Cushitic

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1. Geographical distribution and speakers

The Cushitic family consists of more than thirty languages spoken in Northeastern and Eastern Africa. *Ethnologue* (Gordon 2005) mentions forty-seven languages because it distinguishes six Oromo languages and six Somali languages. The Cushitic languages fall into a number of groups: Beja; the Agaw or Central Cushitic languages: Awngi, Bilin, Khamtanga, Kemant, Xamir and a number of smaller endangered languages including those of the Falashas, the Ethiopian Jews; the Highland East Cushitic languages: Kambaata-T'imbaaro-Alaaba-K'abeena, Hadiyya-Libido, Sidamo, Gedeo and Burji; the Lowland East Cushitic languages: Afar, Saho; Oromo, Konso, Dirayta; Dhaasanac, Arbore, Elmolo; Yaaku; Bayso; Dullay (Harso-Dopase, Gawwada-Gulango, Ts'amakko); Rendille, Boni, Somali; and the South Cushitic languages: Dahalo; Aasáx, Kwadza, Burunge, Alagwa, Gorwa, and Iraqw. I do not include the mixed language Ma'a/Mbugu in this overview. This is a language classified as (South) Cushitic on the basis of its lexicon and its historical origin. The people once spoke a Cushitic language, shifted to a Bantu language and tried to shift back by creating a parallel lexicon with root forms from their original language, from Maasai, from Gorwa and from their dominant Bantu language but manipulated in form; see Mous (2003). Regardless of one's views on classification of this mixed language, typologically the language is Bantu.

There is a separate chapter on Omotic languages. Omotic is not taken to be part of Cushitic, as it is in some proposals for classification. This does not reflect a point of view on the part of this author, who actually has no opinion on this issue. The separation of Omotic and Cushitic makes the writing of the respective chapters definitely more manageable. The debate on the classification of Omotic is dealt with in the chapter on Omotic.

Many variants of language names exist in the literature. Only the most common ones that may lead to confusion are given here with the variant that is used in this paper first: Gedeo = Darasa, Oromo = Galla, Boni = Aweer, Dirayta = Gidole, Yaaku = Mokogodo, Alagwa = Wasi, Aasáx = Aramanik. The following are simply spelling variants: Afar = Qafar = 'Afar, Khamtanga = Xamtanga, Bilin = Blin.

The northernmost and easternmost language is Beja, spoken in Sudan and Eritrea. See map 1Other Cushitic languages spoken in Eritrea are Saho and Bilin; and in Djibouti, Afar. The bulk of the Cushitic languages are spoken in Ethiopia. Kenya has several Cushitic languages: Dahalo, Elmolo, Yaaku, and several dialects of Oromo (Boraana, Orma, Waata). The southernmost Cushitic languages are spoken in Tanzania: Aasáx, (Kwadza),Alagwa, Burunge, Gorwa, Iraqw.

According to calculations by the Moscow school of glottochronology and long-range comparison, the time-depth of Cushitic is deeper than that of any other branch of Afroasiatic (Militariev 2005). Despite this time-depth, the Cushitic languages are typologically relatively homogeneous. In the main Cushitic-speaking area, the languages are in contact mainly with other related languages, Cushitic or Ethio-Semitic. In the more southern areas, the languages are, and have been, in contact with unrelated languages, mainly Bantu and Nilotic. There must have been intensive contacts between Cushitic languages and Nilotic languages at several points in time and space. In fact, Heine et al. (1979) postulated a now-extinct Cushitic language, proto-Baz, on the basis of loan words in Nilotic languages, and similarly now-extinct Cushitic languages have been hypothesized in the Taita hills of Kenya

(Ehret and Nurse 1981). Nurse (1988) and Ehret (1998) argue for a number of now-extinct South Cushitic languages in Tanzania on the basis of loan word evidence in Bantu languages. The intensive contact between Cushitic languages and Ethio-Semitic languages in the highlands of Ethiopia has led to the proposal of an Ethiopic *Sprachbund* (among others, Ferguson 1970). The validity of the *Sprachbund* and the nature of the observed similarities has been critically discussed by Tosco (2000b).

The Cushitic languages vary greatly in number of speakers. The largest is Oromo, with more than 20 million speakers according to Ali and Zaborski (1990), and the second-largest is Somali, with more than 7 million speakers. Estimates of the numbers of speakers for these largest Cushitic languages diverge immensely due to political factors that are involved. The Oromo language has spread enormously in the past and is spoken over a vast area in Ethiopia and Kenya. Oromo was for a long time the lingua franca of Southern Ethiopia, but this role is now taken over by Amharic. Somali is the official language of Somalia, but also spoken in all neighbouring countries. Somali became a fully functioning official language used in education at all levels in a remarkably short period of time (Laitin 1977). Somali and Oromo are both taught in several places in the world and teaching material is available. Afar, Beja, Hadiyya, Kambaata and Sidaamo have each about a million speakers or more. Awngi, Khamtanga, Konso, Iraqw have 100,000 speakers or more. The other languages have fewer speakers, and some of them are endangered: Yaaku and Elmolo in Kenya have only a handful of very old (semi-) speakers left. In Tanzania, Kwadza is extinct and the situation of Aasáx is unclear (Winter 1979). The Agaw languages Kunfäl and Kailina (Appleyard 1996, 1999), and Kemant (Zelealem 2003) are highly endangered.

The Cushitic peoples traditionally depend on animal husbandry and agriculture. Several groups such as the Afar, Arbore, Beja, Bayso, Dhaasanac, various Oromo groups, Rendille, and Somali have specialised in transhumant animal husbandry; others such as the Konso, Iraqw, Dullay, and Highland East Cushitic groups have a highly developed agricultural economy. Some were specialised in hunting: Dahalo, Yaaku, Aasáx, Kwadza, Boni, and Elmolo (fishermen).

In Ethiopia the Ethiopic script is used for a number of Cushitic languages. Oromo has opted for a Latin-based script. In Somali the choice was ultimately for a Latin base too. The pharyngeal sounds pose problems for those languages that have them. Somali uses *c* for the voiced pharyngeal fricative, as in the name *Cali*; Afar uses *q* as in the language name *Qafar*; Iraqw uses */*. In this chapter the official orthographies of Somali and Oromo are used when the sources do so, but otherwise I use ‘ for this sound. The voiceless pharyngeal is rendered *x* in Somali, *c* in Afar, *hh* in Iraqw and *ħ* in this chapter; except for where the source uses the official orthography. I use double symbols for length and the following symbols for consonants: C’ for ejectives and implossives, *ɖ* for the retroflex *d*, *sh* for the palatal fricative and *ɬ* for the voiceless fricative; see the section 4.4 on consonants.

2. Internal classification

The present state of insight into the internal subclassification of Cushitic is given in Tosco (2000a); see Figure 1. A historical overview of Cushitic classifications can be found in Lamberti (1991). The main issues regarding Cushitic internal classification are the position of South Cushitic and the relationship between Highland East Cushitic and Central Cushitic (Agaw). Hetzron (1980) proposed the inclusion of South Cushitic in East Cushitic on morphological grounds, and most experts would agree. Ehret, for example, has changed his position on this; compare Ehret (1980)

with Ehret (1987). The actual position of South within East is difficult to establish due to the lack of lexical correspondences (Kießling and Mous 2003) and also because of the anomaly of the presence in South Cushitic of a lateral fricative and affricate which is claimed to be cognate with Afroasiatic laterals (Dolgopolsky (1987), Takacs (2000)). Kießling (2001) reviews Hetzron's arguments for the inclusion of South in East on the face of new data and insights, specifically in South Cushitic. Hence in the tree in Figure 1 South appears tentatively at the highest level or as a branch within East Cushitic. The positions of Bayso and Yaaku within Lowland East Cushitic are not clear, but the data for these languages are limited. Blažek and Tosco (1994) have proposed a closer link between Dahalo and Yaaku. The classification of Burji as Highland East Cushitic had been obscured by the various ways in which Burji participates in the Dullay-Konsoid-Burji contact area (Sasse 1986).

Most of the debate on classification is about external matters: the genetic relation of Omotic as separate or part of Cushitic (see chapter on Omotic) and the position of Beja as a Cushitic language or a separate branch. In the Tsamay area there is a language, Ongota (or Birale), that has so far escaped classification; see Savà and Tosco (2000a).

Figure 1 here.

Figure 1: Cushitic family tree (Tosco 2000a)

Cushitic phonological and lexical reconstruction is very much "in progress". Lowland East Cushitic lexicon and phonology was reconstructed by Paul Black in his unpublished PhD thesis, and the phonology of Proto East Cushitic was reconstructed by Sasse (1979). Heine (1979) has reconstructed proto-Sam (Somali-Boni-Rendille). South Cushitic has been reconstructed by Ehret (1980) and recently in more detail by Kießling (2002) and Kießling and Mous (2003). The Highland East Cushitic lexicon has been reconstructed by Hudson (1986). A reconstruction of the Agaw languages has recently become available (Appleyard 2006). Blažek is working on an etymological dictionary of Beja (Blažek 2003). Ehret has published a lexical and phonological reconstruction of Cushitic (Ehret 1987), and Arvanites (1991), of the glottalic consonants of Cushitic.

3. Scholarship on Cushitic

There is no comprehensive up-to-date bibliography of Cushitic languages. For Somali one can use Lamberti (1986a) and M Diriye Abdulahhi's website (Diriye 2002); for Highland East Cushitic there is the Bibliography of Highland East Cushitic (Hudson 2006). Publications on Cushitic languages can be found in general African languages journals such as the ones mentioned in the chapter on Chadic, and in the *Journal of Ethiopian Studies,* and in the now-discontinued journals and series: AfroAsiaticLanguages, Journal of Afro-Asiatic Languages, Rassegni di Studi Etiopici. There are regular conferences on Cushitic and Omotic studies: Bonn (Bechhaus-Gerst and Serzisko 1988), Torino, Berlin (Griefenow-Mewis and Voigt 1996), Leiden (Amha, Mous, Savà 2007) and Paris in 2008. Introductions and overviews on Cushitic can be found in Palmer (1970), Hodge (1971), Flemming (1976), Zaborski (1987), Sasse (1981, 1987a, 1987b), Cohen (1988), Tosco (2000a), and Gragg (2001). Palmer (1970) gives an overview of the historical development of Cushitic studies, and Zyhlarz (1956) explains the origin of the term "Cushitic".

In the following list I give the most important descriptive works (grammar, dictionary, texts) for each language. The list is selective and criteria vary by language. More references do not mean better described. For most languages there is some data available or will soon be available. There remain a number of languages that are in need of description: Bayso, Bilin, Boni, Burji, Harso-Dopase in Dullay, and Bussa (Mosiye); more detailed studies are definitely necessary for Arbore, Dahalo, Rendille and Saho; for the highly endangered languages Aasáx, Elmolo and Yaaku description is very urgent or too late.

Beja: Roper 1928, Hudson 1964, Morin 1995, Wedekind, Wedekind and Musa 2003, various articles by Vanhove.
Agaw as a whole: Hetzron 1976, various articles by Appleyard.
- Awngi: Hetzron 1969; Kunfal
- Bilin: various articles by Palmer, Kiflemariam Hamde 1993
- Kemant: Zelealem 2003, Appleyard 1975
- Khamtanga: various articles by Appleyard

Highland East Cushitic: Gebre-Tsadik et al. 1985
- Hadiyya: Sim 1981, 1989 various articles by Plazikowsky-Brauner
- Kambaata-K'abeena-Alaba: Crass 2005, Schneider-Blum 2006, Treis (unpublished)
- Sidamo: Moreno 1940, Gasparini 1983, Wedekind 1980, Anbessa Teferra 2000, Kawachi 2007.
- Gedeo (=Darasa): Gasparini 1994, Wedekind 1990
- Burji: Sasse 1982

Lowland East Cushitic:
- Afar-Saho: Bliese 1981, Hayward 1998, Parker and Hayward 1985, various articles by Hayward
- Yaaku: Heine 1975
- Dullay: Amborn et al. 1980, Savà 2005, Tosco (unpublished)
- Oromoid:
  - Oromo: Ali and Zaborski 1990, Argaw and Philippson. 1988 [1991], Baye 1987, 1988, Clamons 1992, Gragg 1982, Lloret 1988, Owens 1985a, Stroomer 1987, 1995.
  - Konso-Dirayta: Black and Shako Otto 1973, Black 1973, Bliese and Sokka Gignarta 1986, Wondwosen 2006.
- Omo-Tana:
  - Dhaasanac: Tosco 2001
  - Arbore: Hayward 1984a
  - Elmolo: Heine 1980
  - Bayso: Hayward 1978a, Lamberti and Haberland 1988
  - Rendille: Oomen 1978, 1981, Pillinger and Galboran 1999, Schlee 1978, Sim 1981
  - Boni: Heine 1982, Sasse 1980
  - Somali: Andrzejewski with Sheila Andrzejewski 1993, Andrzejewski and Lewis 1964, Johnson 1974, Laitin 1977, Lamberti 1986a, 1986b, 1986c, Luling 1987, Puglielli et al. (eds.) 1985, 1998, Puglielli 1981, 1984, Saeed 1984, 1987, 1999, Serzisko 1984, Tosco 1997

South Cushitic:
- Dahalo: Tosco 1991

Alagwa: Mous (unpubished).
Burunge: Kießling 1994
Iraqw: Mous 1993, Mous, Qorro and Kießling 2002, Berger and Kießling (ed.) 1998.

4. Phonology

4.1. Syllable structure and word structure constraints

Cushitic languages have open and closed syllables. Most languages do not allow an empty onset; the onset is minimally filled with a glottal stop. Onsets are usually simple and consist of one consonant. For example, in Arbore onsets and codas contain maximally one consonant if we disregard glides and laryngeals (Hayward 1984a: 58). The coda allows the same set of consonants as the onset and is also simple: either empty or consisting of one consonant.

Word-internal consonant sequences are limited. They are either geminate ambisyllabic consonants or sequences of two consonants that obey the sonority hierarchy as in Arbore {glide/vibrant} < lateral < nasal < spirant < stop (Hayward 1984a: 60), and in Dhaasanac liquid < nasal < fricative < coronal stop < non-coronal stop (Tosco 2001: 51-53); in K'abeena the first consonant of a word-initial series is either the glottal stop or a sonorant (Crass 2005: 38).

A number of Highland East Cushitic languages and Bayso have sequences of glottal stop and sonorant that are sometimes analysed as complex phonemes; see Hudson (1989: 11ff), Cerulli (1938: 41), and sometimes as sequences of two phonemes. Hayward (1978a: 543) discusses both analyses for Bayso and opts for the complex phoneme solution on the basis of syllable structure and the variation in phonetic realisation of the glottalized labial obstruent [ʔb] ~ [p']. K'abeena has 'l, 'm, 'n, 'r, 'y, which are analysed as consonant sequences by Crass (2005: 39). These complexes generally arise through metathesis, but in Hadiyya *'l* sequences arise through dissimilation of *l-t* in which *-t* is the 2sg/3f agreement suffix; see Sim (1989: 14-15); however, non-derived *'l* sequences exist as well.

Due to rich morphological systems, words are often long even if the roots are relatively short. Vowel epenthesis and vowel deletion are common processes when longer words are formed. Oromo (Lloret 1988), Somali (Saeed 1999: 26-27) and Iraqw have a rule that deletes the vowel of a short syllable between two (short) syllables if a morpheme boundary is involved, e.g. Iraqw *gawid-en* /difficult-PL/ → *gawden*, *lawala-u* → *lawlu* 'spears' (Mous 1993: 30). Various languages have root structure restrictions that involve the quality of the vowel (*e* or *o* versus *i*, *a*, *u*), length of the vowels and accent. For example, in Oromo there are strong tendencies to several co-occurrence restrictions on vowels in roots with the vowels being identical or alternatively either V1 or V2 is *a* (Owens 1985a: 16-17). These restrictions are violated at the word level and do not hold for loan words; thus they are more relevant for language history than for synchronic analysis.

The minimal word is a heavy syllable in Iraqw, which does not have CV words with a short vowel (Mous 1993: 26); K'abeena, however, allows CV words with a short vowel (Crass 2005: 35).

4.2. Accent and tone

The Cushitic languages are accentual or restricted tone languages. The distinction between tone languages and accent languages is not straightforward, because the term "accent" stresses the organisation of prominence in the word and the term "tone" stresses the physical realisation by pitch. Pillinger (1989) described Rendille as an accent language underlyingly and a tone language with downdrift on the surface. Somali has been analysed as a tonal-accent language by Hyman (1981); for Oromo see Andrzejewski (1970), Owens (1980) and Banti (1988); for Afar, Hayward (1991). There are a number of Cushitic languages in which tone does not play a role at all; they are purely accentual. Crass (2005) describes K'abeena as a language with stress on the ultimate or penultimate syllable depending on the status of the final vowel (whispered or fully voiced). Other Highland East Cushitic languages are also stress-accent languages. Whether stress, tone, or tonal-accent, for all Cushitic languages the role of prominence at the lexical level is minimal, but the role in morphology is considerable, also in the Highland East Cushitic languages; see Sasse (1981: 205) for such a characterisation of Cushitic tone. Lexical minimal pairs in tone exist for Iraqw and other South Cushitic languages but only marginally so, and partly because of a tone rule that derives names. For example, in Iraqw there are minimal pairs such as *konkomo* 'rooster' and *konkomó* 'insect sp.', *hlooro* 'foam' and *hlooró* 'locust sp.'; these words for insects show qualities of names, Mous (1993: 21). The tonal systems of the Agaw languages are fairly uncommon; Hetzron (1997: 483-489) describes Awngi as having four tones in which High and Mid are the most important ones compared to Low and High-Mid fall. Joswig (2006a: 17) reanalysed the Mid as a Low tone and Hetzron's Low tone as a contextually conditioned variant of his Low tone and Hetzron's Mid.

