and several types of dependent clause verbs. These are, among others, relative verbs, which serve as the heads of relative clauses and various types of adverbial and complement clauses, and converbs (Table 1).

[Insert Table 1 here]

Main verbs have the most elaborate inflectional potential. Seven subject agreement morphemes, depending on person, number, gender and honorificity, are distinguished. Main verbs are further marked for four aspectual and three modal categories. Relative verbs have a slightly reduced inflectional potential, because they cannot be marked independently for mood. Converbs are even further reduced in finiteness, though they are not entirely non-finite. Their morphological makeup is less complex than that of main verbs and relative verbs: regarding subject agreement, certain distinctions are neutralised (1s = 3m, 2s = 3f/3p), aspectual distinctions are reduced to two (perfective vs. imperfective) and mood is not marked. Converbs are used sentence-medially and require a final main verb or a final copula on which they are dependent.[4] They are used in adverbial function, in clause chains or in verbal compounds.[5] It is on *converbs* that SR is marked in Kambaata (and other Ethiopian languages). But before turning to a discussion of the morphology and use of SR morphemes, some general information on converbs is required.

Kambaata sentences are often paragraph-like units with several converbs and one single sentence-final main verb. Ex. (2) contains four converbs (underlined) and one sentence-final main verb.[6]

(2) *ísi-n* *bu'll-á* <u>*bibbiz-éen*</u> <u>*memees-éen*</u>

[4] Exception: Converbs can be used as final verbs in questions.

[5] For a comprehensive account of converbs in Northeast Africa see Azeb and Dimmendaal (2006a) and Ebert et al. (2008).

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

3mNOM-n enset_flour-mACC crumble-3honPCO sift-3honPCO
[…] *haankur-éen* *wo'-á* *caccaf-éen*
steam-3honPCO water-mACC sprinkle-3honPCO
al-éen *mixaad-ú* *gombis-éenno*
top-mLOC griddle-mACC turn_upside_down-3honIPV
'That means, one crumbles, sifts and steams the enset flour […], sprinkles water (on it) and puts the griddle on top of (it).'[7]

Kambaata differentiates three converb types: perfective converbs (PCO), imperfective converbs (ICO) and negative converbs (NCO). In (2) the use of the perfective converb has been illustrated. The full converb paradigms are given below. (Note: The morphemes that are shared by all paradigms are the subject agreement morphemes.)

[Insert Table 2 here]

The perfective converb is made up of a verbal stem plus subject agreement morphemes. It shares with perfective main verb the morphophonological rule of gemination (GEM) and palatalisation (PAL) in the 1st person and 3rd person masculine; see e.g. *fad-* 'go away', *fájj* (1s/3mPCO) '(I/he) going away', *fájj-eemm* 1sPVE 'I went away' and *fájj-ee'u* 3mPVE 'he went away'.

The semantic relation between the perfective converb clause and the subsequent clause is vague, though often interpreted as expressing a sequence of events (2). Other interpretations of the semantic relation are also possible and common: converb clauses can express circumstances accompanying the event in the main clause or the manner in which the main clause event is carried out. In (3), the converb *báadd* encodes the manner of motion; the main verb expresses the path of motion. In (4), the converb form of *da'll-* 'do fast' is used to express what other languages might do with a modal adverb.[8] Given an appropriate context, converb-main verb sequences may also allow for a purposive, concessive or causal interpretation of the semantic relation between the clauses.

(3) [...] *úb-bee* *gedeel-í* *al-éen* *báad-d* *ful-tóo'u*
fall-3fPVE.REL stem-mGEN top-mLOC crawl-2s/3fPCO go_up-3fPVO
'[...] they crawled onto the fallen stem (lit. "crawling, they went onto the stem")."

(4) *lál-u* *meqqeerr-áta* *da'll-í* *úujj-unta* […]
cows-mNOM afterbirth-fACC do_fast-1s/3mPCO drop-1s/3mPURP.DS
'[…] so that the cows drop the afterbirth quickly.'

The imperfective converb (ICO), which is marked by a morpheme *-án* after the subject agreement morphology (cf. column 3 in Table 2), is semantically less vague than its perfective counterpart. It is employed specifically to express that two events are simultaneous, as shown in (5), where the subject's scratching and talking takes place at the same time as his coming home.

(5) […] *boq-úta* *hangaa'rr-án*
head-fACC scratch<MID>-1s/3mICO

[7] Enset (Ensete ventricosum) is an important food crop in South Ethiopia. The enset plant resembles the banana plant but it does not develop fruits. Food is produced from its underground corm and its pseudo-stem.

[8] Kambaata has only a very small class of adverbs (Treis, 2008: 86).

méxxin *gunguum-án* *waal-im-bá-ndo?*
alone talk_to_oneself-1s/3mICO come-1s/3mNIPV-NEG-Q
'[…] scratching (his) head and talking to himself he came (home), didn't he?'

With a negative converb marked by *-ú'nna* (cf. column 4 in Table 2), converb clauses can be negated independently from the main verb. In the negation, the aspectual distinction between imperfective and perfective is neutralised while the person distinctions of affirmative converbs are retained. The negative converb expresses that the event in the main clause is done 'without V-ing' or 'before V-ing' (6).

(6) *shukkaar-á* *wórr-i-ndo* *wor-ú'nna* *éeb-un?*
sugar-mACC put_into-1s/3mPCO-Q put_into-1s/3mNCO bring-3mJUS
'Should he bring (the coffee) with or without sugar? (Lit. "Should he put or not put sugar into (the coffee) and bring it?")'

Kambaata converbs are dependent verbs that are shorter and less finite than main verbs. Subject agreement distinctions that are made in main verbs are partly neutralised in converbs, the aspectual distinctions are reduced from four to two (Table 1) and mood and, to a certain extent, polarity are determined by the sentence-final fully finite main verb. Ex. (7) illustrates that the jussive mood for which the main verb is encoded has scope over the preceding converb clause. Converbs can also come under the scope of negation marked in the main clause, as in (8), in which the converb *iillít* '(they) reaching' is interpreted as negative due to the negation of the main verb.

(7) *íse* *qans-itán* *le'-ís-sun*
3fNOM breastfeed-2s/3fICO grow-CS-3fJUS
'Let her breastfeed and raise (him).'

(8) *lám-it* *am-á* *óos-ut* *iill-ít*
two-fNOM mother-fGEN children-fNOM reach-2s/3fPCO
sunq-aqq-an-táa-ba'a
kiss-MID-PS-3fIPV-NEG
'Two siblings do not meet and do not kiss each other.' [Riddle]

This sketch of the Kambaata converb system suffices to proceed to the analysis of the SR system. Apart from pronominal anaphora and subject marking on verbs, SR marking is the most important reference-tracking device in Kambaata. Subject (dis-)continuity, or said differently, (non-)coreference of subjects of adjacent clauses is marked on converbs and purposive verbs. To allow for a comparison with other SR marking Ethiopian languages in §4-5, only converbal SR marking will be elaborated upon. (For more information on Kambaata purposive verbs the interested reader is referred to Treis forthcoming.)

In all Kambaata examples presented so far, converb clauses and adjacent clauses have shared one subject; see e.g. (8) in which the two siblings are the subject of *iillít* '(they) reaching' as well as *sunq-aqq-an-táa-ba'a* 'they don't kiss each other'. In contrast, if the subject is not shared by adjacent clauses, the subject change is signalled, in anticipation, on the converb by the different subject (DS)-morpheme *-yan* (*-yaan*).[9] Table 3 summarises the

[9] The DS-morpheme is a suffix to the verb (and not an enclitic to the clause). The DS-morpheme can still be followed by a pronominal object morpheme; see *gíjji-yan* cool.3mPCO-DS 'it cooled' and *gíjji-yan-s* cool-3mPCO-DS-3mO 'it cooled him'.

structure of converbs and shows that the DS morpheme can simply be suffixed to the perfective and imperfective converbs.

[Insert Table 3 here]

As is often the case in natural discourse, the subject arguments in (9) are not expressed overtly by (pro)nouns because they are retrievable from the context. The subject agreement morphology and the preceding context of this example tell us that the subject of the converb clause in line (a) is the speaker (1s) whereas the subject of the verbs in line (b) and (c) is the hearer (2s).

(9) a *resh-á-s* *sheerim-áan-ta-kk* *usúrr-i-yan*
corpse-mACC-3mPOSS tail-M.LOC-J-2sPOSS tie-1s/3mPCO-DS
b *goshooshsh-ít* *bonqoq-i-kkí* *aaz-éen*
drag_along-2s/3fPCO cave-mGEN-2sPOSS inside-mLOC
c *fidiicc-ít* *it-táant*
sit_legs_spread_out-2s/3fPCO eat-2sIPV
'I will tie the corpse to your tail (and) you will drag it along and sit down in your cave with (your) legs spread out (i.e. comfortably) and eat it.' (Kambaatissata 1989: 6.125)

In addition, subject discontinuity across the converb clause is obligatorily marked by the underlined DS morpheme, whose omission renders the sentence ungrammatical. Subject continuity (SS: same subject) is unmarked, as can be seen on the two converbs in line (b) and (c), *goshooshsh-ít* '(you) dragging along' and *fidiicc-ít* '(you) sitting with (your) legs spread out', which share the subject with the main verb *it-táant* 'you will eat'. Since the subject agreement morphology in (9) helps to identify the referents easily, DS marking seems superfluous. However, one often finds examples in texts in which the referents of two different masculine or two different feminine subjects can only be unambiguously identified if one takes note of SR marking; see (10) where the owl and the boy both trigger masculine agreement.