The role of tone in morphology and syntax is important. In Oromo, *hin* is a negative morpheme but *hín* is a focus morpheme. Tone is essential in case marking, in gender distinction, in verb conjugations, and so on. In Somali *lá* 'with' and *la* 'one, someone' and *ku* 'you' but *kú* 'in' differ in tone only (Saeed 1999: 42-43); these differences in tone are due to the fact that adpositional particles such as *lá* 'with' and *kú* 'in' have a high tone and tone is linked to this grammatical category. In Iraqw all definite nominal suffixes (possessives, demonstratives) are high toned (Mous 1993 21).

The Cushitic tone-accent languages are atypical accent languages in the sense that not all words contain an accent (high tone). For example, in Somali, the preverbal adverbial clitics *wada* 'together' and *kala* 'apart' are toneless. For some of the monosyllabic toneless grammatical morphemes, one could argue that they are clitics. However, there are also syntactic positions or functions that are marked by the fact that they are toneless. In the Southern Cushitic languages the majority of the nouns are toneless in all positions and receive tone only through suffixation of high-toned morphemes; Hayward (1984a: 98) notes the same for Arbore.

For none of the Cushitic languages is tone distinctive on every syllable of the word. Tone is distinctive on the final syllable(s). For example, for Somali, Saeed (1999: 42) distinguishes three accentual patterns or melodies: High on the last mora and Low elsewhere, High on the penultimate and Low elsewhere, and Low on all moras. Once the tone falls in a word, it is rare that it can rise again in the same word. But it does occur, for example, Arbore *lúkkutásut* 'his hens' (Hayward 1984a 99). It also occurs in Somali when a high-toned suffix is added to a word with a high tone on the penultimate, e.g. *gúrigíi* 'the house (remote)' (Saeed 1999: 43). High tones are at

the end of the lexeme (ultimate or penultimate) but due to suffixation with suffixes that impose a High tone, a word may end in a series of High tones, for example, Iraqw *gajéér-'éé-dá-r 'isa* /work-my-that-of yesterday/ 'that work of mine of yesterday'.

There are grammatical morphemes that consist of a (change in) tone only. The Beja first singular possessive is only a low tone and the third-person possessive only a high tone in the underlying form (Appleyard 1991: 7, based on Hudson 1976). In Somali, the subject case in many nouns is marked by removing the high tone and genitive case by shifting the high tone to the final mora, for example *díbi* 'bull absolutive' *dibi* 'bull masculine nominative', *dibí* 'bull genitive', *bisád* 'cat absolutive', *bisadi* 'cat feminine nominative', *bisád* 'cat genitive' (Saeed 1999: 44). Banti (1988) analyses the tone distinctions as accent feeding tone: the underlying accent is realized in the absolutive on the ultimate or penultimate mora, while the genitive is characterised by an accentual pattern of ultimate accent and the nominative has a number of allomorphs involving adding an (empty) mora to the end. In several Cushitic languages gender is distinguished by tone differences only. This is valid for Somali, e.g. *ínan* 'boy', *inán* 'girl', *nâyl* 'male lamb', *náyl* 'female lamb' (Saeed 1999: 19), and similarly in Rendille *ínam* 'boy', *inám* 'girl', *máàr* 'bullock', *màár* 'heiffer' (Pillinger 1989); in Afar; see Appleyard 1991: 21-24) who suggests a role for tone in gender marking in proto (Lowland) East Cushitic.

Certain grammatical suffixes require tonal changes on the preceding moras or the high tone on the preceding syllable is part of the suffix, e.g. in Oromo the nominal plural marker *´-lée*, *magalaa-´-lée* → *magaláalée* 'markets' and adjectival plural markers *´-áa* and *´-óo* (Owens 1985a: 93-94). Inherent tone on suffixes can have a different effect on preceding tones and lower preceding high tones. This happens in Beja (Hudson 1976: 101-102); for example, the high tone of 1sg *´n* disappears in *tam-a-n-ee-´k* 'if I ate', compare *tam-a-´n* 'I ate'. The reverse also happens in Beja in *ti-díf-a* 'you went' where the high tone of the root suppresses the accent of the past tense suffix -*`a*. In many Cushitic languages the addition of high-toned interrogative suffixes removes all preceding high tones, e.g. Somali *gúri-kée* → *gurigée* /house-which?:M/ 'which house' (Saeed 1999: 43). This is also the case for Iraqw and Alagwa (Mous unpublished) and it could well be a phonologized intonational pattern. The possessive suffixes in Arbore take away any immediately preceding high tone but not high tones that are separated by a toneless syllable/vowel, e.g. *buurú-h-ásut* /porridge-M-his/ → *buuruhásut* 'his porrridge', but *lúkku-t-ásut* /hens-F-his/ → *lúkkutásut* 'his hens' (Hayward 1984a: 98-99).

The tone-bearing unit is the mora; this is, among others, shown for Somali (Banti 1988a: 13; Saeed 1999: 41), and Dhaasanac (Tosco 2001 36).

In terms of historical development of tone/accent systems, Appleyard (1991) has proposed that Highland East Cushitic lost its tone; Kießling (2002) has shown how high tone (partly) developed in South Cushitic.

Hetzron (1997: 483) describes Awngi as having stress independent of tone. Stress falls on the penultimate and is accompanied by a slight rise in pitch.

4.3. Vowel system

Cushitic languages typically have ten vowels, five long, five short, *i*, *e*, *a*, *o*, *u*.

A number of Cushitic languages have whispered vowels word- or clause-finally. This is true for Oromo (Voigt 1984, Stroomer 1988, Lloret 1989, 1997), the

South Cushitic languages Burunge (Kießling 1994) and Alagwa (Mous unpublished), and for K'abeena (Crass 2005).

The Agaw languages have no length opposition in their vowels, and they tend to have a sixth vowel: Bilin and Kemant have *ä*, Kemant has an additional *æ* (Hetzron 1976: 12). Joswig (2006a) shows that the occurrence of Awngi's sixth vowel *ɨ* is, except for a limited number of exceptional words, predictable.

Somali has full tongue root advancing (ATR) vowel harmony. Vowels within one word are either pronounced with or without ATR (see Kraska and Kim 992, Pia 1965, 1984).

4.4. Consonantal systems

The consonant systems are presented here in three tables: first, the system that Sasse (1979) reconstructed for East Cushitic (see Table 1); second, the system of Ts'amakko with glottalised obstruents and pharyngeals (see Table 2); and third, that of Afar with no glottalized obstruents but a retroflex *d* and pharyngeals (see Table 3).

Table 1: Proto East Cushitic consonants

	t		k		’
b	d		g		
	d’	d’$_1$			
			k’		
f	s	sh		ħ	h
m	n				
	z			‘	
	l				
	r				
w		y			

Source: Sasse 1979.

Table 2: Ts'amakko consonants

p	t	c	k		
b	d		g		’
b’	d’		g’	q’	
	ts’	c’			
	s	š	x	ħ	
	z	ž		‘	h
m	n	(ɲ)			
	l				
	r				
w		y			

The voiced glottalized stops are implossive and the voiceless q' is ejective.
Source: Savà 2005.

Table 3: Afar consonants

	t		k		’
b	d		g	‘	
	ɖ				
f	s (sh)			ħ	h
m	n				
	l				
	r				
w		y			

Source: Hayward 1974.

I use the following symbols for consonants: ‘, ’, *h*, *ħ*, and C’ for ejectives and implossives, *ɖ* for the retroflex *d*, *sh* for the palatal fricative and *ɬ* for the voiceless fricative.

The gap of the absence of a voiceless plossive *p* is common in Cushitic and can be observed, among others, in Beja, Agaw, Sidamo, Gedeo, Somali, and Rendille. A number of other languages do have *p*. Black (1974a) and Sasse (1979) did not reconstruct *p* for Proto (Lowland) East Cushitic (see Svolacchia 1987 for an overview of this phenomenon).

Most languages have glottal consonants *’* and *h*. There is often complete assimilation of vowels through the glottal stop, as in Oromo (Lloret 1995a: 62), Iraqw (Mous 1993: 36-37), and historically in Cushitic (Sasse 1979: 53). In some languages there is no opposition between two identical vowels separated by a glottal stop and a long vowel, for example, Oromo (Stroomer 1988) and Gedeo (Wedekind 1980: 140; 1990: 129), where V’V alternates with glottalised [V:] in fast speech.

Several languages also have the pharyngeal fricatives ‘ and *ħ*. These are Bilin as only Agaw language, Afar, Somali, Rendille, Dullay (Dobase, Gollango, Ts’amakko), and the South Cushitic languages. The pharyngeal fricatives are absent in the Agaw languages (except for Bilin), in Highland East Cushitic, in Dhaasanac-Arbore-Elmolo, Yaaku, Oromo-Konso-Gidole, and Boni. The voiced pharyngeal is sometimes realised with glottal closure. This is the case in Dullay (Hayward and Hayward 1989: 183 n.10) including Ts’amakko. In Iraqw there is no closure but creaky voice (Mous 1993: 18).

Pharyngeal consonants have a centralizing effect on neighbouring vowels; in Rendille for example, all vowels are centralised in the environment of a pharyngealised consonant (ɖ, g, k, x, ħ) evidenced by an increase in F1 and a slight increase of F2 (Esser 1991: 147-148). Dullay *a* is fronted in the environment of ‘, *ħ* and to a lesser extent *q* (Amborn et al. 1980: 67); according to Hayward and Hayward (1989: 183) this extents to the glottal consonants as well.

Cushitic languages provide arguments for a feature grouping guttural consonants together (see Hayward and Hayward 1989). The pharyngeal and glottal consonants and to some extent also the uvular stop and fricative behave similarly in a number of ways. In Afar consonants in one root are either identical or non-homorganic; ‘, *ħ*, and *h* count as homorganic. In Iraqw there is morphophonological vowel assimilation that applies to the vowel of the (final) verbal derivation which assimilates completely to a primary vowel *i*, *a* or *u* in the syllable preceding it provided that the intervening consonant is a guttural, a uvular stop or in some cases even a velar fricative (Hulst and Mous 1992).

Cushitic languages typically have glottalic consonants: implossives, ejectives or both. In Konso the opposition in stops is primarily along the lines of glottalic versus pulmonic; it has four implossive consonants *b’*, *d’*, *j’* and *g’* which are devoiced when geminated and four pulmonic stops *p*, *t*, *c*, *k* which are voiced whenever a vowel follows. Neighbouring Burji has a voiceless ejective series *p’*, *t’*, *c’*, *k’* plus an implossive *d’*. Dhaasanac has the four implosives which are devoiced word-finally and realised with egressive air stream mechanism (Tosco 2001: 19). Oromo has *p’*, *t’*, *k’* and *d’*. Lloret (1995a) shows that Oromo *d’* differs phonologically from the ejectives and behaves like a glottal stop or a plain voiceless stop in many respects: geminated *d’d’* alternates with plain *t* in verbal conjugation; Lloret proposes *’t* as underlying form and mutual assimilation. Lloret (1995b) proposes a feature analysis (using feature geometry) for Oromo in which glottalic

consonants are specified for constricted glottis but not for voice, and implossives differ from plain stops only in terms of [constricted voice] but not in voice; ejectives have pharyngeal as second place of articulation in addition to their oral place of articulation. The Cushitic languages that have ejectives in the four places of articulation tend not to have pharyngeals; this is true for the Highland East Cushitic languages; the Agaw languages except for Bilin, Arbore, Oromo. Konso, Dhaasanac, and Boni have implossives where the others have ejectives and no pharyngeals. The languages that have pharyngeals in their inventory, e.g. Afar, Rendille and Somali, do not have ejectives/implossives in their inventory. Separate from this is the presence of an implossive (Oromo, Arbore) or pulmonic retroflex *d* (Afar, Rendille, Somali). Note that the parameter glottalic consonants versus pharyngeals does not align with genetic units. South Cushitic has pharyngeals and ejective affricates *ts'* and *tɬ'* but no other implossive/ejective stops. The ejective lateral affricate is cognate with *d'₁* in Sasse's (1979) reconstruction (see Kießling and Mous 2003). The bilabial glottalic stop in Arbore is a devoiced or voiceless implossive (Hayward 1984a: 53). The Cushitic languages do not seem to have constraints on co-occurrence of glottalic consonants in one root (Wedekind 1990).

Gemination of consonants is common. Many languages have gemination as a morphological process. For example, Konso geminates the final root consonant of a verb to form a singulative verb stem, and Gedeo uses final gemination for imperative plurals (Wedekind 1990: 51). In those languages that have gemination as a morphological process, there is usually no restriction and any consonant occurs long and short; in Konso all consonants occur long; in K'abeena all but the glottal consonants (Crass 2005: 37), in Oromo all except *h* (Lloret 1997: 499). Many geminate consonants arise through assimilation of consonants that come together in morphological concatenation, e.g. Oromo *laal-ne* → *laalle* 'we watched', *moor-nii* → *moorríi* 'fat:nominative', *did-te* → *didde* 'you refused' (Owens 1985a: 22). This is also the case in the CVC- reduplication in Dhaasanac (Tosco 2001: 46-48). Dhaasanac has also prosodically conditioned gemination: the consonant after a short open syllable or after a diphthong is geminated, thus *ʰagísu* 'hurry!' is realised as *ʰaggíso* (the initial *ʰ* is phonetic), and *g'uoro-m-i* as *g'uorrome* 'I was tired'.

Degemination occurs too. In Arbore geminates undergo degemination when followed by another consonant or a word boundary, e.g. *háw* 'steer' is underlyingly *háww*, and *'iy heytʰe* 'she became replete' from /*heyy-t-e*/ (Hayward 1984a: 62-63). In Dhaasanac prosodically defined degemination occurs optionally when the following syllable also starts in a geminate (Tosco 2001: 49-50).

4.5. Metathesis

Metathesis is relatively common in consonant clusters, but the extend to which it occurs differs from language to language. In Dirayta metathesis has occurred in its recent history in order to fulfill the sonority conditions in consonant clusters: (semivowels <) liquids < nasals, fricatives < stops; *d'ilk* 'elbow' against related Konso *d'ikla*; *taŋk* 'honey' against Konso *takmá* (Black 1974b). Burji has metathesis of causative *s* and preceding stop (Sasse and Straube 1977: 249). In Rendille there is consonant metathesis of the final consonant and the consonant of the preceding syllable plus vowel drop before the plural suffix *-ó*; the final consonants involved are *r* but also *b* and *ħ*, e.g. *baħáb-o* → *babħó* 'armpits', *útaħ-o* → *uktó* 'goatskins', *ugár-o* → *urgó* 'skinbags' (Oomen 1981: 50).

The language in which metathesis is synchronically most productive is Sidamo, in particular in the verb conjugation; consider the following verb forms with the 1pl ending *-inéemmo*: *'amad-inéemmo* → *'amandéemmo* 'we grasp', *gat-inéemmo* → *gantéemmo* 'we are left over', *got'-inéemmo* → *gont'éemmo* 'we sleep', etc. (see Yri (1990: 35), also Murray and Vennemann (1982)).

Bilin has various consonant alternations, e.g. devoicing and/or spirantization of root stops in derived singulars, *lǝx-a*, singulative of *lǝk* 'fire', *dǝrgum-a*, singulative from *dǝrkum* 'sycamore'. Fallon (2006) unifies these alternations as consonant mutation: "Blin displays a variety of mutation processes, all of which appear to be morphologically (or lexically) determined. The mutations involve the features [voice], [continuant], [sonorant] and [lateral], as well as complex mutations involving combinations of these features. Some of these mutations may have originally been the result of lenition processes induced by affixation of a vowel-initial suffix" (Fallon 2006: 117).

4.6. Reduplication

Reduplication occurs lexically and as a grammatical process. The former is presumably often the result of the latter. Grammatical reduplication includes plural formation in nouns, frequentative on verbs and habitual on verbs. Repetition (which I do not consider a phonological process) of a word is used for distributive meaning, for example, the repetition of a number in (1). In K'abeena the repetition of a modifier indicates maximal validity of the characteristic (Crass 2005: 291). Ideophones often display expressive repetition. But ideophones also show reduplication. In Somali reduplication and insertion of *l* is common in ideophones, e.g. *malaf ~ maf* ideophone for 'wipe out, exterminate' (Salaad and Tosco 1998: 127).

(1) q'aac'c'-e=ma dookko dookko bad'd'am-inki
bush-P=to/in one.M one.M hide.oneself-3PLCONS.A
'One by one they hid themselves in the bush.' Ts'amakko (Savà 2005: 79)

In Alagwa, lexical roots show the same three types of reduplication that occur as grammatical processes. Reduplication of the final root consonant, which is frequent in derivations, is rare in the lexical domain, but in the lexical domain we see reduplications of medial root consonants, *lug<aag>-óo* 'tree sp.', *'om<om>oróo* 'ant sp.', *sar<ar>aakwi* 'tree sp.'. The reduplication of the initial CV- and initial CVC- of the root is more common in the lexicon than as a morphological process. As a morphological process the CVC- reduplication involves an epenthetic vowel *a* or *i*, but lexically Alagwa also has initial CVCV reduplication which does not occur as a process, e.g. *sungu-sungu-moo* 'ant sp.', *kuti-kuti ~ kut-kuti* 'puppy', and CVC reduplication in which there is no epenthetic vowel, e.g. *ɦar-ɦara* 'termite'. Some lexical reduplications involving roots that have an *r*, *l* or *s* as final root consonant add an epenthetic homorganic nasal, *buru-m-bur-moo* 'worm', *siili-n-siil-imoo* 'bird sp.', *giri-n-giri-t* 'be round'; and with CV- reduplication *bo-m-boqoori* 'calabash for divination stones', *kwi-n-kwiisi* 'epilepsy'. Iraqw has *tsur-uun-tsuur* (v) 'gather at one place in disorder', *kwi-n-kwirí'* 'harlequin quail (a bird species)', *din-dirmo* 'small hill', *xwaa-ŋ-xwaa* 'bridge of the nose', *pu'-uum-pu'i* 'circle', *mu-ɬu-n-ɬúr* 'Icuna bean'. There are also lexical CVCV- reduplications that replace C_2 in the reduplicant

by *r*, or CV-*r*-epenthetic vowel reduplications, *ʻuru-ʻutli* ‘arrow with ornaments’, *kara-(n)-kaaħa* ‘palate’.

Below I discuss seven reduplication processes that have been repeatedly reported for Cushitic languages. Variants of these and others occur as well. Gemination of the final consonant could be considered a special type of reduplication, but I discuss gemination separately. The epenthetic vowel is given here as *a*. This is the most commonly used epenthetic vowel in reduplication; outside reduplication, the most common vowel for epenthesis in Cushitic is *i*; this latter vowel also occurs in reduplication, sometimes with a difference in meaning. The epenthetic vowel will undergo the regular vowel assimilation processes of the language, e.g. Iraqw *ħeħe’ees* from *ħe’ees* ‘to finish’ by assimilation through a guttural consonant. Different languages may use one particular type of reduplication for different functions; for example, final reduplication is used for nominal pluratives in Somali and Alagwa but for habitual verb forms in Iraqw. Tendencies for a particular type of reduplication to be used for a specific function are mentioned in the discussion of that type of reduplication. The choice between reduplication types is functionally and lexically rather than phonologically determined. Reduplication may provide hints whether a segment is complex or not. For example, in Alagwa we see that only the velar stop part of rounded velars is reduplicated, but the evidence is inconclusive as to whether *Cw* is a unit or a sequence because it is followed by a round suffix vowel which may have absorbed the reduplicated rounding; similarly, in the reduplication of prenasalized stops, only the oral part is reduplicated.

1. $C_1V_1(V_1)$-.
The V_1 may be lengthened in the reduplicant. This type of reduplication is indistinguishable from type 2 when V_1 is *a* or identical to the epenthetic vowel.

Examples: Boni has frequentative *sisii* from *sii* ‘give’ and *d’ud’uud’* from *d’uud’* ‘consider’ (Heine 1977: 280-281). Dhaasanac has *fáafa’* from *fá’* (Tosco 2001: 142).

2. C_1a-.
Iraqw has a frequentative reduplication for which most examples are indecisive as to whether the vowel is reduplicated or epenthetic *a*; in the case of *tatumbiim* it has to be epenthetic and in the case of *gogoow* it has to be reduplicated (type 1), but in all other cases in (2) below V1 is either *a* or the vowel in question could have undergone assimilation through a guttural consonant or *l* (Mous 1993: 31-33, 180-183)

(2) Iraqw C_1a- reduplication for frequentative

tatumbiim	tumbiim	‘to splash in water’
mamaw	maw	‘to leave’
łaław	ław	‘to get’
papaał	paał	‘to push aside, pass’
‘a‘akuut	‘akuut	‘to jump’
‘o‘oos	‘oos	‘to excrete’
ħeħe’ees	ħe’ees	‘to finish’
gogoow	goow	‘to flee’

3. $C_1V_1C_1$-

The V_1 is usually shortened. The second radical of the reduplicated form becomes a geminate provided C_1 is admissible as geminate. This type is used in verb roots for frequentative (see section 28.4). Note that Tosco (2001: 46-48) analyses this as a subtype of type 4 with reduction of the second consonant and compensatory gemination.

4. $C_1V_1C_2$-.
The V_1 is usually shortened. This is indistinguishable from type 3 for those C_2C_1 combinations in the second radical of the reduplicated form that show full assimilation. This type is often used on verb roots for the frequentative. Examples: Rendille has *furfura* from *fura* 'be open' (Pillinger and Galboran 1999: 33). Iraqw has *kum-kumiit* from *kuumiit* 'to continue', *ħaawħaw-aw* from *ħaaw* 'to waste time' (Mous 1993: 182).

5. $C_1V_1C_2$-*a*.
The V_1 is usually shortened. The extra vowel *a* is epenthetic and may assimilate according to the assimilation rules of the language. This type is difficult to distinguish from a type $C_1V_1C_2V_2$-. However, so far I have not found an instance of an indisputable $C_1V_1C_2V_2$- reduplication. Alagwa has *ts'anq-a-ts'anqas* from *ts'aanqas* 'wet a bit', *dah-a-dah* from *dah* 'enter', *'ag-a-'ag* from *'ag* 'eat', *'al-a-'al* from *'al* 'decorate', *ħam-a-ħam* from *ħam* 'be lost, disappear, dead', and possibly with assimilation of the epenthetic vowel *'un-u-'unuus* from *'unuus* 'chase at high speed', *tso'-o-tso'omit* from *tso'omit* 'be distressed, struggle'. In fact, the Alagwa examples do not allow us to decide whether the reduplication is $C_1V_1C_2$-*a* or $C_1V_1C_2V_2$-. But Iraqw has *huw-a-huw* from *huw* 'to bring' in which the *a* must be epenthetic, and Ts'amakko has this type of reduplication lexically in nouns, e.g. *kutt-a-kutt-o* (m) 'small braid', *dang-a-dangac'c'-o* (m) 'porcupine', and in the imperfective derivation in verbs (3). In this productive process, C_2 should be C_2C_3, as the complex codas of monosyllabic roots are reduplicated, as are the geminate consonants in that position, including those that arose from the productive derivational process of gemination of the final consonant for singulative action, e.g. *bitt-a-bittam* 'to keep on buying one thing'.

(3) Ts'amakko imperfective reduplication

'el	'to drop'	*'el-a-'el*	'to keep on dropping'
gere'	to steal	*ger-a-gere'*	'to steal continuously'
bitam	to buy	*bit-a-bitam*	'to keep on buying'
'azaz	to order	*'az-a-'azaz*	'to keep on ordering'
ziir	to extract	*ziir-a-ziir*	'to keep on extracting'
'upp	to blow	*'upp-a-'upp*	'to keep on blowing'
'awš	to be ripe	*'awš-a-'awš*	'to be ripe for a long time'
baq'q'al	to sprout at once	*baq'q'-a-baq'q'al*	'to sprout continuously'
bittam	to buy one thing	*bitt-a-bittam*	'to keep on buying one thing'

(Savà 2005: 188-189)

6. -*a*C_f
This form is used predominantly for number formation in nouns; in which case it is often followed by a vowel number suffix or terminal vowel. It is also used for the multiple reference form of adjectives.

Somali has *-a*C_f as one of its plurative formations, e.g. *áf-af* ‘mouths, languages’, *dab-ab* ‘fires’, *san-án* ‘noses’ (Saeed 1991: 61). Iraqw has a rare singulative suffix *-aa*C_f*-i* (f) for collectives, e.g. *kwaɬ-aaɬ-i* (f) ‘bead’, singular of *kwaɬu* (p), *bal-aal-i* (f) ‘cob of grain’, singular of *balangw* (m), *war-aar-i* (f) ‘seed’, singular of *warangw* (m). Alagwa has several plurative suffixes involving reduplication of the root-final consonant with a preceding epenthetic vowel *a* with variable vowel length and followed by an additional plurative vowel suffix.

(4) Alagwa reduplication of final consonant in pluratives

a. The plural suffix *-a(a)*C_f*-ee* (f)

Base (sg)	Meaning	Plural
deesu (m)	‘snake’	*deesasee* (f)
milambu (m)	‘trough’	*mlambabee* (f)
qaambu (m)	‘tree sp.’	*qaambabee* (f)
saalu (m)	‘leather loincloth for men’	*saalalee* (f)
waqaantu (m)	‘entrails’	*waqaantaatee* (f)

b The plural suffix *-a*C_f*-aa* (f)

siraa (f)	‘anus’	*siraraa* (p)
kwari (m)	‘year’	*kwararaa* (p)
qameesu (m)	‘pot shell’	*qameesasaa* (f)
gaamu (m)	‘thing’	*gaamamu* (p)
filu (m)	‘aardvark’	*filalu* (p)

c. The plural suffix *-a*C_f*-u* (p)

gibisa (f)	‘diaphragm’	*gibisasu* (p)
katá (f)	‘hump (of cattle)’	*katatu* (p)
kebi (f)	‘hearthstone’	*kebabu* (p)
qubee (f)	‘tortoise’	*qubabu* (p)

d. When C_f is a rounded velar

tligwá (f)	‘caterpillar sp.’	*tligwagu* (p)
yakwa (f)	‘calabash, container’	*yakwaku* (p)
senkóo (f)	‘adze, sickle’	*senkoku* (p)

e. The plural suffix *-a*C_f*-a'u* (p)

lipampi (f)	‘calabash for milk or grains’	*limpapa'u* (p)
tsini (f)	‘point’	*tsinaana'u* (p)

5. Morphological typology and processes

Cushitic languages show all types of morphological processes: suffixation, prefixation, infixation, ablaut, stem alternation, reduplication, and tonal marking. The languages are usually rich in morphology, and grammatical categories are realised by (segmental and suprasegmental) morphemes. Suffixation dominates over prefixation and infixation is rare. Kießling (2003) discusses how infixation arose historically in South Cushitic through the combination of more common processes such as suffixation and reduplication in combination with historical changes. Sequences of suffixes are not uncommon, for example, gadyée-r-ée-dá-r ‘is /work-F-mine-that:of-F yesterday/ ‘that work of mine of yesterday (Iraqw, Mous (1993: 230)).

6. Lexical categories

Nouns and verbs are clear-cut categories. Adjectives are less clear as an independent class in some Cushitic languages. For Somali, there is a debate whether the category of adjectives is an independent word category. Afar's adjectives are stative verbs, whereas Ts'amakko's adjectives are nouns. Other lexical categories that are recognized are postpositions, conjunctions, and ideophones. Derivational processes are mainly from verb to noun; the processes from noun to verb overlap with verbal derivation.

7. Nominalisation

Cushitic languages may have many different deverbal nominalisation suffixes. K'abeena has twenty-eight (Crass 2005: 71), Iraqw has twenty (Mous 1993), Sidaamo has close to twenty (Anbessa 2000: 67-69). A limited number of these are fully productive and some have clear specific semantics. A functionally common nominalisation consists of the agentive noun, for example, Sidaamo *hat'asr-aančo* 'butcher' from *hat'ar* 'to butcher' (Anbessa 2000: 67). Other nominalisations include instrument nouns and abstract nouns. Sidaamo uses the same *-aančo* suffix for instruments, e.g. *fey-aančo* 'broom' from *fey* 'sweep' (Anbessa 2000: 67), and a suffix *-imma*, *-ima* for abstract nouns, e.g. *but'-ima* 'poverty' from *but'* 'be poor', *ged'd'-imma* 'old age' from *geed'd'* 'grow old' (Anbessa 2000:7); this suffix is also used to nominalize adjectives, e.g. *dančˀ-imma* 'goodness' form *dančˀa* 'good' (Anbessa 2000: 69). Several nominalisations of the same verb can co-occur, e.g. Iraqw *faara*, *faaro* 'counting' from *faar* 'count', where the derivation in *-a* is completely productive but refers to a specific act of counting while the in *-o* is lexically restricted and refers to 'counting' in general (Mous 1993: 75).

8. Nouns

Nouns have the grammatical property of gender. Gender is defined on the basis of agreement. The number of agreement classes is either two or three. For those where it is three, the third one interrelates with the category of number; there are alternative analyses reducing these systems to a two-gender system. Thus the analysis of gender is closely linked to the analysis of number. Number is derivational in nature, and most languages have a variety of number derivation for both plural and singular. Definiteness is less generally marked and interrelates with case marking. Case marking is of the marked nominative type, that is, the subject (both subject of intransitive and agent of transitive) is marked and the object is in the unmarked citation form but not in the Agaw languages where the accusative is marked. There are no other nominal categories. Pronouns and numbers can be considered special nouns but are discussed separately (see sections 23 and 19). The final vowel of nouns drops under certain circumstances and can be argued to be not part of the noun, see 10 on terminal vowels.

9. Nominal number

Number is not an obligatory category. One can use an underived basic form of the noun that is neutral for number in situations where the specification of number is considered irrelevant. There is number agreement in the subject marking on the verb, but for several languages, agreement on the verb is with gender and not with number. This is the case in Iraqw, for example (Mous 1993). Within the noun phrase there is number agreement on the adjective. Sometimes this agreement is semantic rather than

morphological. For example, in Iraqw one can say *notóo úr* /paper.money (notes) big/ 'a lot of money' or *notóo ur-én* /paper.money (notes) big-PL/ 'large denomination notes' with a distributive reading for the plural adjective. Most languages have more than one plural derivation and also singular derivation. The forms of the number derivation diverge greatly within Cushitic (see Zaborski 1986 for an overview). Number derivations impose gender on the noun. The choice of the number derivation is lexically determined but partly correlates with the gender of the base noun. As a consequence there is a phenomenon called "polar gender", meaning that the plural form has the opposite gender of the singular form. The derivational nature of number is also evident from the fact that lexemes vary in the number of number forms that they have and in the nature of their interrelatedness. For example, in Ts'amakko (Savà 2005: 61-65) we can have a lexeme like *zilanq'a* (f) 'rainbow' which has only one form and one like *gurl-o* (m) cat which has the following number derivations, singular: *gurl-itt-o* (m), *gurl-itt-e* (f); plural: *gurl-ad'd'-e* (p). In the following I will discuss these number properties in a bit more detail.

Mass, collective and/or transnumeral nouns can be distinguished on the basis of their morphosyntactic properties. In Oromo uncountable nouns such as 'water' do not take numeral modifiers (Owens 1985a: 94), and in Somali transnumeral nouns need a relative clause to count 'two that is orange(s)' (Saeed 1999: 58). The small set of transnumeral nouns have only one number form, but that can refer to an individual (singular or plural), the substance, or a collective (Serzisko 1992). In Somali one has to distinguish countable nouns, mass nouns, collective nouns, and transnumeral nouns. Only countable nouns regularly form plurals. In the construction Number + Noun in which Number is the head, the countable noun is not in the plural, e.g. *labá kóob* 'two cups' (Saeed 1999: 56-57).

The feature "number" has two categories based on agreement: singular reference and multiple reference. In Bayso (Hayward 1978a) there is an extra category of paucal reference. Because "plural" will be used as a value for gender, I follow the terminology that Hayward (1984) has suggested: multiple reference and singulative reference. Derivationally nouns can be of three sorts: base, derived plurals or pluratives, and derived singulars or singulatives. The base is often semantically neutral for number and is used when number is irrelevant (see for example Savà 2005: 47) for Ts'amakko, Crass (2005: 63) for K'abeena. In Oromo most nouns do not have derived plurals.

External agreement with number is shown in subject agreement of the verb. Some languages have words that are singular in meaning but require plural agreement on the verb. For those, plural is considered to be an exponent of gender, and agreement on the verb is with gender only. I will come back to that after the discussion of gender. For languages with only two exponents of gender, subject number agreement on the verb can be lexically determined. For example, in Somali, mass nouns have either singular or plural agreement on the verb depending on the lexeme; those that require plural agreement end in *ó*, which is a plural suffix (Saeed 1999: 57). In many languages there are agreement-reduced verb forms that do not show number (and gender) agreement. There is no agreement with the object in number. Internal agreement includes agreement on adjectives. Adjectives show plural agreement through initial reduplication, for example, in Somali (Saeed 1999: 108), in South Cushitic (Kießling 2002, Mous 1993, unpublished), in Oromo (Owens 1985a : 87, 93), but number agreement is not strictly obligatory. Plural suffixation occurs in

Oromo. Other modifiers such as demonstratives and possessives do not to show number agreement.