(10) *dángon* *haqq-í* *aaz-íichch* *gutans-ichch-u* *fúll*
suddenly tree-mGEN inside-mABL owl-SG-mNOM come_out.1s/3mPCO
hiliq-íshsh-iyan *haqq-i-sí* *al-íichch*
be_shocked-CS.1s/3mPCO-DS tree-mGEN-DEF top-mABL
múgg *ke'éechch* *uull-áan* *úbb-o*
descend then ground-mLOC fall-3mPVO
'Suddenly, an owl came out from the tree, shocked (him) (DS→), he (= the boy) fell down from the tree to the ground.'

In the literature on SR phenomena, the clause which contains the SR marker (i.e. the converb clause in Kambaata) is usually referred to as the "marked" clause while the clause which triggers the SR marker is called the "controlling" clause (cf. e.g. Stirling, 2006). I prefer to refer to the "marked" clause as the "controlled" clause, as only subject discontinuity is overtly marked in Kambaata whereas subject continuity is formally unmarked. Apart from one notable exception discussed below, the controlling clause in Kambaata is always the clause immediately following the controlled clause (Fig. 1) or the clause in which the controlled clause is embedded (Fig. 2).

[Insert Fig. 1 here]

[Insert Fig. 2 here]

In a sequence of two or more converb clauses and a final main clause (Fig. 3), all non-initial converb clauses exercise control over SR marking on the converb of the preceding clause but, at the same time, they are also being controlled by the next following clause.

[Insert Fig. 3 here]

While it is usually the case that (pro)nominal arguments directly precede the converbs by which they are governed, it is not uncommon to find arguments topicalised and shifted to the front of the sentence where they are separated from their governing converbs by other converb clauses. Ex. (11) is a complex example which illustrates how controlled and controlling clauses can be intertwined. In line (a) and (b) we find a sequence of four converbs that express a series of events {drink, become drunk, fall, toss and turn on the ground}; the last converb of the sequence is marked for DS because the subject changes from 2s 'you' to 'hyena' in line (c). After the converb 'cut' (meaning 'bite off') at the end of line (c), the subject changes again from 'hyena' to 'you' in line (d). The bracketing in the example indicates that the converb sequence {drink, become drunk, fall, toss and turn on the ground} is embedded in the converb clause headed by 'cut'; note that the object argument of 'cut', *lokk-a-kkí zuru'mm-áta* 'your toe' (lit. "finger of your foot") precedes the converb sequence in line (a). (For an example with a fronted subject argument see (18).[10])

(11) a *kazammáan-u* *lokk-a-kkí* *zuru'mm-áta* { *ág-g*
this_year-mOBL foot-fGEN-2sPOSS finger-fACC drink-2s/3fPCO
b *dimb-ít* *úb-b* *birqiiqq-itáni-yan* }
become_drunk-2s/3fPCO fall-2s/3fPCO toss_turn_on_ground-2s/3fICO-DS
c *gotíichch-u* [...] *múrr-i-yan*
hyena-mNOM cut-1s/3mPCO-DS
d *haakiim-í* *min-éen* *fayy-itéent*
doctor-mGEN house-mLOC become_healthy-2sPVE
'(Earlier) this year, (when) you drank (alcohol), became drunk, fell down, tossed and turned on the ground (unconscious) (DS→), a hyena bit (lit. "cut") off (one of) your toe(s) (DS→) and you were treated (lit. "became healthy") in the hospital.'

Utterances about perception events are common contexts in which imperfective DS converbs can be found. As the perceiving experiencer and the agent of a perceived event are usually non-coreferential, Kambaata uses DS converbs as a complementation strategy in this context:

(12) urr-úta qocc-eenáni-yan maccoocc-éemm
door-fACC knock-3honICO-DS hear-1sPVE
'I heard him (hon) knocking at the door.' (Lit. "He knocked at the door, I heard (it).")

Whereas the literature on SR is often concerned with unexpected cases of SS or DS marking and the syntactic and pragmatic conditions that triggers these (see e.g. Stirling, 1993: 60-114), the Kambaata SR system looks very regular. There is little indication that pragmatic considerations override grammatically determined SR marking. In Kambaaata, SR marking is

[10] See Sim (1989: 428 (6.81b)) for a similarly structured Hadiyya example.

entirely subject-oriented and syntactically conditioned; the (non-)occurrence of DS morphology is independent of the animacy or agentivity of the subject so that SR marking is also sensitive to inanimate subjects and subjects low in agentivity, e.g. passive subjects (13).

(13) […] *al-í* *wud-í* *yabúr-r-a-ssa* *aaqq-án-ti-yan*
upper-mGEN side-mGEN lip-PL-fNOM-3pPOSS take-PS-2s/3fPCO-DS
hor-i-ssá *inq-áakk-ant* *hínn* *y-itóo'u*
all-mGEN-3pPOSS tooth-PL-fNOM<n> smirk say-3fPVO
"[…] the upper lips were raised (lit. "taken") and everybody's teeth exposed (lit. "smirked"). (Kambaatissata 1989: 4.34)

There are, however, two contexts in which DS marking does not arise although it would be expected. Firstly, as already outlined in Table 3, subject discontinuity remains unmarked in negative converb clauses (14). Although the converb clause (with 'know') has a first person subject and the controlling adverbial clause (with 'die') has a third person masculine subject, this does not trigger DS marking on the converb. The DS morpheme *-yan* is incompatible with negative converbs.

(14) *án* *dag-u'nnáan* *reh-ée=hann-íichch* *zakk-íin* […]
1sNOM know-1s/3mNCO die-3mPVE.REL=NMZ-mABL after-mICP
'After he had died without my knowledge (lit. "without I knowing") […].'

Secondly, it is possible that a clause separates the controlled clause from the controlling clause so that they are not strictly adjacent. This phenomenon is discussed in the literature under the term "clause skipping" (Stirling, 1993: 18-23) because an intervening clause is skipped over (Fig. 4). SR marking in Kambaata can bypass intruding relative clauses, relative-based adverbial clauses (15) and negative converb clauses (16) that are backgrounded and peripheral to the chain of events.[11]

[Insert Fig. 4 here]

Ex. (15) illustrates clause skipping: the underlined converbs and the final main verb share the same subject (3hon: honorific/impersonal), while the intervening subordinate clause ('until it is done'), which is marked by curly brackets, has the prepared product as the subject, i.e. the converb *fanqalaans-eenán* 'turning over repeatedly' is controlled by the final main verb but not by the following relative-based subordinate verb.

(15) [...] *ang-áta* *fooloocc-is-eenu'nnáan* *al-í=biiháa*
hand-fACC rest-CS-3honPCO top-mGEN=NMZ.mACC.CRD
aaz-í=biiháa *fanqalaans-eenán*
bottom-mGEN=NMZ.mACC.CRD turn_over_repeatedly-3honPCO
{re'-anóo *iillán qax-éechch}* *haankur-éenno*
become_done-3mIPV.REL.mACC until steam-3honIPV
'[...] without resting (one's) hand, one keeps on turning over what is on top with what is at the bottom and, {until it is done,} one steams (the enset product).'

The same phenomenon is illustrated in (16), in which SR marking ignores an intervening negative converb clause. The clause with the underlined converb *woréen* '(one) putting in' is controlled by the final clause of the sentence, a focalised conditional verb *ag-*

[11] Perrett (2000: 139, 148, 187) shows the same phenomenon in Hadiyya.

eemmá=dáa-t '(it is) if one drinks', with which it shares the subject (3hon). The converb clause is not influenced by the next following negative clause in curly brackets which has a different subject, namely the drink.

(16) […] *malab-uháa* *sukkaar-aháa* *wojj-ú* *so'-aháa*
honey-mACC.CRD sugar-mACC.CRD white-mACC barley-mACC.CRD
xall-á *wor-éen* {*shiish-u'nnáachch*}
only-mACC put_in-3honPCO ferment-1s/3mNCO
ag-eemmá=dáa-t
drink-3honPVE.REL=COND-COP
'[…] if one puts only honey, sugar and white barley into it and drinks (the drink) without {(it) having fermented}.'

The possibility to bypass certain clauses in SS-/DS-marking may indicate that relative-based subordinate clauses and negative converb clauses have a higher degree of dependency than (affirmative) converbs.

Part-whole relationships or inclusion relationships between subjects of adjacent clauses have been of particular interest in publications on SR (e.g. Stirling, 1993: 34-39). SR marking languages often treat overlapping, partly coreferential subjects as same subjects and omit the DS morphology that truly referentially disjoint subjects would have triggered. In Kambaata, however, "partly coreferential" or "not entirely coreferential" is treated as "not coreferential" and consequently marked by a DS morpheme on the controlled clause. I am only aware of one single example in my corpus in which a part-whole relationship between subjects of adjacent clauses did not prompt DS marking: in (17), the '(whole) rope' is the subject of the converb clause whereas 'half (of the rope)' is the subject of the main clause. The underlined converb is a SS converb.

(17) *foxóor-ut* *qarcaat-í* *aaz-éen* *afuu'll-ít*
rope-fNOM basket-fGEN interior-mLOC sit_down-2s/3fPCO
bakkán-u-se *uull-áta* *ull-ée'u*
half-mNOM-3fPOSS ground-fACC touch-3mPVE
'The rope is in the basket (and) half of it is lying on (lit. "touching") the ground.'

Ex. (17) is exceptional in view of the fact that DS marking occurs elsewhere whenever the subjects of two clauses are not strictly coreferential; see (18) in which the subject of the converb clause in curly brackets is *ál-u-s* 'his body' while the subject of the converb-main verb sequence in line (b) is *Sabíru* 'Sabiro' (personal name), which is found at the beginning of the sentence. Although there is an almost complete overlap of the referents, they are treated as non-coreferential and as requiring DS marking on the converb.