Plural derivations vary greatly in form: reduplication of final consonant (Bilin, Somali, South Cushitic, Konso, and Rendille), gemination (Bilin, Arbore, Dhaasanac, K'abeena, Konso, and Rendille), change of stem vowel (i.e. "broken plural" or ablaut) (South Cushitic), and suffixation with various shapes of suffixes: -V, -(V)C(C)V, etc. An example of infixation is the Iraqw plural formation *<ee>_i* for which the vowel *ee* is infixed before the final root consonant and the root is followed by a suffix *i*, e.g. *digeemi* 'boundaries' derived from *digma*; this combination of infix and suffix is an allomorph of the plural suffix *-eeri* used with three consonantal stems, and its shape is explainable by a preferred light-heavy syllabic pattern for the plural (Mous 1993: 53).

Many East Cushitic languages have four to six different plural formations (Oromo, Somali, Konso, Dhaasanac, Ts'amakko, Bayso, and K'abeena). Arbore has more than ten, and the South Cushitic languages have even more. In several languages there is irregular allomorphy (or similarity in plural formatives) involving length of the vowel or consonant of the plural formative (Dhaasanac, South Cushitic, and Konso). For example Dhaasanac has plurals in *-a(a)m*: *deger* 'barren', plural: *deger-aam*; *kur* 'knee', plural: *kurr-am*; *fuoc-u* 'bride-wealth', plural: *fuoc-am* (Tosco 2001: 86-88). Suppletive plurals typically occur for the following lexemes: 'women', 'cattle', 'goats', 'people', 'sisters', 'children', 'uncles' in Burunge (Kießling 1994: 60).

The choice of the plural formative is lexically determined, but often correlations with the base have been observed in terms of the following properties of the base: gender, quality of the final vowel, presence of a particular singular suffix, syllabic structure, and accent type of the base noun. Thus, for Somali, number derivations have been described in terms of declensions where each declension is defined by inter alia (i) whether there is gender polarity between singular and plural, (ii) the form of the plural suffix, (iii) the accent pattern in singular and plural and, sometimes, (iv) the final vowel of the base (Andrzejewski 1960). In Arbore multiple reference suffixes that end in *o* are all plural and have a feminine base. In Rendille plurals in *-aC* (p) and *-Ce* (p) are restricted to polysyllabic masculine bases and plurals in *-ó* to feminine bases, with some exceptions. In Khamtanga there are several different plural formations, the most common being *-t'an*; other formations include drop of final vowel *a*, change of consonant, and gemination of the final root consonant (Appleyard 1987a). The other Agaw languages have similar complex number formation, e.g. Bilin (Palmer 1958). All languages for which we have dialect information show regional variation in choice of plural marker for some of the lexemes.

Singulatives are common, and not only for individual entities of collectives, masses or sorts but also when there is no apparent semantic motivation. For example, Dhaasanac has a derived singular *bil-ti* 'knife' from *bilu* (Tosco 2001: 79). Singular human and animal individuals are often derived by distinguishing males and females, for example, Dhaasanac *lúa* (f) 'lions', sg: *luoc* (m) 'lion', *looti* 'lioness' (Tosco 2001: 79); Arbore *'ízze* (f) 'gazelle': *'ízze-t* (m) 'male gazelle', *'ízze-té* (f) 'female gazelle'. Sometimes the feminine singulative is the second derived form, derived from the male, for example Arbore *hokkól* 'lame (people)', *hokkol-an* 'a lame male', *hokkol-anté* 'a lame female'; *gelebá* (f) 'Dhaasanac', *geleba-n* (m) 'male Dhaasanac', *geleba-n-té* (f) 'female Dhaasanac' (Hayward 1984: 162). The singulatives are used for the singular of pairs, Dhaasanac *gunu* (m) 'testicle', sg: *gunti* (f); for the singular

of collectives *ðúur* (m) 'hair', sg: *ðudîti* 'single hair' (Tosco 2001: 79-80); for the partitive of mass nouns, e.g. Ts'amakko *'and'-e* (p) 'water', sg: *'and'-itto* (m), *'and'-itte* (f) 'drop of water' (Savà 2005). Most languages have about five different singulative formations and often at least one of them contains *-t-*.

There is a strong interplay between singulative and definiteness in Oromoid, and in Bayso the singulative *-ti ~ -titi* indicates individualization or particularizatoin (Hayward 1978a: 106).

Names for people and their languages have their proper suffixes. The *-ac* in Dhaasanac is such a suffix; in Arbore individuals of an ethnic group are derived by suffixes that are not used for other words, Hayward (1984: 183); in Alagwa the suffix *-a'isa* derives language names such as *imbeek-a'isa* (f) 'Maasai language' from *imbeeká* (f) 'Maasai' (Mous unpublished); in K'abeena there is a suffix *-sinata* that derives language names from names for people (Crass 2005: 83).

It is not uncommon for a Cushitic language to have a large number of nominalizing formations. Crass (2005: 71-80) gives twelve different deverbal nominalizers and a few less productive ones for K'abeena. Some of these have a specific meaning such agentive, result of unaccusative verbs, or extent (*Mass / Menge*); but some suffixes are used for a variety of meanings and many different ones denote abstract nouns; ultimately it is a lexical matter which deverbal nominalizers can be used with a specific verb. In K'abeena there is some overlap between deverbal and denominal nominalizers; this is a common situation.

10. Terminal vowels

In the Omotic languages final vowels of nouns are often considered not to be part of the stem; see Hayward (1987) and the chapter on Omotic in this book. In Cushitic a similar analysis can be argued for; however, in many languages such an analysis is just one of the possible options. Arguments for a special status of the final vowel include the following: (i) the number derivations usually erase the final vowel of the noun, (ii) for several languages not all vowels occur word-finally; for example, in Konso nouns end in *a* with the exception of names which may end in *i*, *o* or *e*, (iii) for some languages there is a correlation between the quality of the final vowel and its gender. For example, in K'abeena nouns that have a short final vowel *-e* are feminine and those that have *-a, -aa, -o, -oo, -i, -u* or *-ee* are masculine, unless they contain an addition formative *-t*^{a} (Crass 2005: 61-62); in Ts'amakko nouns that end *-o* are masculine, those that end in *-a* are feminine and those that end in *-e* are feminine or plural in gender; no nouns end in *u* or *i* (Savà 2005: 51-52). Hayward (1983) distinguishes between terminal and non-terminal ultimate vowels in Saho-Afar on the basis of phonological properties.

11. Gender

Gender is very interesting in Cushitic because of its interrelatedness with number. Here I adhere to the Cushitic practice of recognising "plural" as a category of gender for those languages that have this third category. Note, however, that the typological specialist of gender and number, Grev Corbett, has a different view on Cushitic "plural" as exponent of gender (see Corbett 1991, 2000 and Corbett and Hayward 1987).

Gender is a property of nouns in terms of agreement, internal noun-modifier agreement and external subject-verb agreement. Morphological (automatic) subject agreement on the verb is either with number and within singular with gender (the

typological common situation) or with gender only (the typologically special situation). As an example of the latter I present the situation in Iraqw (see Example 5). All nouns fall in one of three groups depending on agreement with the verb. The three agreement classes are termed feminine, masculine and plural because the first group of nouns has the same agreement as a third-person female subject (she); the second one, as a third-person male subject (he); and the third, as a third-person human plural subject (they). I use multiple reference for the denotation of "plural" as an exponent of number.

(5) Iraqw subject gender agreement on the verb:

a.	daaqay i giilín.	i giilín	
	boys 3 fight:3SG.M	3 fight:3SG.M	
	'The boys are fighting.'	'He is fighting.'	
b.	ħayse i harweeriiríin.	i harweeriiríin	
	tails 3 make:circles:3SG.F	3 make:circles:3SG.F	
	'The tails make circles.'	'She is making circles.'	
c.	ħayso i harweeriiriná'.	i harweeriiriná'	
	tail 3 make:circles:3PL	3 make:circles:3PL	
	'The tail is making circles.'	'They are making circles.'	

(6) External agreement in Arbore:.

a.	néek 'íy yeecce	'A lion came.'
	komayté 'íy teecce	'A tortoise came.'
	ʔúmmo 'íso yeecce	'The children came.'
b.	daac 'ay gíra	'There is a rat.'
	'ingiré 'ay gírta	'There is a louse.'
	bíce 'asó gira	'There is water.'

Internal noun-modifier agreement requires the same division of the nominals into three genders. In Iraqw, the combination of the various agreement markers also require the same nouns to be derived into the same gender classes. This is shown in Table 4 where the masculine nouns require the linker *u* the demonstratives; the feminine nouns the linker *r* (deleted before an alveolar consonant) and the (p) gender nouns have no gender linker. In Arbore there are several agreement markers for noun phrase internal agreement (see Table 5) when modifying a noun (N-), on adjective (Adj), on possessives (poss), on demonstratives (D) and on the the modifying question word 'which?'. They require the same three genders as the subject agreement on the pre-verbal "selector" (preV) and on the copula (be) do.

Table 4: Iraqw internal agreement patterns: Demonstratives

	hiima (m) 'rope'	ħasam (f) 'dilema'	gi'i (p) 'ghost'
DEM1	hiimuwí	ħasamarí	gi'iká
DEM2	hiimusíng	ħasamasíng	gi'isíng
DEM3	hiimuqá'	ħasamarqá'	gi'iqá'
DEM4	hiimudá'	ħasamadá'	gi'idá'

Table 5: Internal agreement in Arbore

	preV	be	came	N-	Adj	poss	D	D	which?
masc	y	gíra	yeeĉce	-ha	-á	ha-	-h-	0	bú-
fem	y	gírta	teecce	-tah	-á	ta-	-t-	t	bíto-
plur	só	gira	yeecce	-ha	-o	toha	h-	0	to-

Internal gender agreement markers often involve *ku* for masculine and *ta* for feminine, or forms developed out of those (see also Bryan 1959).

The values for gender on the basis of internal Noun Phrase agreement of possessives and demonstratives in Cushitic languages are summarised in Table 6.

Table 6: Possessive and demonstrative agreement

m f p	m/p f	m f	none
Alagwa, Burunge, Iraqw, Arbore, Boni, Dullay, K'abeena definites	Alagwa pronouns, Burunge pronouns, Iraqw pronouns, Arbore genitive	Elmolo, Oromo, Somali, K'abeena demonstratives	Konso, Dhaasanac, Tsamay, K'abeena possessives

Personal pronouns do not always show the same gender distinctions as nouns do. For example, in Iraqw there are only two third-person pronouns: *inós* 's/he' and *ino'ín* 'they'. In Arbore the sex of the possessor is differentiated in third-person singular possessives. Also deictic pronouns referring to human antecedents display sex difference using the words for "man", "woman", "people". Personal pronouns in Cushitic in general tend to refer to humans only and are primarily used for contrast. They are more like a subset of nouns than grammatical markers.

Another important and typologically interesting feature of Cushitic gender is that it is a property of the word and not of the lexeme. Singular and plural forms of the same lexeme often differ in gender and partly in systematic ways. This has given rise to the concept of gender polarity (Hetzron 1967, 1972). In Somali a large number of nouns have the opposite gender in singular-plurals pairs. Serzisko (1982) has analysed this phenomenon of opposite gender in terms of markedness. The more general Cushitic picture is not one of polarity of gender but of "plural" and feminine as common genders for multiple reference words in combination with correlations between choice of multiple reference formation and the gender of its base. Thus the polarity of gender is only part of the picture and not a property of the gender system as such; the more general picture is rather one where different words, singular and multiple reference within one lexeme are often different in gender.

Gender is not predictable on the basis of meaning of the word. Words with male connotations can be feminine and the other way around; for example, in Alagwa: *seree'a* (f) 'buffalo', *karama* (f) 'castrated bull', *isa'amu* (m) 'breast, teat', *ɬaama* (f) 'person who is made ill (male or female)'. For most words the choice of gender has no semantic base at all; compare the words for gourds in Konso *d'ahaan-aa* (p) 'gourd(s)', *hulp-a* (m) 'large gourd for water', *murraa-ta* (f) 'gourd for drinking', *xott-aa* (p) 'large water gourd', *shaww-aa* (p) 'gourd with handle'.

There is some evidence for semantic associations with gender in terms of size and endearment/pejoration, as is so common in the Omotic and Semitic languages of Ethiopia. This is the case in the Western Oromo dialects in which the gender system has developed into one with masculine as basic gender; use of feminine gender is restricted to females and to express diminutives and pejoratives (Clammonds 1999: 392), as is the case in Agaw (Hetzron 1976: 14). In more general terms, gender

denotes the semantic notion of social significance (masculine) vs. social insignificance (feminine) (Tucker and Bryan 1966: 511, Castellino 1975: 352ff, Sasse 1984: 117). There are parts of the lexicon where gender clearly has a semantic base in all languages: agentives distinguish male and female sex which correlates with the gender of the derivational suffix; derived singulars for animates are often sex specified in the gender.

Gender is partly overt in the formal properties of the noun. Number suffixes are gender specified, and once a number suffix is recognized, the gender of the noun is known. Here too there is no full predicative value. Words ending in what seems to be one of the number suffixes may have a different gender and some homophonous number suffixes differ only in gender. There are also homonyms that differ in gender only, e.g. Arbore *'ellό* (m) 'cowrie shell' vs. *'ellό* (f) 'fear'. We have already seen that terminal vowels can be indicators of gender. Typical correlations between word form and gender are those in Afar and Somali: Afar stressed vowel-final nouns are (f); consonant-final and nonstressed vowel-final nouns are (m); other nouns with final *o* and *e* are (f) (Hayward 1998). In Somali, polysyllabic masculine nouns ending in a consonant have the accent/high tone on the penultimate vowel; those that are feminine, on the ultimate (Saeed 1999). Final high tone for feminine is also reported for Rendille (Oomen 1981: 40-43) except for those feminine nouns that end in a vowel, while masculine nouns have penultimate accent. She proposes that the contrastive pitch is caused by the loss of a feminine suffix in feminine nouns (Oomen 1981: 39). The difference in tone or accent placement is related to word-final reduction processes: In Borana Oromo, feminine nouns mostly have long final vowels and masculine short final vowels (Stroomer 1987: 70). The assignment of gender to loan words can show a clearer picture of form-gender correlations; in Iraqw nouns ending in *u* tend to be masculine; nouns ending in other vowels tend to be feminine and loan words from Swahili follow this pattern (Mous 1993: 41). But loan words can also be assigned to one of the classes, as is the case in Ts'amakko where all loans are feminine (Savà 2005).

Several proposals have been made to recognize "default" gender. Hayward (1992) proposes that (f) is the default gender for Afar. Mous (1993) has suggested that (f) is the default gender for Iraqw on the basis of (f) subject agreement of subject complement clauses. It issometimes difficult to determine default values for gender that are independent of other factors such as the gender of the general word for 'thing' or the phonological properties of the vowel that happens to be the marker of the default exponent of gender. There are, however, languages with a default gender in which all non-sex-distinguishable nouns are of the same gender.

The interplay between gender and number is in the (p) exponent of gender. This class has to be set up because of words that require third plural agreement. Underived (p) words constitute a relatively small set of words, ranging from 130 in Konso to 4 in Afar. Many but not all of these words have some connation with multiple reference, for example, 'people', 'children', 'women' in Afar (Hayward and Corbett 1988: 265). Examples in Alagwa are *daaqaay* (p) 'children', *tikay* (p) 'women, wives', *yawa* (p) 'cattle', *aaraa* (p) 'goats', *baaluu* (p) 'days', *fayee* (p) 'marriage settlement, bride price', *kwa'u* (p) 'house of many poles' and liquids, collectives, words for time and geographical concepts (Mous unpublished). Other kinds of words that often appear in this group are words for part of the day. But also clearly singular words appear in this class, e.g. 'tail' in Iraqw, 'healed wound' in Alagwa. For many languages a large number of the derived multiple reference words

are (p). In Bayso all paucal words are (p). However, all relevant languages have derived multiple reference words that are feminine (Alagwa) or masculine (Bayso), seldom both. For example Iraqw has (p), (f) and (m) derived multiple reference words but the (m) derived nouns are ambivalent in terms of number. Derivation for singular reference is never (p) and always restricted to (m) and (f).

Oomen (1981: 56) proposes that (m) is the unmarked gender and used for [-count] (transnumeral) nouns, and feminine gender is the marked gender to indicate [+count], either plurality or singularity. Despite the attractiveness of this proposal to account for the relative rarity of derived (m) multiple reference nouns, the proposal does not hold for the other Cushitic languages that do have derived singulars in (m). In Rendille no feminine plurals are derived from a feminine base, and this is also true as a strong tendency for the South Cushitic languages. The historical explanation that Oomen offers for Rendille is that these words already had the feminine suffix.

There are additional connotations of (p) and multiple reference in the external agreement phenomena. Many languages show an alternative of semantic multiple reference agreement to morphological gender agreement for the subject of the verb. In Alagwa, multiple reference words that are (f) can be combined with either a third singular feminine ending verb or a third plural ending of the verb. In the latter case the agreement is on a semantic base. A second connotation of multiple reference and plural gender agreement is that the same semantic agreement of a third plural verb is observed as a resolution of gender conflict for a coordinated structure with mixed gender; this is one of the strategies to resolve a gender conflict in Afar (Corbett and Hayward 1988). A further complication is that several Cushitic languages have reduced verb conjugation paradigms in which the underspecified verb form is homophonous with that of a third-person singular masculine subject; see the section 24.

Feminine is associated with multiple reference. In Afar, numbers higher than ‘one’ trigger feminine agreement. In Arbore, Alagwa, and Iraqw multiple reference formations are mainly feminine or plural in gender, rarely masculine. In Borana Oromo (f) adjectives are used for mass meaning (Owens 1982: 47). In Rendille change to feminine gender marks either sex specification or multiple reference (Oomen 1981: 43).

12. Case

Case in Cushitic is typologically interesting, since the most common Cushitic case system is that of marked nominative which is relatively rare among languages of the world. Marked nominative refers to the fact that the noun is case marked for the subject function (subject of an intransitive verb and agent of a transitive verb) and the base form of the noun is used when the noun is not a subject, that is, in isolation, in object position, as well as when it is the predicative noun in a nominal sentence (Hayward 1988: n. 8); see Gensler (2000) and König (2006) for an overview of this phenomenon and its areal spread. In both the marked nominative case system and the nominative-accusative system the subject of a transitive and the subject of an intransitive clause are treated the same way, in both the marked nominative case system and the ergative-absolutive system the agent of an transitive clause is marked and the object of a transitive clause is unmarked. A third general case form is the genitive, and some languages mark the head of a modified noun (anti-genitive or construct case). There are additional case forms in some languages, adverbial case clitics and postpositions. In this section I deal only with core case: marked

nominative. The nominative is often termed “subject case” in Cushitic studies. The unmarked case is called “absolutive”, in line with the unmarked case value in the ergative-absolutive system; some authors prefer the term “accusative” for the unmarked case.

Sasse (1984) presents an overview of marked nominative case in Cushitic. He summarises its characteristics as follows: (i) absolutive rather than nominative (subject) case is the citation form of the noun, (ii) the absolutive rather than the nominative case is the predicative form of the noun in a verbless sentence; (iii) the absolutive is also used for the vocative, measure constructions, and with adverbial case markers; it also occurs when case is neutralized as a consequence of group inflection or focus marking. Gensler (2000) adds that the absolutive is used for the fronted topic and emphatic noun in situ position. Languages differ in the choice of case they use for the subject in nominal clauses: Oromo uses the absolutive for the subject of a verbless equative clause (Owens 1985a : 98), while Somali uses the nominative (Saeed 1999: 187). The focalized subject is in the absolutive; in that situation there is no subject agreement on the verb, e.g. in Somali and Arbore (Hayward 1984a: 113). The explanation for this is that these constructions go back to a fossilized cleft sentence (Hetzron 1972, Hayward 1984a: 113-126). In Borana Oromo, relative clauses are not marked with nominative case marker (Owens 1982: 53). Dirayta is exceptional within Cushitic in that synchronically the nominative case form is the unmarked form and the absolutive form is best treated as derived (Tosco 1996). K’abeena marks both accusative and nominative case, but the nominative can be analysed as more marked and based on the accusative (Crass 2005: 86).

An exemplary overview of use nominative and absolutive case is presented by Owens (1985a: 98-102). I copy his overview with some examples here (see 6). The absolutive is unmarked in the sense that (i) it lacks morphological marking, (ii) it is used as the citation form, (iii) it is the basis of morphological processes such as genitive marking and coordination marking, and (iv) it is used in a large variety of other contexts. The nominative is marked in the sense that (i) it needs morphological marking and (ii) its function is restricted and (iii) can be specifically formulated as marking the (focussed and non-focussed) subject of a tensed clause (both the subject of intransitive clause and the agent of a transitive clause).

(6) Absolutive case in Oromo

a. equative predicate

xun bishaan kursháashaa
this water dirty
‘This is dirty water.’

b. direct object

húrrée-n arká d’olki-t-i
fog-NOM sight prevent-F-IMPFV
‘Fog reduces visibility.’

c. causative object

nama sún intalaa-f xennáa xann-isiis-e
man that girl-DAT present give-CAUS-PAST
‘He made that man give the girl a present.’

d. goal, location object
magaláa deema
market go
'He will go to the market.'

e. time complements
innií saa'áa afur si bóodá maná tur-e
he hours four you after house stay-PAST
'He stayed behind four more hours than you at home.'

f. predicative
maná adíi akka gaarií-tti díimáa dib-e
house white as nice red paint-PAST
'He painted the white house red very well.'

g. unit of measure
xaráa-n ás írráa kilométrii diddám fagata
road-NOM here from kilometers twenty far
'The road is twenty kilometers from here.'

h. object of postposition
innií xeesúmmáa sun bírá jira
he guest that near exist
'He is near to that guest.'

(7) Nominative case in Oromo

a. subject of adjectival clause
híd'ii-n díim-tuu
lip-NOM red-F
'A lip is red.'

b. focussed patient subject (S) verbal clause
nyaan-níi ní nyaatama
food-NOM focus eat:PAS
'The food is being eaten.'

c. focussed agent subject (S) verbal clause
sárée-n adíi-n ní iyyi-t-i
dog-NOM white-NOM focus bark-F-IMPFV
'The white dog is barking.'

d. non-focussed agent subject (A) verbal clause
haat-tíi okkótée goot-t-i
mother-NOM pot make-F-IMPFV
'Mother is cooking.'

(Owens 1985a: 98-102)

The nominative (subject) case is often limited to certain nouns. It is restricted to masculine nouns in Saho, Afar, Dirayta, Sidamo, and Kemant. In Saho only masculine nouns ending in vowels are involved. In Dirayta the nominative case involves masculine nouns only; in addition some singulative masculine nouns are excluded from case marking (Tosco 1996: 28). In Rendille the nominative occurs only on feminine nouns ending in a consonant provided that the noun is noun phrase-final

(Oomen 1981: 45). An overview of such restrictions is offered in Tosco (1994a: 226-228).

Recurrent formal characteristics of the nominative case are low tone and a final vowel *i*. In Somali, the nominative case is primarily marked tonally on the last element of the subject phrase by lowering of the tone of the noun (but penultimate high in one of the declensions) and by a suffix *i* for some feminine nouns (Hyman 1981, Banti 1984, Lecarme 1988). Lowering of tone and final vowel *i* are also characteristics of the nominative in Saho and Afar. In K'abeena the subject case is marked by retraction of the accent by one syllable (Crass 2005: 87). In Sidamo masculine nouns change the final vowel to *i* or *u* for the subject case. In Oromo the nominative is not always marked; when it is, by *-i* (m), *-ti* (f), or *-n*^{i} plus voicing and lengthening the final vowel.

Nominative-case marking is on the head noun and on its modifiers in Oromo; the nominative and absolutive demonstrative pronouns are used interchangeably (Owens 1985a: 87). In Arbore (Hayward 1984a: 150) the nominative is marked on the head only.

Sasse (1984) reconstructs a nominative case system for Cushitic and case marking on nouns by changing short final vowel *-a* for absolutive to *-u* or *-i* for nominative on masculine nouns only; there was a different situation for nouns ending in long vowels. Consequently word-final reduction processes resulted in the restrictions of case marking that we find in the present-day languages. New nominative-case marking also developed, such as Oromo nominative *-n.* And in Burji a new feminine nominative case was formed by suffixing the feminine subject demonstrative pronoun; these pronouns were distinct in case for masculine and feminine in Proto East Cushitic: **ka* MASC:ABS, **ku* MASC.NOM, **ta* FEM:ABS, **ti* FEM.NOM for the proximal demonstrative pronoun (Sasse 1984: 117).

Other case systems occur too. The Agaw languages have a nominative-accusative system, and several languages have no distinction of nominative and accusative case (South Cushitic, Konso, and Beja). In Agaw the accusative is marked and the nominative (subject) is unmarked and identical to the word form in isolation (Bilin and Awngi); in Kemant there is marking for the masculine subject as well. In Bilin and Kemant the accusative is used with definite objects only (Hetzron 1976: 17). The Agaw languages have non-core case marking as well.

There is a tendency for a correlation between definiteness and case marking. Hayward (1988) shows that in Burji indefinite base subject nouns are marked by the nominative case including gender agreement (definite expanded subject nouns are case marked differently by reduction of their final vowel and for masculine words addition of *i*). Indefiniteness is a matter of degree in regard to marking of the nominative case in Burji. Such a system is a natural development, as is explained by Comrie (1981: 123), since if case marking is partial only, it might be expected in objects that are high in animacy and definiteness or in subjects that are low in animacy and definiteness by the odd-man-out principle, i.e., only the less common situation would be case marked. In the case of Burji the latter gave rise to an indefinite subject marker which for masculine nouns is superimposed on definite marking.

13. Genitive

The genitive links the nominal modifier to the head noun, e.g. Somali *gúri-ga Calí* /house-the:ABS Ali:GEN/ 'Ali's house' (Saeed 1991: 175). The genitive marks the

possessor in a predicative possessive construction, e.g. (8). The genitive is also used with certain modifying suffixes. For example, in K'abeena the ordinal number suffix, the privative and the similative suffixes require genitive marking on the noun, e.g. *k'aak'ummee t'eeni-gga* /september:GEN rain:GEN-similative/ 'like rain in September' (Crass 2005: 100).

(8) ti t'ák'ut[i] 'aye-rr[a]
DEM1:F:marked animal:NOM who?:GEN-COP:P
'Whose animals are these?' (Crass 2005: 100)

In Oromo, as in many other Lowland East Cushitic languages, the noun plus a modifier noun form a tonal phrase and gender-sensitive tone rules apply. In Oromo a segmental gender-sensitive genitive-case marking in the form of an associative morpheme is optional, obligatory when self-standing (Owens 1985a: 103-104).

(9) oww-íi (xan) ibiddá namá gubaha
fire-NOM ASSOC.M fire person burns
'Heat from a fire burns a person.'

(10) tan intalá suní arke
ASSOC.F girl that.GEN saw
'He saw that girl's.' (Owens 1985a : 104).

In Afar there is a distinction between definite (marked by *-ih*) and indefinite genitives, with the latter used when no other modifier occurs. Burji also has such a definite/indefinite distinction and has the additional interesting property that it agrees in gender with the possessee rather than with the possessor on which it appears, e.g. *goti-nta d'aga* /hyena.M-GEN.F ear.F/ 'a hyena's ear' (Hayward 2002: 63).

In Agaw the genitive precedes the head noun and agrees in gender and number with the head noun, next to a non-agreeing genitive construction (Hetzron 1976: 19).

In Arbore both the head and the genitive are potentially marked; the form of the head marking consists of tone patterns and suffixes and depends on the gender of the head noun and the phonological shape of it, while the genitive noun is marked with a suffix containing *t* and has certain tone patterns depending on the tone pattern of the head noun (Hayward 1984a: 150-157).

The phrasal properties of (genitive)-case marking (e.g. in Awngi (genitive) case is marked on every element of the noun phrase) are discussed in the section 21.

14. Construct case

In the South Cushitic languages the nominal modifier is not marked and follows the head noun. Any modified head noun is marked as such by the construct case which is gender sensitive. In Iraqw the construct case is marked by a high tone on the final syllable of the head noun: *afé-r mar'i* /mouths:CON-F houses/ 'doors', *murúu 'ayma* /things:M:CON eating/ 'food'. Nouns modified by an adjective or a relative clause are also in the construct case; if the head noun is understood, a gender-sensitive construct case pronoun is used, e.g. *ar mar'i* /INDEP.CON.F houses/ 'those (i.e. mouths) of the houses'.

15. Non-core cases and clitics

The Agaw and Highland East Cushitic (HEC) languages have additional cases: K'abeena (HEC) has dative case, instrumental-comitative + locative case, and ablative case. Formally these are built on the accusative. The instrumental-comitative is also used for noun coordination; it has partial semantic and formal overlap with the locative (Crass 2005: 105-106).

Several of the Lowland East Cushitic languages and South Cushitic languages have case clitics that have a fixed position in the clause: Arbore, Dhaasanac, Elmolo, Dullay, Boni, Rendille, Somali, Dahalo, Alagwa, Burunge, and Iraqw have case clitics that are linked to the verbal complex rather than to the noun phrase. The case clitics have also been termed "adpositional clitics", or "applicative". They typically have a fixed position preceding the verb and indicate the role of one of the noun phrases in the clause. The case clitic is not necessarily attached to that noun phrase (11e,f). The usual "cases" are dative (11b), instrumental/comitative (11a,c), locative/allative (11d,e), and ablative (11d). The clitics get cliticized either to the following verb (11d,f) or to the preceding (pro)nominal (11c,e), which may often be an object pronoun but again not necessarily referring to the object of the case relation (11d).

(11) a. 'um ye kí šuún (Dhaasanac, Tosco 2001)
children me with gather.IMPF.A
'Bring me the children.'

b. kúu lo-s-o ħab-it Juma (Alagwa, Mous unpublished)
2SG.M OPT-DAT-O.M tell-2SG Juma
'You should tell Juma. '

c. 'anafu'umay-ħank-^{i} ha-gi-ni-ri fa'a 'agim^{a}
1SG meat-N-DEM1 S1/2-O3PL-O.FOC-COM porridge eat.1SG.IPF
'ilibaa-goo-ba (Burunge, Kießling 1994: 163)
milk-PRED-NEG
'I eat the porridge with *this meat*, not with the milk.'

d. á-í-ká-soó-weyne (Rendille, Pillinger and Galboran 1999: 30)
FOC-IO-from-to-drove.animals:we
'We drove the animals from [there] to [here] for him.'

e. buura a-n suum-i qaas-áan
beer O.F-EXPEC poison-DIR put-1PL
'We'll put poison into the beer.' (Iraqw, Mous 1993: 246)

f. moor d'éeká ká-habta
home children at-remain
'It is the children who remain at home.' (Boni, Sasse 1981: 256)

Somali and Rendille allow stacking of case clitics, the other languages do not. The actual forms of the case clitics and a discussion of their history can be found in Appleyard (1990: 27) and Biber (1984: 51-52); see also Mous (2006) for the addition of South Cushitic.

16. Adpositions

The word category of pre/post-position is not straightforward. Most languages have special sets of nouns that translate like pre/post-positions and are at various stages of grammaticalization towards postpositions (or preposition in the case of the South Cushitic languages). Hayward (2002) addresses the analytical problem of whether

these relational clitics are case markers or postpositions, such as the locative marker *l* in (12), and whether some others are postposition or relational nouns, such as the direction marker *ula* in (12). Using as guiding principle that case markers do not attach to adpositions, he argues that relational nouns are not postpositions, because they often have the genitive case. And as a consequence, the relational clitics to which no core case can be attached are analysed as postpositions because if they were case markers, it would be unexplainable that these (relational) nouns cannot receive case.

(12) ħiyawt-i ‘eel-i ula-l adiik yane
man-NOM well-GEN direction-LOC going he:is
‘A man is going towards the well.’ (Hayward 2002: 58)

Konso postpositions can be defined as a separate word category on the basis of the fact that they do not occur as head in a Noun Phrase in a genitive construction even if most can be shown to be derived from nouns. Postpositions can be combined (13) and are often combined with a case clitic such as locative *-opa* in (14) and directional adverbs.

(13) iifsa tarapeesa qara-dela ca
lamp table on-upwards be:IPF
‘The lamp is above the table.’ (Daudey and Hellenthal 2004: 87)
(14) aree-pp-opa-xata xooye
here-at-DEST-downwards come:IMP
‘Come down to this place.’ (Daudey and Hellenthal 2004: 88)

Dullay has cliticized postpositions genitive-locative, benefactive, instrumental, directive, and ablative (Amborn et al. 1980: 89). Ts’amakko has four adpositional clitics that are attached to the noun phrase. Some, like the clitic *nu,* have a wide variety of functions (15) (Savà 2005: 103-107).

(15a) ’ano beze=nu gaz-o ’ooš-i
1SG.SUBJ Beze=from hair-M shave-3SG.UNM
‘I have shaved Beze.’
(15b) bog’ol-k-o=nu q’ol-e c’ox-ind’a
king-SG-M=from cattle-P milk-PLUR.IMP.B
‘Milk the cattle on behalf of the king!’
(15c) laabl-e gaan-t-e=nu šeeg’-i
cloth-F woman-SG-F=from bring-1SG.UNM
‘I brought the cloth to the woman. ’

The semantics of the locational nouns/postpositions may reflect a cattle-focussed culture if the body part ‘back’ is used for ‘up’ reflecting the model of a quadruped animal (cow) (Heine and Reh 1984). This is the case in Iraqw; Carlin and Mous (1995) argue that the model is not necessarily that of a cow but more that of a container, e.g. *baati i daandú do’* ‘The iron sheets are on top of the house’ (Carlin and Mous 1995: 124), but see Reh (1999) for counter-arguments.