(18) a *Sabír-u* {*ál-u-s* *búqq-búqq* *y-áni-yan*}
S.-mNOM body-mNOM-3mPOSS tremble-tremble say-1s/3mICO-DS
b *daddaabb-í-s* *shoolé* *fanqalaans-í*
letter-f.ACC-3mPOSS four_times do_again_and_again-1s/3mPCO
c *anabbább-o*
read-3mPVO
'Sabiro read his letter four times, his body trembling.' (Kambaatissata 1989: 8.22)

Like part-whole relationships, inclusion relationships motivate DS marking, too. The subject of the converb clauses in (19) is 1p (referring to the speaker and his brother) and includes the subject of the main clause, which is 3m (referring to the brother only).

(19) *car-áan* *maram-máni-yan* *ís* *worr-iichch-ú* *háamm-o*
bush-mLOC walk-1pICO-DS 3mNOM snake-SG-mACC step-3mPVO
'We (i.e. I and him) were walking through the bush (when) he stepped on a snake.'

DS marking is also triggered when the subjects are of the same person, e.g. both third person (20), or when the inclusion relation between the subjects is inversed, i.e. when the subject of the converb clause is included in the subject of the main clause (21).

(20) *sás-it* *jaall-áakk-at* […] *oo'll-an-táni-yan*
three-fNOM friend.PL-PL-fNOM kick.MID-PS-3fICO-DS
isso'óochchi-s […] *shíq* *y-aanó* *garád-u-s* *adab-óo*
3pABL-3mPOSS tall say-3mIPV.REL big-mNOM-3mPOSS boy-mNOM
lam-í-s *jaall-aakk-á-s […]* *mu'r-an-síishsh-o-ssa*
two-fACC-3mPOSS friend.PL-PL-fACC-3mPOSS cut.MID-PS-CS-3mPVO-3pO
'Three friends fought with each other (and) the tallest and biggest boy among them made the (other) two friends cut each other.'

(21) *íse* *ichch-á-s* *qixxans-íti-yan* *na'óot* *intóomm*
3fNOM food-fACC-3mPOSS prepare-3fPCO-DS 1pNOM eat.1pPVO
'She prepared the food (and) we (i.e. she and I) ate it (together).'

Focus constructions constitute an exception to the general rule that controlling clauses have to follow controlled clauses. Converb clauses (like all other constituents) can be focussed and be made the predicate of a cleft construction ((22): line c). In converb clause clefts, the main clause is relativised and functions as the subject of the sentence (line a). Thus the usual order of controlled and controlling clauses can be overridden.

(22) a *á'nnu* *xall-í* *lokk-áan* *maran-teenayyoontáa-hu*
2honNOM only-mGEN foot-mLOC walk-2pPROG.REL.NMZ-mNOM
b *Qamaanqám* *caa'mm-á* *gob-ú*
Q.fNOM shoe-mACC sew-mACC
c *dag-gáni-yanee-nti-ba'?*
know-2s/3fICO-DS.VV-COP<n>-NEG.Q
'You are walking barefoot, (although) Qamaanqame knows sewing shoes, doesn't she?' (Lit. "It is (although) Qamaanqame knows sewing shoes – doesn't she? – that you are walking barefoot.")

DS marking in Kambaata does not entail any particular semantic relationship between the controlled and the controlling clause. The DS morpheme *-yan* is nothing but an indicator of a subject change and is not used in any other grammatical context.

4. Switch-reference in Cushitic languages

4.1. Survey of switch-reference marking languages

Many Afroasiatic languages in Ethiopia and beyond have special dependent verb forms for non-final clauses that are functionally equivalent to the Kambaata converbs discussed above.

But although converbs are very common in Cushitic, the following overview will show that SR marking is only attested in four languages of this branch, all of them members of the Highland East Cushitic (HEC) sub-group. The HEC languages include *Kambaata-Alaaba-*K'abeena, *Hadiyya*-Libido, *Sidaama*, Gedeo and Burji, of which only the languages in italics have SR marking on converbs.

[Insert Fig. 5 here]

Alaaba is the closest relative of Kambaata and has three different converbs which are called "converb", "subordinate progressive" and "posteriority verbs" in Schneider-Blum (2007: 241-62, 266-68) but which correspond in form and function to the Kambaata perfective, imperfective and negative converbs.[12] The Alaaba DS morpheme *-áan(i)* is cognate to the Kambaata DS morpheme but its use is more restricted than in Kambaata; it can only be added to perfective converbs (23) but does not occur on imperfective converbs in DS contexts (24) (Schneider-Blum, 2007: 260). As in Kambaata, DS marking is incompatible with negative converbs (Schneider-Blum, 2007: 267).[13]

(23) *hant'abeecc-út(i)* *t'iz-z-áan(i)* *fe'leecc-út(a)* *kitim-éem(a)*
hen.SG-fNOM be_sick-2s/3fPCO-DS goat.SG-fABS sacrifice-3honPV
'When the hen was sick, a goat was sacrificed.' (Schneider-Blum, 2007: 258)

(24) *Muhamád(-i)* *c'uul-í-s(i)* *wokk'ar-án(i)* *laʔ-yóom(i)*
Muhamad-mNOM child-mABS-3mPOSS beat-1s/3mICO see-1s.PV
'I saw that Muhamad has beaten his child.' (Schneider-Blum, 2007: 395)[14]

The data on K'abeena, which is the closest relative of Alaaba, is not conclusive. Although K'abeena has a morpheme *-áan*^{i} which is added to perfective converbs ("converb 1") and which is clearly cognate with the DS morpheme in Alaaba and Kambaata, there are too many examples counter to the assumption that DS contexts *require* the *-áan*^{i} morpheme; it is only possible to say that a subject switch can be encoded by this morpheme (Crass, 2005: 181f). The imperfective ("progressive") converb is marked by *-ánan*^{i} (Crass, 2005: 183) and used both in SS and DS context. In the same way, negative converbs occur in cases of subject continuity and discontinuity (Crass, 2005: 186).

As detailed in Sim (1989) and Perrett (2000), Hadiyya has numerous dependent verb forms, several of which can be characterised as converbs. "Converb 1" (CV1), which is functionally equivalent to the Kambaata perfective converb discussed above, is used, among others, to encode sequences of events in clause chains 0 and the manner in which events expressed by the main verb are carried out.[15] "Converb 1" is not overtly marked for aspect; it contains subject agreement morphology and a morpheme *-aa* or *-a'a*, depending on person (Sim, 1989: 150).

(25) *bitees-eena* *has-ukk* *manc* *k'uumu* *buyy-inne* *kar-aa*

[12] In the individual descriptions of Ethiopian languages, authors use different labels for non-relative-based dependent verb forms. The reader should be aware that what I consider "converbs" in the languages quoted in this article are not necessarily called "converbs" by the authors of the grammars that I consulted.

[13] To allow for an easier comparison, the glossing conventions of Kambaata have been transferred to cognate Alaaba morphemes. The glosses of quoted examples from other languages have also been harmonised and/or simplified.

[14] Compare this utterance about a perception event with the Kambaata example 0.

[15] For more detailed information on the functions of converb 1 see Sim (1989: 381-86).

sell-PURP want-3mSP.REL man.NOM limp leaf-INS tie-3mCV1
meera *mass-aa* *bitees-ookko*
market take-3mCV1 sell-3mIPV
'The person who wants to sell (it) will bind it up in a limp leaf, take (it) to market and sell (it).' (Sim, 1989: 293)

The converbs in 0 have the same subject as the final main verb, namely *manc* 'man, person'. The "converb 1" is restricted to SS contexts; in DS context it is ungrammatical or only marginally acceptable (Sim, 1986: 386). Instead, the so-called "converb 2" is applied in DS contexts. "Converb 2" is Sim's cover term for three dependent verb paradigms that are based on three aspectually different declarative main verb paradigms ("Imperfect", "Simple Perfect" and "Present Perfect") to which a morpheme *-aa*(*-re*) is added (cf. 0 and Sim (1989: 150)), i.e. unlike in Kambaata and Alaaba, the DS converb is not based on the SS converb. The Hadiyya "converbs 2" (DS) are longer and morphologically more complex than the corresponding main verbs. Thus "converb 2" represents an untypical type of converb in the languages of the family and the area.[16]

(26) *manc* *beetina* *wo'o* *uww-ukk-aare* *ag-ukko*
man.NOM boy.DAT water give-3mSP-DS drink-3mSP
'The man gave water to the boy, and he [= the boy] drank it.' (Sim, 1989: 422)

Hadiyya also has a simultaneous converb, the so-called "while-form" (Sim, 1989) or "converb 0" (Perrett, 2000), which is functionally equivalent to the Kambaata imperfective converb and the Alaaba "subordinate progressive", and a "without form", which is cognate to the Kambaata negative converb and the Alaaba "posteriority verb". The "while-form" and the "without-form" are used in SS and DS contexts alike (Sim, 1989: 312, 440-446; Perrett, 2000: 139f).

Sidaama is another HEC language in which converbs are marked for subject (dis-)continuity. The converb system of Sidaama is structured similarly to that of Kambaata; however, the verb forms that are functionally equivalent to the Kambaata perfective and imperfective converbs are dealt with under the names "connective verb" and person-marked "infinitive" in Kawachi (2007) (here I gloss them as PCO and ICO). These verb forms are under the same subject constraint. If the subjects of a converb clause and a subsequent clause are *non*-coreferential, the enclitic *=nna* is attached to the converb (Kawachi, 2007: 279f).[17] Ex. (27)-(28) illustrate the use of a perfective converb in an SS and a DS context, respectively. In (28), the *=nna*-morpheme is attached because the subject changes from 'sun' to 'I'.

(27) *harrišš̄o* *gan-te* *hogir-s-itu-'e*
sun.fNOM hit-3fPCO become_thirsty-CS-3fSP-1sO
['The sun hit me (and) made me thirsty.'] (Kawachi, 2007: 415)[18]

[16] At the Horn of Africa, Oromo (Lowland East Cushitic) is, to the best of my knowledge, the only other language that has converbs that are longer and morphology more complex than main verbs. Oromo sequential converbs are derived from "simple past" main verbs through final vowel lengthening. In contrast, simultaneous converbs are invariant dependent verb forms ending in *-aa*; cf. Azeb and Dimmendaal (2006a: 407ff) quoting Gragg (1976: 192f) and an unpublished paper by Griefenow-Mewis and Tamene; see also Owens (1985: 151f, 214f). NB: Oromo is a language without SR marking; compare (26) and (27) in Owens (1985: 217) in which the sequential converb is used in a SS and a DS context, respectively.

[17] Kawachi neither speaks of "converbs" nor of "switch-reference" or a "DS morpheme" in his description.

[18] In the original source, the translations of (27)-(28) are as follows: (27) 'The sun hit me, and I got thirsty (lit., '... and made me thirsty')' and (28) 'Because the sun hit me, I (m) got thirsty'.

(28) *harrišš̆o* *gan-t-e=nna-'e* *hog-id-u-mm-o*
sun.fNOM hit-3f-PCO=DS-1sO become_thirsty-MID-1mSP
['The sun hit me (and) I (msc.) got thirsty.'] (Kawachi, 2007: 415)

In case of subject discontinuity, the enclitic =nna is also suffixed to the imperfective converb.[19] Ex. (29) shows that Sidaama employs the same complementation strategy with verbs of perception as Kambaata does in (12): the perception verb governs a DS converb clause, which is, in this particular example, embedded into the main clause.

(29) *lat'o* {*dangur-i* *waalčó* *fan-∅-a=nna*} *la'-'-ino-si*
L.fNOM D.-mNOM door.mACC open-3m-ICO=DS see-3f-PP-3mO
'Lat'o saw Dangura while he was opening the door.' (Kawachi, 2007: 281)

While the origin of the DS morpheme in the languages hitherto mentioned is obscure, the Sidaama DS morpheme clearly has its origin in the conjunctive enclitic =*nna* 'and' (cf. *bero=nna teč̆č̆o* 'yesterday and today' (Kawachi, 2007: 276)), i.e. we are here dealing with a transparent grammaticalisation process of a marker for conjunctive coordination into a DS morpheme.[20]

The remaining HEC languages, Libido (closely related to Hadiyya), Gedeo and Burji, do not seem to mark converbs for SR,[21] at least as far as one can tell from the data that is presently available. To the best of my knowledge, there is also no mention of SR systems in other Cushitic languages outside the HEC branch.

4.2. Historical notes on the switch-reference morphemes

There is little doubt that the DS morphemes of Kambaata -*ya*[*a*]*n* and Alaaba -*aani* are cognate. The Kambaata DS morpheme has been written as -*yan* in §3 according to the Kambaata orthographic conventions. However, the vowel a can be realised short or long, depending on speakers' preferences, which is reflected, among others, in the spelling variation of these morphemes in written texts.[22] The final devoiced vowel [^{i}], which is written in Alaaba, is also phonetically present in Kambaata but not reflected in the orthography, because all consonant-final words end in [^{i}] by default. The initial *y* of the Kambaata morpheme is possibly an epenthetic consonant.

It is hard to tell whether the Hadiyya morpheme -*aa*(-*re*), of which the bracketed part is optional, is cognate to the DS morpheme of Kambaata-Alaaba. Like the Alaaba morpheme, the Hadiyya morpheme contains a long vowel *aa*. The latter, however, is attached to a finite

[19] Strictly speaking, the DS morpheme replaces (or merges with) the final part of the imperfective converb morpheme. In SS contexts, the imperfective converb ends in -SBJ-*a-nni*, in DS-contexts it ends in -SBJ-*a=nna* (Kawachi, 2007: 414) ("SBJ" stands here for the four possible subject agreement morphemes).

[20] The DS morpheme =*nna* and the conjunctive morpheme behave differently with respect to the position vis-à-vis pronouns. The DS morpheme precedes pronominal object suffixes on verbs (Kawachi, 2007: 304 (3.490)), whereas the conjunctive morpheme follows possessive suffixes on nouns (Kawachi, 2007: 274 (3.399)). (Object and possessive suffixes are identical in all persons except 2s.)

[21] Wedekind (1990) makes reference to SS and DS tendencies of some adverbial clauses in Gedeo (1990: 241) and Burji (1990: 520). Furthermore, Burji is said to mark "pronominal SR" (1990: 655). Unfortunately, the description, formulas and examples are not conclusive so that I am unable to say whether the phenomena treated under "switch-reference" in Gedeo and Burji are comparable to those in other HEC languages. Gedeo and Burji will require further investigation in the future.

[22] See e.g. *ihaniyaan* 'becoming (DS)' in Kambaatissata (1989: 5.1; 6.29). In Kambaatissata (1989), vol. 5, there are 20 instances of -*yaan* and 4 instances of -*yan*. Outside vol. 5, the spelling -*yaan* is rare.

main verb form, while the former is attached to a converb. Furthermore, it does not seem plausible to connect the consonant *r* of the optional part of *-aa*(*-re*) to the final consonant *n* in Kambaata-Alaaba (acc. to Hudson (1989), Kambaata *n* regularly corresponds to Hadiyya *n*). I tend to consider the Hadiyya and Kambaata-Alaaba morphemes not to be cognate. Since the Sidaama morpheme *=nna* is not cognate to either the Hadiyya or Kambaata-Alaaba DS morpheme, we are dealing probably with three unrelated markers for signalling SR on converbs in HEC.

5. Switch-reference in Omotic languages

Omotic languages are spoken in Ethiopia to the South and West of Cushitic languages. They are only distantly related to Cushitic languages, with which they are assumed to join only at the highest level of Afroasiatic in common classifications.[23] The Omotic languages are usually divided into two major branches, North and South Omotic (Bender, 2000); a simplified family tree is given in Fig. 5 to allow for easier orientation in this section.

[Insert Fig. 6 here]

This section will show that SR marking is very widespread in North Omotic (in the branches marked in italics) but, as far as we can tell from the literature, absent from South Omotic. I will proceed from bottom to top in Fig. 5 and start the overview with the Ometo group of North Omotic.

5.1. Survey of Ometo

The West Ometo language Baskeet (Basketo) has three converbs; two same subject converbs and one different subject converb. The general converb 1, ending in *-í*, often encodes a tight conceptual link between the event expressed by the converb and the next immediately adjacent verb or, said differently, converb 1 describes an inseparable sub-aspect of the event that is expressed by converb 1 and the following verb together; see e.g. *k'atts'í tóng-* (cut make_fall) 'slaughter' in (30). The semantic relation between converb 1 and the next following verb is vague.

(30) *mííz-in* *sill-ín* *k'atts'-í* *tóng-í-d-e*
cow-fDEF throat-fDEF cut-CV1 make_fall-M-PV-ASS
'(One) slaughtered the cow (lit. "(one) cut the throat of the cow, made (her) fall").'

Converb 2, which ends in *-ar*, is an explicitly sequential converb used in SS contents (31). In pre-pausal position, converb 2 is marked for subject agreement, *-á* (f) for 1s, 2s, 3f and *-í* (m) for 3m, 1p, 2p 3p (31).

(31) […] *nééní* *ɦang-ár-á* *tááb* *ɦátt* *k'aar-í* […]
2s go-CV2-f 1sDAT now monkey-TV
ell-í *tááb* *aatts*[*-í*] *mish-áb-e*!
do_quickly-CV1 1sDAT shift-CV1 send-2sIMP-ASS
'[…] you go and send Monkey […] to me quickly!'

[23] According to Theil (forthcoming), however, no convincing arguments have so far been presented that Omotic is indeed an Afroasiatic language family and not a family of its own.

If the subject changes across clauses, the DS converb marked by *-in* is used. The DS converb is invariant and not able to indicate subject agreement.

(32) *bun-í* *sóól* *úshk-ín* *te* *irts'íns-aa* *micc-í-d-e*
coffee-TV hot drink-CV.DS 1sPOSS tongue-DEF burn-m-IPV-ASS
'(When) (I) drank hot coffee, my tongue got burnt (lit. "(it) burned my tongue").'

The converb and SR marking system of Baskeet is similar to that of Maale, as described in Azeb (2001: 190-199). In Maale, the SS converb 1 is marked by *-í*, the SS converb 2 by *-áʔʔo* and the DS converb by *-ém*. Ex. 0 contains a DS converb with 'God' as its subject, a sequence of two SS converbs 1 and a main verb. The SS converbs and the main verb share the subject 'police', which is not overly expressed but understood from the context.[24]

(33) *s'ossí* *dúmm-ó-na* *kants-ém* *ʔark'-í* *ʔekk-í*
God.NOM darkness-ABS-INS meet.CS-CV.DS hold-CV1 take-CV1
ha *zag-é* *s'aabb-ó* *gel-z-é-ne*
this look-2sIMP prison-ABS enter-CS-PV-A:DCL
'Now believe me (lit. "look at this!"), God having let (them) meet in the darkness, (the police) captured (the fugitive) and put (him) in prison.' (Azeb, 2001: 197)

Azeb and Dimmendaal (2006a, 2006b) give a comprehensive account of converbs in Wolaitta (Central Ometo dialect cluster), to which the reader is referred for details and examples. There are three types of converbs: a sequential ("anterior") converb marked by *-í*(*dí*) (m) or *-á*(*dá*) (f) and a simultaneous converb marked by *-iídí* (m) / *-aídda* (f); both are under the SS constraint and are replaced by a converb ending invariably in *-*(*i*)*n* in DS contexts (Azeb and Dimmendaal, 2006a: 400).