17. Adjectives

The category of adjective is not clear-cut in all Cushitic languages. In several languages there is a (static) verb conjugation type that plays an important role in the function of descriptive modification. This is the case in Somali and Afar, (Banti 1988b: 208-213). These verbs form a conjugation class of their own and follow the head noun in a subject relative clause, for example, (16).

(16)	shalay	baa	ri-dii	caddayd	la	qashay
	yesterday	FOC	goat-DEF:NOM	be.white:PAST:3F	IMPERS	killed

'Yesterday the white goat was killed.' (Somali, Banti 1988b: 209).

There are two other kind of words in Somali that translate as adjectives: nouns that are used as predicates in a relative clause, e.g. *nin marti ah* /man guest is/ 'a man who is a guest' (Banti 1988b: 214), and attributives, that is, invariable nouns that modify the head noun, e.g. *meel sare* /place high/ 'a high place' (Banti 1988b: 217). These nouns cannot be used independently, and they need a dummy head noun when used predicatively, e.g. *waa kan sare* /FOC this high/ 'the higher one'. Many languages have a group of modifying nouns, e.g. Ts'amakko, Arbore, and K'abeena. Nevertheless, there is evidence for an independent category of adjective in many of the Cushitic languages. For example, Treis (2005b) argues for an independent category of adjectives in Kambaata on the basis of derivational category-changing morphology that is specific for adjectives.

Adjectives can be defined morphologically by number agreement. Adjectives are often the only word category that shows agreement with number, especially for languages that have gender agreement in the verb. In the South Cushitic languages, Rendille, Bilin, Oromo, Arbore, and Dhaasanac adjectives show number agreement, singular being unmarked. Ts'amakko is one of the few East Cushitic languages with no number agreement in adjectives.

The languages that show number agreement in adjectives tend to have various ways in which number is marked on adjectives, but these are different from nominal number marking. The most widespread number agreement marking on adjectives is by partial reduplication of the initial CV, e.g. in Arbore (plus vowel lengthening in Dhaasanac, plus gemination of the root-initial consonant in Oromo), or complete reduplication, as in Rendille. South Cushitic and Bilin have *-an* for plural number agreement, K'abeena has *-aa'nut*^{a} and other markers, Rendille has a prefixed *a-* (Oomen 1981: 61), and Oromo has *´-óo* or *-óotá* (*-o* marks (p) gender in adjectives in Arbore).

Number agreement is claimed to be semantic for some languages. In Borana Oromo, Stroomer (1995) points to the distributive reading imposed by a reduplicated adjective expressing a difference between 'a group of good bulls' with a singular adjective and 'scattered good bulls' with a plural reduplicated adjective. The same is valid for Iraqw (see the example on 'paper money' in section 9 on nominal number).

In addition to number agreement, adjectives show gender agreement. Agreement involving adjectives can be complex, as in Arbore or in Burunge and Iraqw where the modified head noun has a gender marker to allow modification, the adjective is number marked and has additional gender marking. In Arbore we have three options for agreement on an adjective modifying a multiple reference noun, see (17) in which *-a* on the adjectives marks (masculine/feminine) gender, *-o* (plural) gender and reduplication on the adjectives marks number.

(17) Arbore adjective gender agreement (Hayward 1984a: 201f)

a.	’ed’í-ha fa-fayya’an-á	/sheep.goats-M RDP-good-M/F/	‘good sheep and goats’
b.	’enug-mé-ta gu-guud-á	/kids-MR-F RDP-many-M/F	‘many lambs/kids’
c.	k’acc-ó-ha ’í-’ils-o	/stones-P RDP-heavy-P/	‘heavy stones’

In some languages there is no gender agreement on the adjective itself, only on the head noun, e.g. Alagwa and Rendille. In others, such as Oromo and Ts’amakko, gender agreement adjectives follow the noun without additional (gender) marking on the noun.

In Arbore the adjective is invariable and shows no agreement when used predicatively, in which case it needs a predicative suffix *-d’a*.

Adjectival derivation: Adjectives are derived from verbs by inchoative derivation in Ts’amakko, but in this language the inchoative suffix *-ay* is also present in the regular gender markers for adjectives *-akko* (m), *-att*e (f) and *-ayke* (p). South Cushitic has an unproductive *-ar* deverbal adjectival suffix. Ts’amakko has *-al* (~ *-ol*) to derive adjectives from nouns.

18. Adverbs

Adverbs are not a clearly defined major word class in Cushitic languages. Most grammars include a section on adverbial expression in which expressions for time and place are presented. These expressions may be nominal in nature, lexicalised phrases, or difficult to categorise in a word class.

Some languages have a restricted set of adverbs that can be defined syntactically as admissible in the verbal piece. For Iraqw these are *adá* ‘quickly, soon, immediately’, *adawa* ‘all together’, *ak* ‘more, further’, *al* ‘together’, *baló* ‘one day, ever, never (in combination with negation)’, *geerí* ‘ahead, firstly’, *lak* ‘almost’, *mak* ‘somewhat’, *malé* ‘again, first’, *qaró* ‘already, nearly’, *sang* ‘now, just, already’, *tawo* ‘in vain, uselessly’, *tsibi* ‘truly’, *tsuwá* ‘for sure’, *algee* ‘slightly, a bit’, *tibe* ‘again’. In Alagwa a number of adverbs seem to be derived by *-nkoo*, *bankóo* ‘first’, *hinkóo* ‘now’, *lankóo* ‘some time, some day’, *slankóo* ‘before’; others end in *-ee*, *baree* ‘if’, *tsigée* ‘fast, early’, *tsobolee* ‘truly’ *sigee* ‘far’. Other languages too have adverbs that end in *óo*, for example, Oromo *fágóo* ‘far’, *d’íhóo* ‘near’, *díkk’oo* ‘little’ *gúddóo* ‘very’. In K’abeena adjectives in the locative case are used as adverbs. K’abeena has a few de-adjectival adverbs derived by the similative suffix *-gg*^{a} (Crass 2005: 239). Oromo has some adverbs that modify the verb or adjective that they precede, such as ‘much, very’, ‘little’, ‘very’.

In the Oromoid languages Oromo and Konso, postpositions can be used adverbially, e.g. the Oromo postposition *waj* ‘together’ in *níi wáj d'ufe* ‘he came together’ (Owens 1985a: 121).

19. Numerals

Most Cushitic languages have basic numbers for 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 100, and 1,000. The highest numbers are often borrowed, e.g., in Alagwa 100 and 1,000 are borrowed from Swahili; in Ts’amakko from Amharic.

In the Lowland Eastern and South Cushitic languages numerals are a subset of nouns but follow the noun without any genitive marking. The head noun does not need to be in plural when followed by a number higher than 1; for example, it is not in Dullay and Somali.

Being nouns, numerals have inherent gender. In Iraqw 1 to 9 are feminine, but the units 10, 100, and 1,000 are masculine; in Arbore only the units1 and 100 are masculine, the other numerals are feminine or plural. In several languages the nouns for the units such as 10, 100 and 1,000 tend to have multiple reference forms (though not the unit 10 in Arbore).

The higher numbers 11 to 99 are formed by the formula {term for '10(s)'} *n* {term for 'and'} *m* in which the multiplicator is usually expressed by simple juxtaposition and the addition by the common coordinator in the language. Multiplication by 1 is optional or not expressed. This system operates among others in Arbore, South Cushitic, and Dullay. The word for '10' is in its multiple reference form if there is one (South Cushitic and Dullay).

A slightly different system is one in which the numbers 20, 30, et cetera, are lexicalised but etymologically related to the basic numbers 2, 3, et cetera. This is the case in Borana, K'abeena, Dhaasanac, and Afar.

Ts'amakko has a different basic unit, 20, which is a word meaning 'body'; the numbers between 10 and 19 are formed by '10' followed by the number between 1 and 9, without a coordinator (Savà 2005).

Numerals do not agree in gender with the head noun. In Dhaasanac 'head' may intervene between the head noun and the numeral as a kind of generalized numeral classifier. *kulic mé tikid'd'i* /day head one/ 'one day, once upon a time'. A common exception, a numeral that does show gender agreement, is the numeral for '1' (Arbore, Ts'amakko, and Alagwa). In Dhaasanac the number 1 has a different form when used independently as in counting and when used as a modifier. The numeral '1' can take up other functions such as a marked indefinite, e.g. Alagwa *wokoo* 'a certain' from *wak* 'one'.

In the Noun-Numeral construction with no gender agreement the noun is usually in the singular, e.g. in Oromo, Ts'amakko. An example is *gulm-a salaħ* /beer.calabash-F four/ 'four beer calabashes' (Savà 2005: 87-88).

In Somali, numerals are the head of the noun phrase when they modify a noun, e.g. *áfar naagóod* /four.ABS women:GEN/ 'four women' (lit. four of women) (Saeed 1999: 70).

Numerals occur in subject, object, predicate and adverbial positions. Arbore numerals have predicative forms containing the predicative suffix *-d'a* which is also used for predicatively used adjectives.

The syntactic behaviour of numerals is different in Highland East Cushitic, Agaw, and Beja, where the order is numeral-noun, and the numeral is more a modifier and less a noun, e.g. K'abeena *lamalu 'annícci-'ne* /seven:M:marked father:ABL-1PL.POSS/ 'among our seven forefathers' (Crass 2005: 211).

Not all languages have ordinal numerals: Arbore lacks them; in Dhaasanac one adds the element *ki* after the head noun and a determiner after the numeral used as ordinal, for example *máa ki 'afuur-a* /man *ki* four-DET/ 'the fourth man' (Tosco 2001:106). In some languages ordinals are derived from cardinals; for example, Borana has a suffix *-eesoo* for ordinals, e.g. *afr-eesoo* 'fourth'; this suffix contains the adjectival suffix *-oo* (Stroomer 1995:61). The ordinal for 'first' is usually lexically different, e.g. *'érkob* 'first' in Dhaasanac; *durá* in Oromo from *dúrá* 'in front'.

The distribution of number gestures is according to geographical area. In the South Cushitic languages, showing numbers by gestures is in line with the common East African system: 2 = forefinger and middle finger brushing against each other, 3 = forefinger, middle finger and ring finger (no movement), 4 = forefinger and middle

finger as pair separate from ring and little finger in a V, 5 = raised fist, often moving, 6 = 3 + 3, 7 = 3 + 4, 8 = 4 + 4, 9 = 4 + 5, 10 = two fists hitting each other. Dhaasanac has the Eastern Nilotic system of Maasai and Turkana in which 2 is presented by the middle and the forefinger extended and brushed against each other and brushed together; 3 is presented by forming a circle with the top of forefinger and thumb together and the other fingers extended; 4 as described above and 5 by a fist in which the thumb appears between pointing and middle finger (see Tosco 2001: 107; compare with Zaslavsky 1973: 250 and Gulliver 1958). The counting gestures are different from the gestures showing numbers and they display a great deal of variation and areal influence. Counting on finger digits is very common in Ethiopia, counting by closing fingers of one hand starting with the little finger is common in Kenya and Tanzania.

In Dullay numerals can be used as verbs with inchoative meaning, e.g. *salħ* 'become four', from *salaħ* 'four' (Amborn et al. 1980: 97).

Other quantifiers may behave like numerals. This is for example the case for Arbore *búlí(h)* 'all, every' and Alagwa *ɬoomee* 'all' *túk*^{u} or *tík*^{u} 'all, whole' and modifying question words such as *mi* 'which?', *miili* 'which?', *mag(a)* 'how many?'. In K'abeena 'all' is similar to the numerals. In Oromo *heddúu* 'many' and *díkk'óo* 'few' are numerals and do not co-occur with numbers.

20. Ideophones

Cushitic languages are no exception to African languages in that they have an extensive word category of ideophones. It has, however, rarely been described. Tosco (1998) is a thorough study of Somali ideophones with an impressive set of examples; Crass (2005) pays due attention to them; they are described for the South Cushitic languages; see also Mous (2000) on ideophones in riddles.

Defining the category of ideophones is generally not easy. In Somali, ideophones are noun-like; they are feminine nouns; in Dhaasanac they are a subclass of adverbials or nominals (Tosco 2001: 249-250).

Some language have grammatical morphemes that are limited to sound symbolic words. This is the case for K'abeena which has a nominalizing suffix *-iti* that is restricted to ideophones (Crass 2005: 84, 233). In Iraqw there is a de-ideophonic verbalizing suffix *-eel*.

As in many other languages, one of the ways to introduce an ideophone is by the verb 'to say' or another direct speech introducer. This is the case for Alagwa, Iraqw, Somali, and K'abeena. In K'abeena the verb 'to make' is used in transitive or causative constructions (Crass 2005: 229); see also the section 25 on 'to say'.

There are special phonological characteristics of ideophones, uncommon sounds, and uncommon sequence of sounds. In K'abeena, ideophones often end in a geminate consonant. And there is often expressive lengthening, tone and reduplication.

21. Structure of the noun phrase

The Cushitic languages are divided into languages with head-final and head-initial noun phrases. This does not correlate with differences in basic word order or other characteristics that are universally associated with the position of the head such as position of the adverb, pre- or post-positions, or prefixing or suffixing strategy. The distribution of head-final versus head-initial nominal phrases is areal rather than genetic: Noun phrases in Lowland East Cushitic and South Cushitic are head initial;

in Afar-Saho, Highland East Cushitic, and Agaw, head final. (The areal nature of the order is evident from map 3 in Banti 1988b: 254).

Tosco (1994b) provides a typological overview of noun phrase syntax in Cushitic (see Table 7) and proposes a historical scenario in which he proposes that pre-head modifier order is an innovation in Highland East Cushitic and Saho/Afar through the grammaticalization of a left cleft construction which explains the recurrent determiner-gender markers on the preposed modifiers originating from copulas in Highland East Cushitic.

Table 7: Word order patterns in Noun Phrases in selected Cushitic languages.

Language	Adj, N	Gen, N	N, Poss	Dem, N	Num, N	Rel, N	No. of Mod N NP.s	No. of N Mod NP.s
HEC								
Hadiya	Adj N	Gen N	Poss+N	Dem N	Num N	Rel N	6	Ø
Kambata	Adj N	Gen N	Poss N, N+Poss	Dem N	Num N	Rel N	6	(1)
Sidamo	Adj N	Gen N	N+Poss	Dem N	Num N	Rel N	5	Ø
Gedeo	Adj N	Gen N	Poss N	Dem N	Num N	Rel N	6	Ø
Burji	Adj N	Gen N	Poss N	Dem N	Num N	Rel N	6	
Afar	Adj N	Gen N	Poss N	Dem N	Num N	Rel N	6	Ø
"LEC"								
Dullay	N Adj	N Gen	N+Poss	N Dem	N Num	N Rel	Ø	6
Oromoid								
Konso	N Adj	N Gen	N Poss	N Dem	N Num	N Rel	Ø	6
Oromo	N Adj	N Gen	N Poss	N Dem	N Num	N Rel	Ø	6
Omo-Tana								
Somali	N Adj	N Gen, Gen N+Poss	N+Poss	N Dem	Num N	N Rel	1 (2)	5
Arbore	N Adj	N Gen	N Poss	N Dem	N Num	N Rel	Ø	6
Bayso	Adj N	N Gen	N Poss	Dem N	N Num	N Rel	2	4
Dhaasanac	N Adj	N Gen	N+Poss	N+Dem	N Num	N Rel	Ø	6

Source: Tosco 1994b.

Bilin (Agaw) has both orders: head final and head initial. As in Beja the order Head-Modifier is used to emphasize the modifier (Morin 1995: 46). In Dhaasanac, possessive phrases can be either head final or head initial; the head-final phrases require a final possessor or emphasis marker, e.g. *cár b'íl=lé* /snake house-EMPH/ 'the house of the snake', versus *b'íl caríet* /house snake:GEN/ 'snake house/ (the emphasis marker is absent in compounds with dependent-head order such as *b'íl 'afu* /house door/ 'door of the house' (Tosco 2001: 254-55).

Within the noun phrase, modifiers require the head noun to be repeated by a gender-sensitive pronoun. This pronoun cannot function as a subject or object pronoun. The shape of this pronoun goes back to *ku* (m), *ta* (f) and *ki* (p); but more often than not these are reduced to *kV* (m/p) and *tV* (f) or even further reduced to suffixes. The amalgamation of such a pronoun with the head noun results in construct state of the head noun, i.e. the shape of the noun when modified. The South Cushitic languages require a gender-sensitive genitive pronoun before a modifier: for the independently used modifiers this has become part of the possessive or demonstrative pronoun; when following the noun, the pronoun is fused with it resulting in construct case on the head noun. Take for example the following noun phrase (18) from Iraqw in which the gender linker is realized as *r* before the possessive suffix, as *ta* in the independent demonstrative and as *ar* before the final modifying noun phrase.

(18) dooła-r-ók ta-qá' ar bará qaymo
hoeing-F-2.SG.POSS INDEP:F-DEM3 INDEP.CON.F in:CON field
'that hoeing of yours in the field...'