Taylor (1994: 87-90) also reports on a SS converb form ending in *-i*(*di*) (m) or *-a*(*da*) (f) 0 in Gamo, which is mutually intelligible with Wolaitta. Taylor does not remark on a simultaneous converb in Gamo – but this might be a gap in the description. The Gamo DS converb ends in *-i*(*i*)*n* (35).

(34) *nu* *gira* *ʔimm-idi* *simm-idos*
1p tax.ACC pay-mCV1 return-1pPV
'On paying our tax, we returned.' (Taylor, 1994: 315)

(35) *šoošši* *sas's'-in* *ʔaddezi* *haik'-ides*
snake.NOM bite-CV.DS man.NOM die-3mPV
'When the snake bit (him), the man died.' (Taylor, 1994: 33)

In examples provided in Azeb (2009), it is evident that Zargulla (East Ometo) has, at least, a SS converb in *-í* (corresponding to converb 1 in Maale) and a DS converb in *-úm*.

(36) *kiítá-y* *ham-úm* *boc'oc'-átt-us* *ʔekk-í* *yeénne*
message-NOM go-CV.DS present-FOC-3pSBJ take-CV.SS come.PAST
'The message having gone (to them), (the hyenas) brought (lit. "take, come") *a present*.' (Azeb, 2009: 205)

[24] Simultaneity in SS contexts is marked in Maale by reduplicating converb 1; in DS contexts, simultaneity is encoded by the suffix *-nte* (Azeb, 2001: 198).

To summarise, the following Ometo languages could be identified as having SR marking on converbs: Baskeet (West Ometo), Maale (South Ometo), Zargulla (East Ometo), Wolaitta and Gamo (Central Ometo). It is probable that the Central Ometo dialects Dorze, Dawro, Gofa and Melo, which are mutually intelligible with Wolaitta, also have SR marking but this is still to be confirmed. No information is so far available on Oyda (Central Ometo) and Kachama-Ganjule (both East Ometo). Descriptions of East Ometo varieties apart from Zargulla, i.e. Hirut (2003) on Haro, Hayward (1990a) on Zayse and Hayward (1982) and Binyam (2010) on Koreete, do not make mention of SR marking.

5.2. Survey of Gonga-Gimojan (without Ometo)

SR marking in other (i.e. non-Ometo) Gonga-Gimojan languages seems to be restricted to Yemsa and Bench, the converb systems of which have been described thoroughly in Zaugg-Coretti (2008) and Rapold (2008), respectively. Rapold (2008) describes two types of converbs ("medial verbs") in Bench, a SS converb marked by *-ī́* (m) / *-á* (f) and a DS converb marked by *-n̄*. Compared to main verbs, converbs allow for a reduced number of gender agreement morphemes (see the SS converb allomorphs) and for a reduced number of tense-mood-aspect distinctions. Converbs can also fall under the scope of the polarity of the main verb. Ex. (37) contains a DS converb which is dependent on the verb 'see/look'. Apart from illustrating converb use in a DS context, the example also shows that Bench uses DS converb clauses as a complementation strategy with perception verbs; cf. (12), (24) and (29).

(37) *dōd-à* *hăɛ-ń̄-ān* *yī* *gə̀-s.t-n̄-ān*
country-RLT this.m-LOC-FOC 3m.NOM trade-PS-DS-FOC
bēk'-ńs-á *tà* *hāyt'-ād-á-ò?*
see/look-PRF-f 1s.NOM tell-CQ-f-MEDCQ
'Did I say I had seen them [= the skins of monkeys] being traded in this country?' (lit. "Did I tell, after they were sold in this country and I saw it?") (Rapold, 2008: 178)

Yemsa has four different converb forms. Of these, three mark an opposition between SS and DS forms (general, sequential and negative converb). The simultaneous converb, however, is restricted to SS contexts. I am unable to do justice here to the complex Yemsa system but I have summarised (and simplified) relevant information from Zaugg-Coretti (2008) in (38) below. The morphemes given here are attached to verbal stems.

(38) Yemsa converbs
- General converb[25]
  - SS: *-r-à* vs. *-r-ē* (subject agreement: f vs. m)
  - DS: *-nā* vs. *-nī* vs. *-n* (subject agreement: 1s vs. 2s/3 vs. rest)
- Sequential converb
  - SS: *-aa-t* (subject agreement (f vs. m) marked tonally)
  - DS: *-aa-nā* vs. *-aa-nī* vs. *-aa-n* (subject agreement: 1s vs. 2s/3 vs. rest)
- Simultaneous converb (only SS) *-t* (subject agreement (f vs. m) marked tonally or by final vowels)
- Negative converb
  - SS: *-nòyí* (no subject agreement)

[25] Zaugg-Coretti (2008) does not group the SS and DS converb of this section together.

- DS: *-nòyí-nā* vs. *-nòyí-nī* vs. *-nòyí-n* (subject agreement: 1s vs. 2s/3 vs. rest)

The general converb (CV) is semantically vague and leaves the temporal relation to the next verb unspecified; it is also used in complex verb constructions. The SS form is characterised by a morpheme *-r-* to which subject agreement suffixes (f vs. m) are added. The DS form distinguishes three subject agreement morphemes, which all include the consonant *n*. Recall that *n* is also part of the DS morpheme is most other Omotic languages. Ex. (39) illustrates the use of several DS converbs in one sentence.

(39) *Yèe-sè-tēe-sē* *ēwāa-s-ōn* *kàch'é-r* *kāch'ē-n*
come-p-3honSUB-TEMP enset-DEF-fACC cut.m-NMZ cut-CV.DS[.2s/3]
wàar'ă-r *wàar'ī-n,* *shèdĭ-r*
dig.m-NMZ dig.m-CV.DS[.2s/3] remove.leaves.m-NMZ
shèdī-n, *wàashá-r* *wàáshī-n*
remove.leaves-CV.DS[.2s/3] harvest.enset.m-NMZ harvest.enset-CV.DS[.2s/3]
ūwāa-s-ōn *bùlĕ-r* *bùlē-n* *wòstè-sé-f-ē*
enset.root-DEF-fACC chop.m-NMZ chop-CV.DS[.2s/3] work-p-IPV-m
'When they have come the enset cutters cut, the diggers dig, the leaf removers remove (dry) leaves, the enset harvesters harvest enset (by scraping out the pith) and the choppers chop the enset roots; that is how they work.' (Zaugg-Coretti, 2008: 230)

The sequential converb is used when the following verb expresses an event that takes place only after the event in the converb clause was completed, i.e. it marks explicit anteriority. The simultaneous converb is restricted to SS contexts and marks simultaneity explicitly. The negative converb allows negation independent of the main verb. Yemsa is the only Omotic language of which I am aware which has negative converbs; unlike the Kambaata and Hadiyya negative converbs (§3 and 4.1) those of Yemsa are marked for SR.

Apart from Yemsa, Bench and some Ometo languages, no other language of the Gonga-Gimojan branch of North Omotic is known to have SR marking – but, admittedly, the data that we have in hand is not sufficient to make a final judgement on languages like Chara, Kafa, Shekkacho and Anfillo. Only Shinasha is fairly well known but the descriptions make no mention of SR marking (Lamberti, 1993; Rottland, 1990).

5.3. Survey of Dizoid

Verbal morphology which marks subject (non-)coreference has been discovered in the Dizoid branch of North Omotic, too. Hellenthal (2010) reports on two types of converbs ("medial verbs" in her terminology) in Sheko, a SS converb which is characterised by a suffix *-tə* and a DS converb marked by *-ǹ*. While the most prominent function of *-ǹ* is to mark a subject switch across converbs, the morpheme can also be applied to mark a textual boundary in an SS context (Hellenthal 2010: 332). Subject proclitics can be attached to converbs but the mood and aspect values of the converbs are determined by the final main verb in the sentence (Hellenthal 2010: 332). Ex. (40) contains a sequence of four converb clauses. The example illustrates beautifully how DS and SS morphology is used to track the subject referents, which are not encoded in overt noun phrases. The subject proclitics do not help to disambiguate between the two feminine third person subjects (here: monkeys) and the listener can only rely on the SR marking device to determine which monkey is carrying out which action.

(40) *sīīp' sīīp' sīīp' yí=ge-ǹ*
sew sew sew 3f=say-CV.DS
yí=sììp'ù-tʃ'òr-ʃù-tə *yí=tāām-n̄-s-a* *àts-ǹ*
3f=sew-finish-CS-CV.SS 3f=fire-DEF-m-ACC give-CV.DS
bārkāy-ǹ *tāām-n̄-s* *kòb-tə*
monkey.f-DEF fire-DEF-m take-CV.SS
'"Sew, sew, sew," she (monkey 1) said; she (monkey 2) finished sewing and she (monkey 2) gave her the fire; the monkey (monkey 1) took the fire and…' (Hellenthal 2010: 332; glosses adapted)

Dizi, a language very closely related to Sheko, employs very similar morphemes to mark SS and DS converbs, *-tɛj* and *-n*; see the DS converb in (41).

(41) *in-kŋ* *a:b* *ts'abt-n* *jɛ-nno*
we-GEN eye be_sick-CV.DS come-1p
'Since our eyes are sick, we came [to the hospital].' (Lit. "'Our eyes being sick, we came.") (Beachy, 2005: 115)

No information is available on the verbal morphology of the third Dizoid language, Nayi.