A head-final language such as K'abeena also requires a gender-sensitive determiner for nominal modifiers. The determiner *ta* (agreeing with the head noun in gender) precedes the nominal modifier 'hand' in (19a) and the genitive pronoun 'mine' in (19b); it is also needed before relative clauses.

(19) a. ta 'anga forkott^{u}
DMD1:F:UNM hand:GEN rawness:NOM
'the rawness of this hand ...' (Crass 2005: 325)

b. ta 'ii saẍẍat^{a}
DMD1:F:UNM 1SG.GEN advice:ACC
'my advice' (Crass 2005: 326)

Some languages require a phrase-final determiner *ka*. Dhaasanac has this determiner after every member of the noun phrase, for example, *'adda kú=a ti=a* /aunt your-DET that-DET/ 'that aunt of yours' in which the determiner *ka* appears as *a* (Tosco 2001: 253).

In Oromo a possessor, relative clause, numeral, 'which', demonstratives, 'all', and 'other' can all occur without a head noun. The associative marker must be used in that case for relatives and third-person possessives, including nominal modifiers.

Modifiers that follow the noun are either suffixes/clitics or independent words. Determiners such as demonstratives and possessives may be suffixes to the head noun as in the Iraqw example (18) above. These can also occur as independent words.

The order of modifiers in the noun phrase varies from language to language. In Iraqw the order is noun-possessive/demonstrative/indefinite suffix - demonstrative/indefinite pronoun-numeral/adjective/adverb/relative clause. In Oromo it is noun adjective possessor-relative/numeral/which/other-demonstrative-only/all. Numerals often follow the adjective, e.g. Ts'amakko *'org-ayn-e busk-e xobin* /male.goat-PL.P castrated-P five/ 'five castrated male goats'.

In addition to linkers with gender agreement, other agreement phenomena may occur within the noun phrase. Adjectives may agree in gender, in addition to the gender linker on the head noun and, independently, in number, as discussed in section 9 above. Several languages show case agreement within the noun phrase. In Oromo both the noun and the following adjective agree in case marking. There is case agreement in all qualifiers in Awngi. In example (20) the locative which refers to the whole noun phrase is repeated after each word in the final position, the plural genitive referring to 'the doorways of' is found after each word in the higher genitival phrase before the locative, and the masculine genitive referring to the 'nice house of' is found before that in the lower genitive phrase. There is much variation in this area of noun phrase syntax among the Agaw languages. In Xamir, case is expressed only at the end of the NP, not necessarily on the head noun. In Kemant, case is either on the head noun or on the modifier.

(20) [g'ud-a-w-sk^{w}-da ɣuna-w-sk^{w}-da [cənkút-ək^{w}-da
good-FEM-MASC.GEN-PL.GEN-LOC woman-MASC.GEN-PL.GEN-LOC nice-PL.GEN-LOC
ŋɔ́n-ək^{w}-da [wodel-ká-da ábjél]]]-ka]-da
house-PL.GEN-LOC large-PL-LOC doorway-PL-LOC
'In the large doorways of the nice house of the good woman' (Hetzron 1976: 37)

22. Demonstratives, definite markers, which?

Demonstratives, definite markers, and certain other markers are discussed together because they partly overlap in form and function within and across languages. There are five kind of markers that I discuss here: definite markers, demonstratives, discourse deictics, particulars, and the question word "which?". Boni has six categories of deixis in Sasse's (1980) analysis: proximal, distal, particular, anaphoric referential, cataphoric, and habitual. Definiteness is never an obligatorily marked category in Cushitic languages: sometimes the use of definite markers has been grammaticalized, and the markers no longer necessarily express definiteness. Demonstratives sometimes function as definite markers. A number of languages have separate deictic markers for anaphoric and cataphoric use in discourse; others use demonstratives for those functions. Various languages have a marker for "a particular X". Most languages have a questioning particular marker, "which?". Many of the deictic markers discussed here show gender agreement with the head noun, but the patterns are mixed; within one language some but not all of the demonstratives may agree in gender with the head noun; this is the case, for example, in Boni in which only the proximal has the three-way gender agreement. The deictic markers occur either as suffixed to the noun or as separate words; most can appear independently in the separate word form. When noun phrases are case marked, this case marking may end up on one of the deictic markers. Demonstrative and definite markers may have case-specific forms.

22.1. Definite markers

Since definiteness is not an obligatory category, the use of the definite marker is in opposition to that of an indefinite marker. There are various other means to indicate that a referent is supposed to be present and prominent in the mind of the hearer: leaving it unmentioned or using a pronoun, the position in the sentence of the noun phrase referring, and so on. It is very common for a definite referent not to be marked for definiteness. In section 21 on the noun phrase we have seen that definite markers may occur several times or at certain positions in the noun phrase for grammatical purposes only. In Rendille the relative marker is used on nouns that are modified.

When there is a noun phrase with several nouns, it is commonly impossible to use the position of a definite marker to indicate differences in definiteness between the nouns. For example, in Somali a noun is marked as definite if modifying another definite noun and no difference can be made between 'a' and 'the' in 'car of the company', *baabuurka shirkada*.

Several languages have definite markers that are separate from demonstratives. K'abeena has a definite marker *-n-*gender linker (always followed by gender/proximal demonstrative markers) which is added to most numerals. It can be combined with other definite markers, e.g. *gú'mi-n-ti-s^{e} mancot^{a}* /all:F:NOM-DEF-F:NOM-DEF.F woman:ACC:COP.F/ 'All are women' (Crass 2005: 120-121).

Definite markers are often combined with other definite modifiers. For example, Somali possessives require an additional definite marker. Definite markers can also be used with inherently definite words such as personal names. In Somali personal names that are modified by a relative clause will be marked as definite. Geographical names contain a definite marker, e.g. *ingriiska* 'United Kingdom'. Iraqw allows demonstratives after names and personal pronouns (Mous 1993: 90, 282).

The interplay of definiteness and number is still to be researched. In Somali the noun form that is unmarked for number will be used in indefinite contexts, e.g., *dad baa yimin* 'people have come'; but in combination with the modifier 'all', the noun must be definite, e.g., *dadka oo dhan way siman yihiin* 'all people are equal', and similarly, in general statements such as *dadka ma noolaan karocunto la'aan* 'a person cannot be without food'.

22.2. Demonstratives

The languages vary greatly in the number of distinctions in degree of distance marked by demonstratives, from only one in Konso to four in the South Cushitic languages. Oromo, Konso, K'abeena, Dhaasanac, and Somali have two, proximal and distal; Afar and Rendille have three degrees of distance. Within the same branch the number of distinctions may be different: Within the group of Sam languages Somali has two degrees, Rendille three and Boni three of which one is used referentially. Whereas deictic adverbs in some languages refer to same, higher or lower altitude, demonstratives refer to the distance from the deictic centre, the speaker.

It is common for demonstratives to require gender agreement with the head noun, as is the case in Somali, Rendille, South Cushitic, K'abeena, and Khamtanga. In Oromo this is the case for the proximal demonstrative only and not for the distal demonstrative. There is no gender agreement in Dhaasanac.

22.3. Demonstrative pronouns

The Somali and Rendille demonstratives may be used independently. In the South Cushitic languages independent demonstratives need a gender-sensitive base which is different from the gender linker when used as a suffix. Dhaasanac uses the word *'ee* 'thing' as head when demonstratives are used independently. K'abeena uses independent forms that have a prefix stem *hi* plus gemination of the second consonant (Crass 2005: 128-129); while the Afar demonstratives need a suffix *h* when used independently (Bliese 1981: 15-16).

Several languages have separate referential markers, but in others demonstratives are used to refer back or forward in discourse and in time. Kießling (1994:80-81) discusses the discourse functions of Burunge third and fourth degree distance demonstratives which are proximal non-spatial and distal non-spatial, non-spatial referring to not visible. The proximal non-spatial form is used for a referent that has been mentioned earlier in the narrative and that should be readily available in the hearer's memory; this demonstrative will be used for the protagonist of the story. The distal one is used for referents that have been introduced much earlier and might not be prominent in the hearer's memory; it is also used for contrasting the opponent to the protagonist. In Iraqw the third and fourth degrees of distance demonstratives are the only ones that can occur reduplicated and this only in referential use.

Demonstratives are used as definite markers even in languages with separate definite markers. Arbore uses the proximal demonstrative *-ló* for definiteness which can be added to phrases containing the distal demonstrative *-átto*, (Hayward 1984a: 191); in Konso there are two markers *-se* and *-ose* (plural *sene*) for definiteness and demonstrative, and the difference between the two is far from obvious. A demonstrative form *se* and variants thereof is widespread in South Ethiopia across language groups: Dirayta has a proximal demonstrative *se* as an intruder in the demonstrative system (see Tosco 1996); Dullay has a proximal demonstrative *se*, and distal *-ssa*; Dime (South Omotic) has *sini*; Koorete (Ometo) has *se-*, Maale (Ometo) has *se* and *soo* for elevation deixis; Zayse (Ometo) has distal *so*; Gamo (Ometo) has *sekki*; Burji has *-shi* and outside the area, *se* is the invariant demonstrative of Yaaku.

22.4. Deictic adverbs

Deictic adverbs 'here' and 'there' are sometimes derived from demonstratives, as in Alagwa *ta*, *tay-s, ha-qa*, and *ha-d*^{a}. But these are used alongside *diit*^{i} and *diis*, based on the word *dii* 'place' and a demonstrative of the first and the second degree respectively.

Dirayta has a system of elevation deictic adverbs distinguishing (i) higher elevation *'ele*, (ii) lower elevation *háte* and (iii) level elevation *ɗà-se*; the same distinctions are made in Konso. The distinctions of elevation are only made for remote distance, i.e. when facing away from the mountain slope (Hayward 1980: 285). Some Omotic languages of the area such as Maale, Dime and Zayse have this feature too.

Separate referential markers exist for example in Oromo where the aforementioned one is *xáani/táani*, the proximal demonstrative is *xana/tana* and the distal one is *sana* invariant for gender (Owens 1985a: 87-88). In Dhaasanac *girí* is used for anaphoric deixis (Tosco 2001: 226-230). Awngi has a referential article *-ká* "used strictly in the sense of 'the aforementioned'" (Hetzron 1976: 39). Boni distinguishes between back referring in discourse and forward referring (Sasse 1980: 81).

22.5. Particular marker

There are two types of particular markers. One is used as a marked indefinite specific similar in meaning to the indefinite article in English but only used when it is crucial enough to mention that the entity from a relevant set is to be understood as new in the discourse. Examples are Iraqw *-koo*/*-kaa*/*-kaariya* 'a certain', with double gender marking, i.e. in the usual gender linker that precedes and in the form of the marker itself (21). The other kind of particular marker has the meaning 'one of a set'. This is used in Boni *-óo* to indicate a singular, specific referent (Sasse 1980: 81); Dhaasanac uses *náa* for particular deixis; it is often followed by the proximal demonstrative and the general determiner (Tosco 2001: 227-228).

(21) loo'a-r-ka wak-ee garma-ko i hootat-ín
day-F-FINDEF.F one-BGND boy:M-INDEF.M 3 live:HAB-DUR:3M
'One day a certain boy was living, ... ' (Mous 1993: 93)

22.6. Which?

Several languages have modifying question words that show similarities with the markers discussed above. Rendille has a suffix *-koh* 'which?' (Pillinger and Galboran 1999: 18-19); Oromo has *xámí/támí* (Owens 1985a: 88); Dirayta has *hekámm / hekánt / hekammaɗ'd'u* (Hayward 1980: 286); Arbore has *búko* / *bítoko* / *toko* for m/f/p as selective interrogative definitives, *bíteh* 'whose?' and *kaakó* 'how many/much?' (Hayward 1984a: 199-200). The question word 'which?' is the interrogative counterpart of the particular marker. The descriptions are not detailed enough to determine whether the question word 'which?' refers to a predefined set (which of those?) or to a set to be construed in discourse.

23. Pronouns

There are various types of personal pronouns. One set of personal pronouns is often analysed as a special set of nouns; they can be modified by the usual nominal suffixes such as definite and demonstrative suffixes. Personal (pro)nouns typically distinguish person, number and gender. Zaborski (1989) provides an overview of Cushitic independent pronouns. The person distinctions made are first, second and third. In Somali, Rendille and Dhaasanac there is a distinction between inclusive and exclusive first-person plural. Gender distinction is usually restricted to the third person but sometimes extends to the second person, as in Beja and Dahalo, for bound pronouns only (Tosco 1991: 37). Beja has gender distinction in the second-person plural; and Dahalo as well, but for the bound pronoun only (Tosco 1991: 37).[1] South Cushitic has gender distinction in the second person (singular) only and not in the third person. There is no gender distinction in pronouns in Dhaasanac (Tosco 2001: 210).

Possessive markers (suffixes and pronouns) usually show the same distinctions as the personal nouns. However, in the South Cushitic languages the distinction in gender for the second person is not present in the possessives, which do not distinguish gender of the possessor at all. On the other hand, in Harso-Dullay the possessive distinguishes gender in the second person but not in independent personal pronoun (Amborn et al. 1980: 91, 97). In K'abeena the third-person possessive *s* also acts as a definite/ demonstrative marker (Crass 2005: 114-115). Final elements of the noun may elide when a possessive is used, for example, the feminine linker t^a is deleted before possessives in K'abeena (Crass 2005: 114). Possessive suffixes and pronouns often require additional definite markers. In Somali, where this is the case, such definite marking is left out when the possessed noun is a kinship term; the same applies to Khamtanga (Appleyard 1988b: 18).

In addition to the independent pronouns, most languages have other sets of personal pronouns that are more pronominal and less like a subset of nouns. In Somali there are subject pronouns and two series of object clitic pronouns; the subject pronouns cliticize to the left of the focus marker, and the object clitic pronouns are positioned within the verbal complex; the second series is used only when there are two non-third-person objects; the third-person object pronouns being zero. Third-person object pronouns are zero in Boni, Rendille, Konso, Elmolo and Dhaasanac. Dahalo, South Cushitic, Dullay and Oromo have object pronouns too; see Appleyard (1990) and Biber (1984: 53-54).

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[1] Iraqw does not have sex distinction in the second person plural pronoun, contrary to Whiteley (1958) and consequently Zaborski (1989: 650).

A non-specific subject pronoun that is different from any of the other pronouns, like French *on* or German *man*, is found in Somali, Rendille *la*, Boni *li*; Arbore *na*, Elmolo *(a)na* and South Cushitic *ta* or *da*. In some of the languages this option is in addition to the possibility of a passive extension on the verb. The semantics of the South Cushitic *ta* is not just non-specific subject but includes senses of collectivity and of human agent. For Iraqw, the impersonal subject marker can also be used to refer to a specific collective group, yet there is no plural marking on the verb. In Burunge the impersonal subject pronoun is so un-specific that no independent personal pronoun can be use in connection with it. In Arbore the impersonal subject is identical in form to the first-person plural marker. In Iraqw the impersonal subject marker can refer only to human agents, while in the related language Burunge it can be used even with weather verbs, i.e., verbs in which reference to anything remotely related to a controlling agent is absent. In Iraqw the same impersonal subject is used to indicate collective agents. The Elmolo equivalent of the impersonal is termed an "intransitive" prefix by Heine, since it suppresses the possibility of expressing two complements; it too can be used with agentless transitive verbs, such as 'to have diarrhoea' (Heine 1980). The Arbore impersonal subject construction is also used for middle situations,[2] as is evidenced by example (22). The object pronoun in the Elmolo example shows that the undergoer is an object.

(22) ína k'are (Arbore, Hayward 1984a: 308)
IPS shave
'He shaved himself / he was shaved.'

(23) kesé ené-ke-(e)ld-e (Elmolo, Heine 1980: 198)
2SG IPS-O.2SG-have.diarrhea-PF
'You have diarrhoea'.

All the languages that have object pronouns have a reflexive/reciprocal pronoun. Oromo has a distinct reciprocal pronoun. A language like Somali has a combined reflexive/reciprocal object pronoun *si*; others, like Konso, have a separate reflexive, *isi*, and a reciprocal, *ollí* 'together, each other'. The reflexive/reciprocal pronouns have a root either similar to the Oromo distinct reciprocal root *wali,* as is the case in Dhaasanac, Elmolo, and Arbore verb, or to the Oromo reflexive *ífi,* as is the case in Dullay, Konso, Boni, Rendille, and Somali, or one that is related to the first plural pronoun, as is the case in Alagwa, Burunge, and Iraqw. The Arbore reflexive is not a separate object pronoun but consists of the object pronoun followed by *tta* and *wal-* prefixed to the verb (Hayward 1984a).

(24) yé-tta (l[e̤ɦe̤]) wal-síibe Arbore (Hayward 1984a: 227)
I-SFX léhe[3] REFL-anoint
'It was I that anointed myself.'

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[2] A middle situation is not agentless but does not have the clear distinction between agent and patient, as is the case in a standard active transitive situation.