5.4. Survey of Mao and South Omotic

Data on the Mao branch of North Omotic is sparse and it is unknown whether the Mao languages have converbs and SR systems. This leaves us with the second primary branch of Omotic, South Omotic, encompassing the languages Aari and Dime as well as the Hamer-Benna-Karo dialect cluster (Fig. 5). Grammatical sketches of these languages are available but neither Hayward (1990b) on Aari, nor Lydall (1976) on Hamer, nor Mulugeta (2008: 157-59) on Dime mentions a grammaticalised system of marking subject (non-)coreference.

5.5. Historical notes on the switch-reference morphemes

Although the converb systems of individual Omotic languages are structured differently, it is a very striking fact that SR marking Omotic languages share a DS converb morpheme *-n* / *-m*. Moreover, there is a general tendency not to encode subject agreement on DS converbs but to mark it on SS converbs. Concerning the SS converb morphology, there is much variation between the individual languages and I am unable to say whether SS marking could be reconstructed to the Proto-North Omotic level, on the basis of current research results.

It is beyond the scope of this paper to speculate on the origin of SR morphology in Omotic. The fact that the DS morpheme is cognate all over North Omotic suggests a considerable time depth. In analogy to an attested grammaticalisation path from case marker to SR marker elsewhere in the world, Azeb (2001: 198) hypothesises that the Maale DS morpheme *-ém* (or *-é-m*) could be related to the dative morpheme, which is *-m*. In Bench, the DS morpheme is formally identical to the dative case morpheme and only tonally different from the locative morpheme (Rapold, 2008: 164). However, a plausible scenario how a dative case marker could have ended up suffixed to a verb stem and be interpreted as a DS morpheme is still missing and therefore the origin of the North Omotic DS morpheme remains obscure. Note that the homonymy of the dative or locative marker and the DS morpheme is not a general feature of North Omotic languages; see e.g. Baskeet DS *-in*, dative *-ab*(*o*) and locative *-*(*it*)*ta*.

6. The historical scenario

The preceding section has shown that SR marking is much more widespread in Omotic than in Cushitic: most documented North Omotic languages have SR marking and share a cognate DS morpheme *-n* / *-m*. SR marking seems to be absent from South Omotic.[26] In Cushitic, SR marking is very restricted and only found in some HEC languages but it is entirely absent in other branches of East Cushitic as well as Central, South and North Cushitic.[27]

When SR marking languages are plotted on a map (Fig. 6), the four SR marking Cushitic languages are seen to be spoken in the neighbourhood of Omotic languages, or more precisely, near Wolaitta and Yemsa.

[Insert Fig. 7 here]

This remarkable distribution of SR marking raises the question about its origin in HEC. We can surely discard the possibility that the SR morphology in North Omotic and HEC is common heritage from the Proto-Afroasiatic stage, because otherwise we would have to argue that it was only retained in two sub-branches of Cushitic and Omotic that happen to be neighbours, while it was lost everywhere else in Afroasiatic. It also seems very unlikely that North Omotic and HEC developed the SR systems in close neighbourhood but independently of each other.

If we take into account that only HEC languages adjacent to SR marking North Omotic languages have SR, while many North Omotic languages have SR *without* being adjacent to HEC (e.g. Bench, Sheko), we are left with only one plausible explanation: SR marking in HEC is the result of language contact with Omotic languages. Since SR is not found in all HEC languages, the borrowing of SR must have happened after the HEC languages split up from their ancestor language Proto-HEC.

It is known from other areas in the world that SR marking can be subject to areal diffusion across genetically unrelated (or only very distantly related) languages. Stirling (2006: 318) refers to works on American, Australian and Papuan languages, some of which have acquired SR systems under the influence of their neighbours. In the case of the North Omotic-HEC contact it remains to be investigated whether it is more reasonable to assume that the SR marking morpheme itself was borrowed together with the SR concept or whether we are dealing with contact-induced grammaticalisation (Heine and Kuteva, 2003) by which a language's own material was reanalysed as SR morphology. In the following, I will review three possible diachronic scenarios.

Scenario 1: HEC took over the SR concept and the SR morphology from Omotic languages.

This scenario seems not too imaginative as an explanation for the SR morphology in Kambaata-Alaaba and, with reservations, Hadiyya. Looking at the DS sequential converb endings of Yemsa in (38), *-aa-nā* vs. *-aa-nī* vs. *-aa-n* (§5.2), they are not too different from Alaaba *-aani* (cognate to Kambaata *-ya*[*a*]*n*), on the one hand, and perhaps Hadiyya *-aa*(*-re*), on the other hand. Note, however, that there is a significant geographical divide (Omo River), no direct contact and no known bilingualism between Yemsa and HEC, at least at present

[26] Note that the membership of South Omotic in the Omotic family is controversial (Azeb, 2008).

[27] Furthermore, no evidence of grammaticalised SR systems could be found in the descriptions of Ethio-Semitic languages, most of which have (a) converb(s) (Azeb and Dimmendaal, 2006a: 409-13). To the best of my knowledge, Surmic and other Nilo-Saharan languages spoken close to the Ethiopian borders do not have grammaticalised SR marking either although various Nilo-Saharan languages, e.g. Kunama and Nara, have converbs (Azeb and Dimmendaal, 2006a: 421f).

(Aklilu, 2002). This leaves us with the possibility that Kambaata borrowed the concept plus the DS morpheme from Central Ometo, because the language is a direct neighbour of two Central Ometo varieties, viz. Wolaitta and Dawro.[28] Along the Southern border of Kambaata, bilingualism between Kambaata and Wolaitta is not uncommon.[29] The DS morpheme is -(*i*)*n* in Wolaitta (possibly also in Dawro) and if one assumed that the final consonant of Kambaata -*ya*[*a*]*n* went back to the Wolaitta DS morpheme, one could segment -*ya*[*a*]*n* into -*ya*[*a*] and -*n*; this would leave us with a morpheme -*ya*[*a*] of unknown function in Kambaata and an internal structure of the DS morpheme as in Hadiyya (-*aa-re*).[30]

Scenario 2: HEC languages developed SR morphology through a grammaticalisation process that was induced by Omotic languages.

At some point in time, HEC speakers who were also proficient in a SR marking Omotic language started to mark SR, a grammatical category that was until then absent in their language. For this purpose, (a) morpheme(s) from the language's own resources was/were grammaticalised. This scenario seems most plausible for Sidaama, in which a conjunctive enclitic 'and' was reanalysed as a DS morpheme. With respect to Kambaata, Alaaba and Hadiyya no hypotheses about possible diachronic sources of the DS morphemes can so far be formulated.

Scenario 3: Under the influence of Omotic languages, HEC languages reinterpreted a grammatical opposition that was already marked on converbs as marking SR.

One could hypothesise that Kambaata, Alaaba and Hadiyya once made a distinction between "long" and "short" converbs, as it is attested in East Gurage language (Semitic) spoken in close proximity, and that they reinterpreted this opposition as marking SR. In Wolane (East Gurage),[31] short converbs (CV1) are marked with the suffix -*ɛ* and long converbs (CV2) with the suffix -*āni* (the macron marks a long vowel). The short converb signals a tight semantic link between the event expressed in the converb clause and the next following clause (see the first converb in (42)), whereas the long converb simply encodes an anterior but conceptually separable event (Meyer, 2006: 131ff, 265-70).

(42) [...] *dəggəs* *y-bɛl-y-ɛ* *y-sɛč-y-āni*
feast 3m-eat.IPV-3mO-CV1 3m-drink.IPV-3mO-CV2
bibbi *ʔənn(ɛ)-ʔazɛr* *bētɛn-nim* *y-yēnz-u-ɛ*
LOC.this this-side married_life-3pPOSS 3p-hold.IPV-p-CV1
nəbər-nim *y-qēt'-t'l-u-ān.*
life-3pPOSS 3p-continue.IPV-p-AUX.NP
'[...] one gives a feast [DS →] and afterwards they (the widow and her new husband) start their married life and continue (this way) their life.' (Meyer, 2006: 270)

As conceptual and temporal separability often involves the two events being carried out by different agents, the subjects of a long converb and its controlling verbs are often different (42). Wolane cannot be analysed as having grammaticalised SR in the converb domain (there is just a *correlation* between SS and short forms and between DS and long

[28] No grammatical description of Dawro is so far available.
[29] This statement is only based on my own (very subjective) observations!
[30] In synchronic Kambaata, however, there is no reason to segment the DS morpheme into two parts.
[31] I am grateful to Ronny Meyer (2011 p.c.) for directing me to the converb system of Wolane. Wolane is closely related to Silt'e, which is in intensive contact with Alaaba. Silt'e does not border on Kambaata (at least today) but its earlier influence on Kambaata is visible in lexical and grammatical domains (Treis, 2005: 10; Treis, 2007: 95).

forms) but we can see a functional parallel between the short/long converbs in Wolane and SS/DS converbs in SR marking languages. What is more, the Wolane long converb ending is almost identical to the DS morpheme of Alaaba *-aan*^{i} and Kambaata *–ya*[*a*]*n*.

At the present state of knowledge, it is very difficult to evaluate the plausibility of the three scenarios given above. To compound matters further, what can be true for one HEC language does not have to be true for another, because the DS morphemes in HEC are not (all) cognate (§4.2) and it is well imaginable that only one language (or only some languages) developed SR under Omotic influence and then passed it on to (an)other HEC language(s). Thus SR could have been first developed in Kambaata/Alaaba and Hadiyya and then been induced in Sidaama, where the origin of the DS morpheme is still transparent.

7. Conclusion

Contrary to the impression that one gets from the typological literature on SR, the present article has shown that there are *many* canonical SR marking languages in Africa. These languages are found in a geographically contiguous area in the Southwest of Ethiopia. Most SR marking languages belong to the Omotic language family. The perusal of all available sources has revealed that there are at least nine Omotic languages with a grammaticalised SR system. Given the sketchy and/or superficial knowledge that we have of many Omotic languages at the present moment, it is likely, as the documentation progresses, that more SR marking Omotic languages will become known in the future.

In the Cushitic language family, SR marking is restricted to four Highland East Cushitic languages and it has been argued here that SR was developed in these languages under the influence of neighbouring Omotic languages. To the best of my knowledge, the development of SR in Cushitic is the first unequivocal evidence of Omotic influence on the grammar of Cushitic languages discussed in the literature. But although the direction of influence (from Omotic to Cushitic) could plausibly be determined, the present article could only formulate hypotheses about the exact historical scenario that led to SR marking in Cushitic languages. Apart from the Sidaama case, there is no clear evidence to decide on whether we are dealing only with a case of conceptual borrowing (calquing) or also with a case of morpheme borrowing. A study of regional variants of the Central Ometo cluster and Yemsa (Omotic) on the one hand and of Kambaata and Hadiyya varieties (Cushitic) on the other hand may help us solve this question in the future.

We have hardly any knowledge about synchronic or diachronic patterns of multilingualism in the North Omotic-HEC contact zone. But irrespective of whether the SR concept was borrowed with or without the phonological material, it was only borrowable if a significant number of HEC speakers were Omotic-HEC bilinguals in the past or if significant numbers of previously Omotic speaking people shifted to HEC and took along a grammatical category that was made in the Omotic language that they were (once) fluent in.

Acknowledgments

Earlier versions of this paper were presented at Addis Ababa University (21 Jan 2011) and at the University of Hamburg (26 Jan 2011) and I am grateful for the constructive criticism that I received from the audiences. Research for this paper was supported in part by a La Trobe Post-doctoral Research Fellowship (2008-2011) and a “Research in Paris” Postdoctoral Fellowship (2011); this support is gratefully acknowledged. I am indebted to Tessema Handiso, Deginet Wotango, Dutse Tamiru, Tiyitu Taddese and all other Kambaata and Baskeet speakers that I have been working with in the past years. Sincere thanks go to Martine Vanhove, Marie-Claude Simeone-Senelle and two anonymous reviewers for helpful

comments on an earlier version of this paper. The map in Fig. 7 is based on a work by Monika Feinen. Danielle Bonardelle provided editorial assistance for this paper. All remaining shortcomings and errors are mine.

Abbreviations

ABL	ablative
ABS	absolutive
ACC	accusative
A:DCL	affirmative declarative
ASS	assertive
AUX	auxiliary
COND	conditional
CONT	continuous
COP	copula
CQ	content question
CRD	coordination
CS	causative
CV	converb
DAT	dative
DEF	definite
DS	different subject
f	feminine
FOC	focus
GEM	gemination
GEN	genitive
hon	honorific/impersonal
ICO	imperfective converb
ICP	instrumental-comitative-perlative
IMP	imperative
INS	instrumental
IPV	imperfective
J	juncture
JUS	jussive
LOC	locative
LOG	logophoric pronoun
m	masculine
MED	meditative
MID	middle
n	unanalysed pragmatically determined morpheme (Kambaata)
NCO	negative converb
NEG	negation
NIPV	non-imperfective
NMZ	nominalisation
NOM	nominative
NP	non-past
O	object
OBL	oblique
p	plural
PAL	palatalisation

PCO	perfective converb
PL	plurative
POSS	possessive
PP	present perfect
PRF	perfect
PROG	progressive
PS	passive
PURP	purposive
PV	perfective
PVE	e-perfective
PVO	o-perfective
Q	question
REL	relative
RLT	relational case
s	singular
S	subject
SbjAgr	subject agreement
SG	singulative
SP	simple perfect
SR	switch-reference
SS	same subject
SUB	subordinate
TEMP	temporal clause
TV	terminal vowel
VV	vowel lengthening

References

Aklilu Yilma. 2002. *Pilot Survey of Bilingualism in Yem*. Dallas, TX: SIL International.

Azeb Amha. 2001. *The Maale Language*. Leiden: CNWS.

Azeb Amha. 2008. *Omotic Languages*. Ms.

Azeb Amha. 2009. The morphosyntax of negation in Zargulla. In Leo Wetzels (ed.), *The Linguistics of Endangered Languages. Contributions to Morphology and Morphosyntax*, 199-220. Utrecht: LOT.

Azeb Amha and Gerrit J. Dimmendaal. 2006a. Converbs in an African perspective. In Felix K. Ameka, Alan Dench, and Nicholas Evans (eds.), *Catching Languages. Issues in Grammar writing*, 393-440. Berlin: Mouton de Gruyter.

Azeb Amha and Gerrit J. Dimmendaal. 2006b. Verbal compounding in Wolaitta. In Alexandra Y. Aikhenvald and R.M.W. Dixon (eds.), *Serial Verb Constructions. A Cross-linguistic Typology*, 319-337. Oxford: OUP.

Austin, Peter. 1981. Switch-reference in Australia. *Language* 57, 2: 309-334.

Beachy, Marvin Dean. 2005. *An Overview of Central Dizin Phonology and Morphology*. MA thesis, University of Texas at Arlington.

Bender, M. Lionel. 2000. *Comparative Morphology of the Omotic Languages.* Munich: LINCOM.

Bender, M. Lionel. 2003. Northeast Africa: A case study in genetic and areal linguistics. *Annual Publications in African Linguistics* 1: 21-45.

Binyam Sisay Mendisu. 2010. *Aspects of Koorete Verb Morphology.* Cologne: Köppe.

Breeze, Mary J. 1990. A sketch of the phonology and grammar of Gimira (Benchnon). In Richard J. Hayward (ed.), *Omotic Language Studies*, 1-67. London: School of Oriental and African Studies.
Comrie, Bernard. 1998. Reference-tracking: description and explanation. *Sprachtypologie und Universalienforschung* 51, 1: 335-346.
Crass, Joachim. 2005. *Das K'abeena. Deskriptive Grammatik einer hochlandostkuschitischen Sprache*. Cologne: Köppe.
Crass, Joachim. 2006. Ethiopia as a linguistic area. In Keith Brown (ed.), *Encyclopedia of Language and Linguistics*, vol. 4, 231-35. Amsterdam: Elsevier.
Crass, Joachim and Walter Bisang. 2004. Einige Bemerkungen zum äthiopischen Sprachbund und ihre Relevanz für die Areallinguistik. In Walter Bisang, Thomas Bierschenk, Detlev Kreikenborn, and Ursula Verhoeven (eds.), *Kultur, Sprache, Kontakt*, 169-198. Würzburg: Ergon.
Crass, Joachim and Ronny Meyer (eds.). 2007. *Deictics, Copula and Focus in the Ethiopian Convergence Area.* Cologne: Köppe.
Crass, Joachim and Ronny Meyer. 2008. Ethiopia. In Bernd Heine and Derek Nurse (eds.), *A Linguistic Geography of Africa*, 228-249. Cambridge: Cambridge University Press.
Crass, Joachim and Ronny Meyer (eds.). 2009. *Language Contact and Language Change in Ethiopia.* Cologne: Köppe.
Curnow, Timothy C. 2002. Three types of verbal logophoricity in African languages. *Studies in African Linguistics* 31, 1-25.
Ebert, Karen H., Johanna Matthissen and Raphael Suter (eds.). 2008. *From Siberia to Ethiopia. Converbs from a Cross-linguistic Perspective*. Zürich: Universität Zürich, Seminar für Allgemeine Sprachwissenschaft.
Ferguson, Charles A. 1976. The Ethiopian language area. In M. Lionel Bender, J. Donald Bowen, R.L. Cooper, and Charles A. Ferguson (eds.), *Language in Ethiopia*, 63-76. Oxford University Press.
Gragg, Gene. 1976. Oromo of Wellega. In M. Lionel Bender (eds.), *The Non-Semitic Languages of Ethiopia,* 166-195. East Lansing, MI: African Studies Center, Michigan State University.
Güldemann, Tom. 2003. Logophoricity in Africa: An attempt to explain and evaluate the significance of its modern distribution. *Sprachtypologie und Universalienforschung* 56, 4: 366-387.
Hagège, Claude. 1974. Les pronoms logophoriques. *Bulletin de la Société de Linguistique de Paris* 69: 287-310.
Haiman, John. 1983. On some origins of switch-reference marking. In John Haiman and Pamela Munro (eds.), *Switch-reference and Universal Grammar*, 105-128. Amsterdam, Philadelphia: Benjamins.
Haiman, John and Pamela Munro (eds.). 1983a. *Switch-reference and Universal Grammar*. Amsterdam, Philadelphia: Benjamins.
Haiman, John and Pamela Munro. 1983b. Introduction. In John Haiman and Pamela Munro (eds.), *Switch-reference and Universal Grammar*, ix-xv. Amsterdam, Philadelphia: Benjamins.
Hayward, Richard J. 1982. Notes on the Koyra language. *Afrika und Übersee* 65, 2: 211-268.
Hayward, Richard J. 1990a. Notes on the Zayse language. In Richard J. Hayward (ed.), *Omotic Language Studies*, 210-335. London: School of Oriental and African Studies.
Hayward, Richard J. 1990b. Notes on the Aari languages. In Richard J. Hayward (ed.), *Omotic Language Studies*, 425-493. London: School of Oriental and African Studies.
Heine, Bernd and Tania Kuteva. 2003. On contact-induced grammaticalisation. *Studies in Language* 27, 3: 529-72.

Hellenthal, Anne-Christie. 2010. *A Grammar of Sheko*. Utrecht: LOT.
Hirut Woldemariam. 2003. *A Grammar of Haro with Comparative Notes on the Ometo Linguistic Group*. PhD thesis, Addis Ababa: Addis Ababa University.
Hudson, Grover. 1989. *Highland East Cushitic dictionary*. Hamburg: Buske.
Hyman, Larry M. and Bernard Comrie. 1981. Logophoric reference in Gokana. *Journal of African Languages and Linguistics* 3, 1: 19-37.
Kambaatissata. Rosaanchi maxaafa. [Kambaata language. School book.] 1989 E.C. Grade 1-8. Southern Nations, Nationalities, and Peoples Regional State: Education Bureau.
Kawachi, Kazuhiro. 2007. *A Grammar of Sidaama (Sidamo), a Cushitic language of Ethiopia*. PhD thesis, University at Buffalo, State University of New York.
Kutsch-Lojenga, Constance. 1994. *Ngiti. A Central-Sudanic Language of Zaire*. Cologne: Köppe.
Lamberti, Marcello. 1993. *Die Shinasha-Sprache. Materialien zum Boro.* Heidelberg: Winter.
Leslau, Wolf. 1945. The influence of Cushitic on the Semitic languages of Ethiopia: A problem of substratum. *Word* 1, 1: 59-82.
Lydall, Jean. 1976. Hamar. In M. Lionel Bender (ed.), *The Non-Semitic Languages of Ethiopia*, 393-438. East Lansing, MI: African Studies Center, Michigan State University.
Meyer, Ronny. 2006. *Wolane. Descriptive Grammar of an East Gurage Language (Ethiosemitic)*. Cologne: Köppe.
Mulugeta Seyoum. 2008. *A Grammar of Dime.* Utrecht: LOT.
Noonan, Michael. 1992. *A Grammar of Lango*. Berlin: Mouton de Gruyter.
Owens, Jonathan. 1985. *A Grammar of Harar Oromo (Northeastern Ethiopia)*. Hamburg: Buske.
Perrett, Denise Lesley. 2000. *The Dynamics of Tense Construal in Hadiyya*. PhD thesis, London: University of London.
Rapold, Christian. 2008. Medial verbs in Benchnon. In Karen H. Ebert, Johanna Matthissen and Raphael Suter (eds.), *From Siberia to Ethiopia. Converbs from a Cross-linguistic Perspective*, 155-183. Zürich: Universität Zürich, Seminar für Allgemeine Sprachwissenschaft.
Roberts, John R. 1997. Switch-reference in Papua New Guinea: A preliminary survey. In Andrew Pawley (ed.), *Papers in Papuan Linguistics 3*, 101-241. Canberra: Research School of Pacific and Asian Studies, Australian National University.
Rottland, Franz. 1990. A sketch of Shinasha morphology. In Richard J. Hayward (ed.), *Omotic Language Studies*, 185-209. London: School of Oriental and African Studies.
Schneider-Blum, Gertrud. 2007. *A Grammar of Alaaba, a Highland East Cushitic Language of Ethiopia*. Cologne: Köppe.
Sim, Ronald J. 1989. *Predicate Conjoining in Hadiyya. A Head-Driven PS grammar*. PhD thesis, University of Edinburgh.
Stirling, Lesley. 1983. *Switch-reference and Discourse Representation*. Cambridge: Cambridge University Press.
Stirling, Lesley. 2006. Switch-reference. In Keith Brown (ed.), *Encyclopedia of Language and Linguistics*, vol. 12, 316-323. Amsterdam: Elsevier.
Taylor, Nicholas. 1994. *Gamo Syntax*. PhD thesis, University of London.
Theil, Rolf. Forthcoming. Is Omotic Afroasiatic? A critical discussion. *Proceedings of the David Dwyer Retirement Symposium, Michigan State University, East Lansing, 21 October 2006*.
Tosco, Mauro. 2000a. Cushitic overview. *Journal of Ethiopian Studies* 33, 2: 87-121.
Tosco, Mauro. 2000b. Is there an "Ethiopian Language Area"? *Anthropological Linguistics* 42, 3: 329-365.

Tosco, Mauro. 2008. What to do when you are unhappy with language areas but you do not want to quit. *Journal of Language Contact* 2: 112-123.
Treis, Yvonne. 2005. Avoiding their names – avoiding their eyes: How Kambaata women respect their in-laws. *Anthropological Linguistics* 47, 3: 292-320.
Treis, Yvonne. 2007. Copulas in Kambaata. In Joachim Crass and Ronny Meyer (eds.), *Deictics, Copula and Focus in the Ethiopian Convergence Area*, 71-97. Cologne: Köppe.
Treis, Yvonne. 2008. *A Grammar of Kambaata. Part 1: Phonology, Morphology, and Non-verbal Predication*. Cologne: Köppe.
Treis, Yvonne. Forthcoming. Purpose clauses in Kambaata. *Afrika und Übersee*
Wiesemann, Ursula. 1982. Switch-reference in Bantu languages. *Journal of West African Languages* 12, 2: 42-57.
Wedekind, Klaus. 1990. *Generating Narratives. Interrelations of Knowledge, Text Variants and Cushitic Focus Strategies.* Berlin: Mouton de Gruyter.
Zaborski, Andrzej. 1991. Ethiopian language subareas. In Stanisław Piłaszewicz and Eugeniusz Rzewuski (eds.), *Unwritten testimonies of the African past* (Orientalia Varsoviensia, 2), 123-134. Warszaw: Wydawnictwa Uniwersytetu Warszawskiego.
Zaugg-Coretti, Silvia. 2008. Converbs in Yemsa (Omotic, Ethiopia). In Karen H. Ebert, Johanna Matthissen and Raphael Suter (eds.), *From Siberia to Ethiopia. Converbs from a Cross-linguistic Perspective*, 221-255. Zürich: Universität Zürich, Seminar für Allgemeine Sprachwissenschaft.

Tables

Table 1. Inflectional categories on main verbs and dependent verbs in Kambaata

	Main verbs		Relative verbs		Converbs	
Subject Agreement	1s 2s 3m 3f/3p 3hon	1p 2hon/2p	1s 2s 3m 3f/3p 3hon	1p 2hon/2p	1s/3m 2s/3f/3p 3hon	1p 2hon/2p
Aspect	Imperfective Progressive *e*-Perfective *o*-Perfective		Imperfective Progressive *e*-Perfective *o*-Perfective		Imperfective Perfective	
Mood	Indicative Imperative/Jussive Preventive		--		--	

Table 2. Kambaata converb paradigms

			Perfective	Imperfective	Negative*
1s	3m		´(GEM/PAL)-∅ ~ -∅-*í*	-∅-*án*	-∅-*ú'nna*
2s	3f	3p	´-t	-t-*án*	-t-*ú'nna*
3hon			-éen	-een-*án*	-een-*ú'nna*
1p			´-n	-n-*án*	-n-*ú'nna*
2p	2hon		-téen	-teen-*án*	-teen-*ú'nna*

*The morpheme -*ú'nna* is in free variation with -*u'nnáachch* (16) and -*u'nnáan* (14).

Table 3. Structure of Kambaata SS and DS converbs

	SS	DS
PCO	SbjAgr[#]	SbjAgr[#]-*yan*
ICO	SbjAgr-*án*	SbjAgr-*án(i)-yan*
NCO	SbjAgr-*ú'nna*	

[#] The stem-final consonant is palatalised and/or geminated in the 1s and 3m forms.

Figures

Figure 1. Sequence of controlled and controlling clause.



Figure 2. Discontinuous controlling clauses.

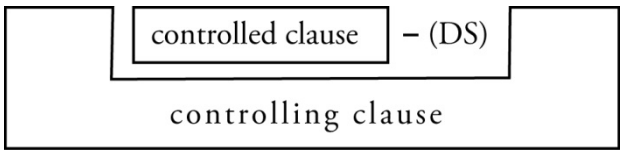


Figure 3. Multiple converb sequences.

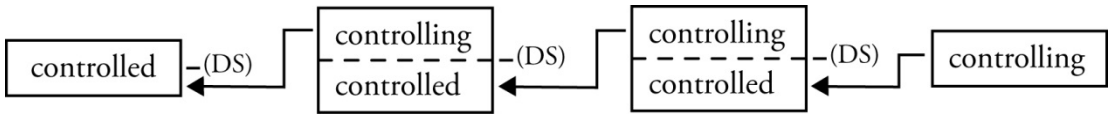


Figure 4. Clause skipping.



Figure 5. The subdivisions of Cushitic (acc. to Tosco 2000a: 108)

- Beja (North Cushitic)
- Agaw (Central Cushitic)
- East Cushitic
    - *Highland East Cushitic*
    - Lowland East Cushitic
        - Southern
            - Nuclear
                - Omo-Tana (a.o. Somali)
                - Oromoid (a.o. Oromo)
            - Transversal
                - Dullay
                - Yaaku
        - Saho-Afar
    - Dahalo
    - South Cushitic

Figure 6. Classification of Omotic (acc. to Bender 2000)

- South Omotic (Aroid)
- North Omotic
  - Mao
  - *Dizoid*
  - *Gonga-Gimojan*
    - Gonga (Kefoid)
    - Gimojan
      - Yemsa
      - Ometo-Gimira
        - Bench
        - Chara
        - Ometo
          - North
          - West
          - South
          - East

Figure 7. Ethiopian languages with switch-reference systems