[3] The optional element *léhe* does not seem to have a semantic contribution and is possibly etymologically related to a verb 'to have' (Hayward 1984a: 226).

24. Verbs

Verbal inflection typically includes the expression of aspect (and tense, mood, and evidentiality), dependent/independent clause, person (subject) marking, and negation. Verbal inflectional morphology tends to be complex. Various conjugational classes have to be distinguished; sometimes this reflects the application of morphophonological rules, and sometimes the classes are related to derivation but it often goes beyond that. The most basic aspectual distinction which most languages display is that of Perfective versus Imperfective, often distinguished by a vowel difference. In addition many language have a dependent or subjunctive third type with yet a different aspect encoding vowel. Zaborski (1975) offers a comprehensive overview of the Cushitic verbal system in a historical approach; see also Zaborski (1997, 2005), Voigt (1985, 1996), and Banti (1987, 1994, 2001) for historical scenarios for the developments of the main types of conjugations in Cushitic.

There are many structurally different conjugations. First of all many languages distinguish between a prefix and a suffix conjugation. The suffix conjugations are dominant. Then there are paradigms with reduced person agreement. New formations typically arise in the form of compound tenses or auxiliary constructions.

24.1. Prefix conjugation

The prefix conjugation is the remnant of the pre Cushitic conjugation type and survives in a number of languages, but typically in a restricted set of frequent verbs. For example, in Somali it is only the verbs ‘be’, ‘come’, ‘know’, ‘lie’, and ‘say’ (Saeed 1999); in Awngi only ‘bring’, ‘come’, ‘know’, ‘remain’ and ‘be’ (Hetzron 1969: 44ff). Arbore has at least twelve prefix conjugation verbs which follow two different conjugation patterns (Hayward 1984a: 261-265). Beja and Afar have larger numbers of prefix conjugation verbs. In Afar the prefix conjugation is growing because of borrowings from Semitic languages (see Hayward 1978b and Hayward and Orwin 1991). In the prefix conjugation of Afar the person components and the first plural number component are prefixed; first singular, third masculine and third plural are differentiated (see Table 8); aspect and mood are indicated by stem vowel mutation (identical stem vowels but not *a* for the perfect and *a* as first stem vowel in the non-perfect) (Hayward 1978b: 355-359).

Table 8: Prefix conjugation in Afar

	‘to eat’
1Sg	okˈme
2Sg	t-okˈme
3SgM	y-okˈme
3SgF	t-okˈme
1Pl	n-okˈme
2Pl	t-okmee-ˈni
3Pl	y-okmee-ˈni

Source: Bliese (1981: 110).

24.2. Person Marking

Person marking on the verb usually has seven exponents: 1sg, 2sg, 1pl, 2pl, 3masc, 3fem, 3pl. Beja is deviant in that it consistently distinguishes between 2masc and

2fem. A common characteristic is what Tucker called the block pattern: the ending of 2sg and 3fem are identical and also 1sg and 3masc are identical. The identity of a 2sg and a 3fem verb form, *t* or its reflex, is indeed shared in all of Cushitic; the identity of 1sg and 3masc is common but not always valid and is the result of a merger of two different endings (Banti 2001). The 2pl and 3pl forms are often plural forms based on 2sg and 3masc respectively. Thus there are usually at least three different person forms: 1sg/3masc, 2sg/3fem, and 1pl; but in Dhaasanac there are only two forms: the distinct 1pl form is absent and replaced by two forms: the 1sg+ form for the inclusive 1pl form and the 2sg+ form for the exclusive 1pl form: 1sg/3masc/3pl/1pl.incl and 2sg/3fem/1pl.excl/2pl (Tosco 2001: 112). In addition Cushitic languages often have a verb form that is not inflected for person (or that has the 3masc ending, which is often zero). This form is used with an unspecific subject (French *on*, German *man*); in K'abeena it is also used for respect (Crass 2005: 157). In Arbore the third-person plural verb form is used for impersonal clauses; in addition, a clitic *na* has to be used on either the focussed element, or the selector (Hayward 1984a: 304-308).

24.3. Suffix conjugation

The most common conjugation type in Cushitic, the suffix conjugation, goes back to a construction of a nominalised verb followed by an inflected auxiliary, a proposal which is attributed to Praetorius (1893) (see Banti 2001 for a full discussion). The suffix conjugation typically distinguishes the seven person forms mentioned above and is marked for aspect. As an example I give the conjugation of Ts'amakko (Table 9).

Table 9: Suffix Conjugation in Ts'amakko

	'to drink'	'to eat'
1Sg	'úg-í	ží'-ì
2Sg	'úg-dí	ží'-tì
3SgM	'úg-í	ží'-ì
3SgF	'úg-dí	ží'-tì
1Pl	'úg-ní	ží'-nì
2Pl	'úg-dè	ží'-tè
3Pl	'úg-è	ží'-è

Source: Savà (2005: 146)[4]

Conjugation classes of the suffix conjugation are defined along formal and/or semantic lines. In Somali three main conjugation types are based on whether the verb has no derivational suffix, a causative suffix, or a middle suffix. In Iraqw as well, different conjugations are set up for verbs ending in *w*, as in the inchoative suffix, and those ending in *m*, as in the durative suffix. In Dhaasanac verbs ending in an coronal form a class apart (Tosco 2001: 123). The Awngi verbal conjugation is complicated, with tonal differences for groups of verbs (see Hetzron 1969).

24.4. Reduced paradigms

Several languages have inflectional paradigms with reduced distinctions in subject marking. Banti (2001) calls it the Cushitic second suffix conjugation or the East Cushitic Stative conjugation; he also discusses the possible correlates of this paradigm in Semitic and Old Egyptian and suggests that the lack of distinction in gender in the third person is a result of the fact that the person endings go back to possessives, except for the third person where no possessive was used (Banti 2001: 21). In the reduced paradigm there is no difference between masculine and feminine third person. Examples are the Saho affirmative and negative non-past paradigms, the rare Somali inflected paradigm for affirmative and negative non-past (usually the non-past is rendered by an invariable form plus an inflected form of 'to be'), the Burji affirmative past, the Konso adjectival conjugation. In Saho-Afar and in Somali the reduced paradigm is characteristic of a lexically defined group of verb roots including 'to be' or copula, 'to have' and 'to lack', emotion-cognitive verbs such as 'hate', 'love', 'know', and adjectival concepts such as 'white', 'red', 'new', 'long', 'bad'. Hayward (1978c) shows that so-called adjectives in Afar are in fact a category of stative verbs and their verbal category is, amongst other criteria, shown by the subject agreement on them. Additional arguments are presented by Vanhove (2000) for the Djibouti Afar dialect of Tadjoura. Negative stative forms also exist in Afar but interestingly these cannot occur in the attributive position (Hayward 1978c: 13). The stative verbs of Afar are the "quasitransitives" 'have', 'lack', 'like, love' and 'hate' ("quasi" because these verbs cannot be passivized); equatives 'to be (copula)' and 'not to be (negative copula)'; attributives such as 'good', 'thin', 'difficult' and many more. An example of a reduced paradigm is the following:

[4] The two types of suffix conjugation have a tonal difference and represent two different lexical classes.

(25) Saho affirmative non-past of *'usuba* 'be new'

1sg	'usubiyó
2sg	'usubitó
3sg.m	'usubá
3sg.f	'usubá
1pl	'usubinó
2pl	'usubitín
3pl	'usubón (Banti 2001: 8)

Language internally and cross-linguistically the reduced paradigms often alternate with invariable paradigms. For example, in Somali the focussed form of the inflected affirmative non-past is invariable, and in Rendille the equivalent of the Somali reduced paradigm is invariable (Banti 2001: 7-8). Such invariant paradigms are common in negative and focussed tenses. The Konso negative dependent paradigms are invariable; the perfective paradigm ends in *nin*; the imperfective paradigm in *ninkinnin*. The verb in Table 10 is *kat* 'sell', the final stem consonant assimilates; the initial elements are the subject clitics that I discuss in 27.

Table 10: Negative Dependent forms of *kat* ‘sell’ in Konso

	Perfective	Imperfective
1sg	an kannin	an kanninkinin
2sg	ak kannin	ak kanninkinin
3sg	an kannin	a kanninkinin
1pl	ainu kannin	ainu kanninkinin
2pl	aishina kannin	aishina kanninkinin
3pl	aishoona kannin	aishoona kanninkinin
	-nin	-ninkinin

24.5. Compound and auxiliary constructions

Most languages have various conjugations that have compound and auxiliary constructions; i.e., an auxiliary construction in which the inflected element is an auxiliary verb and lexical verb infinitival, or a compound consisting of an invariant form and an inflected element. The Konso negative present in the Table 11 consists of an invariant verb form ending in *nin* plus the negative ‘to be’.

Table 11: The Konso compound negative present continuous and related paradigms

	PresCont	NegPresCont	Neg "be"
1sg	in kanni	an kanin-co	co
2sg	ik kanni	ak kanin-kkitto	kitto
3sg.f	i kanni	kanin-kitto	kitto
3sg.m	i kanni	kanin-co	co
1pl	in kanninna	an kanin-kinno	kinno
2pl	ik kannittan	ak kanik-kittan	kittan
3pl	i kanni	kanin-can	can

New verb paradigms easily arise through grammaticalization of a infinite (converb) form followed by a inflected light verb. The renewal of paradigms is clear in Kambaata from the double person marking, e.g., a 2PL marker in the imperfective *-teenánta* consists of *-t-een-á-nta* -2-PL-aspect-2PL (Treis 2005a; see also Tosco 1996).

24.6. Converbs

The Agaw and the Highland East Cushitic languages have converbs, that is, non-finite verb forms that function in linking clauses. K'abeena has five types of converbs. The converb that consists of the stem inflected for person and followed by an epenthetic whispered *i* is used for sequential events. Other converbs are inflected and can be marked for progressive, negation, or telicity (Crass 2005: 176-188). Converbs are also reported for Agaw (see Hetzron 1969). Depending on the definition of converb, other languages also make use of converbs; see section 34 on clause chaining.

24.7. Aspect

Apart from person, the verb is usually conjugated for aspect. Most languages have different paradigms for perfective and imperfective; a third conjugational paradigm is the optative. The major difference between these three is often in the aspectual vowel, *e*, *a*, or *o* respectively. Another distinction that is often made is between so- called independent and dependent sentences, requiring different paradigms. Many Cushitic languages have additional semantic categories coded in the system. For example, Awngi encodes tense and evidentiality (Hetzron: 1978). Kambaata expresses "intimidative" (hortative not to do something) (Treis 2005a).

24.8. Negative verb forms

Negative verb forms consist of a different set of paradigms that are not based on the affirmative set, as is the case, for example, with the reduced paradigms for negative forms (see above). In Highland East Cushitic and Agaw negative suffixes or infixes are used with modified forms of the affirmative verb (Appleyard 1984: 202-203). There is often a fair degree of differentiation among negative verb forms within a group of related languages. Such is the case in Agaw (Appleyard 1984: 203) and also in South Cushitic where Iraqw has as suffix *-ka* originating from a verb *kaaħ* 'be absent, lack' and Alagwa has *-baɬ* from the quantifier 'without'; in both cases they are preceded by nominalisation morphology (Kießling 2002: 381-389).

24.9. Imperative

The imperative usually has two forms: a general one consisting of the verb stem and a second one specifically used with multiple addressees. A number of languages have a vowel ending for the general imperative or for certain verbs. This is often *i* (Konso, Somali, and Dullay) but can be different, e.g. *u*, for middle derived verbs (Konso, Dhaasanac, and Somali). In Dahalo the imperative has an ending *i* for a singular addressee in the imperfective, a copy vowel in the perfective, and *e* and *o* respectively for plural addressees; a particle signaling direction towards the speaker (hither) can be added (Tosco 1991: 59). Negative imperatives (or prohibitives) are often part of the negative subjunctive/optative paradigm or need an extra predicative negation marker such as *ma* (see example 26 below). In the South Cushitic languages there are more elaborate imperative paradigms with additional and combined marking of direction (towards speaker or not) and the presence of an object argument; see the following example of Iraqw and note that the low tone on *-ang* and *-are'* indicates the presence of an object.

(26) Iraqw imperatives

dóoł	'dig!'
dooł-é'	'dig! (to many)'
dooł-eek	'dig it!'
dooł-aak	'dig it! (to many)'
dooł-áŋ	'dig for me!'
dooł-aré'	'dig for me! (to many)'
huw-aŋ	'bring it to me!'
huw-are'	'bring it to me! (to many)'
ma dooł-aar	'don't dig'
ma dooł-ara'	'don't dig (to many)'

25. The verb 'to say'

It is a common phenomenon among Cushitic languages to form compounds with a verb 'to say'. Appleyard (2001) calls these composite verbs, while Cohen, Simeone-Senelle and Vanhove (2002) use the term "descriptive compounds". Many of the Semitic and some of the Omotic languages of Ethiopia share this feature with the Cushitic languages; it is one of the features of the suggested Ethiopic *Sprachbund*, and the origin is Cushitic (Appleyard 2001). The construction is also proposed to be the origin of the suffix conjugation in Cushitic (Praetorius 1893); Appleyard (2001) proposes the verb **iy(y)* 'to say' as the basis for the suffix conjugation. The verb 'to say' typically incorporates ideophones, and it is universally common for ideophones to be introduced by a verb 'to say'. Some Cushitic languages use 'to say' to incorporate quotes, e.g. Oromo *muu jed'e* 'express dislike', lit. 'say m-m' (Appleyard 2001: 4). A language such as Afar (Cohen et al. 2002) uses the verb 'to say' or 'to put' to make intransitive or transitive verbs respectively. The form of the incorporated root (verb root, adverb, ideophone, noun) may be reduplicated, lengthened, or sometimes attenuative sense may be added, e.g. *dáaf-iyye* /sit.down-3.M.PERF:say/ 'he hardly sat down', but *dáffa-iyye* /sit.down-3.M.PERF/ 'he sat down'. The newly derived verb functions as a lexical unit in the sense that it can undergo further derivation, but prosodically the unit can be broken by adverbial particles and personal pronouns, e.g. *dúb ko-t hée-yyo* /IDEOPHONE you-on put-1S.FUT/ 'I'll beat you' (Cohen et al. 2002: 232). Vanhove (2004) shows that in Beja this auxiliary 'to say' has grammaticalized

into an intention or purpose marker, e.g. *īškwít áne* strike:AOR1SG say:ACC1SG/ 'I intended to strike' (Roper 1928: 84, quoted in Vanhove 2004: 154). Vanhove argues that the remarkable fact is that the usual intermediate stages of quotative and complementiser were skipped in this instance.

26. Copula, verbs to be

Equative or identificational nominal clauses of the type 'this is water', *xun bíshaan* in Oromo (Owens 1985a: 79-82), often do not need a copula; juxtaposition of the subject and predicate noun phrase (in that order) is a complete clause. Alagwa allows NP NP clauses without the copula, *nyaraw xulxumbimoo* 'a scorpion is an insect'; the Dahalo copula *-su* suffixed to the subject (first) NP is optional (Tosco 1991: 89-90). The subject may even be left out and understood as a third person, e.g. Dullay *(úso) t'iirakkó* 'he is a man' (Amborn et al. 1980: 104-106). This is more common when there is a copula present, as in Iraqw *a ló'* 'it is true', lit. 'is truth' (Mous 1993: 235). In Somali the sentence-type marker *waa* is used in such clauses, *Cali waa báre* 'Ali is a teacher', and the subject NP can be left out, *waa rún* 'it is true', lit. 'is truth' (Saeed 1999: 186-189). Several other languages use the subject clitic in such sentences, e.g. Dullay *u-t'iirakkó* 'he is a man' with focus on 'man' (Amborn et al. 1980: 104-106); Dhaasanac *máa-ti-a ʰe d'aasanac* /man-that-DET 3SUBJ Dhaasanac/ 'that man is a Dhaasanac' where the subject marker *ʰe* is optional (Tosco 2001: 288); and Alagwa *hareróor na dooɬumuso'oo* 'my wife is indeed a cultivator' with a subject focus marker *na*. The subject noun phrase in nominal equative clauses is in the nominative in Somali but in the absolutive in Oromo. Several languages have copula suffixes on the (second) predicative noun phrase. In Arbore this is the copula *á*, *é*, or *d'á* (Hayward 1984a: 114, 122); Oromo has a copula suffix *-d'a* (after long vowels), *-a* (after short vowels), *-i* (after consonants), e.g. *lafee-d'a* 'it is (a) bone' (Ishetu 1989: 85); in K'abeena the gender-agreeing copulas are suffixes that derive from demonstratives (Crass 2005: 263-272), and the subject NP need not be expressed.

Oromo has a second enclitic copula *-iti*, used in nominal sentences involving possession, e.g. *(kun) godaa 'annan-iti* /this container milk:of-is/ 'this is (a container of milk' (Ishetu 1989: 90). K'abeena also has such an alternative, *-tⁱ* with lengthening of the preceding vowel and invariant for gender; it is used in particular after names, adverbs and demonstrative (in the genitive).

A suffixed copula on the predicative NP is common with questioning and negation. Arbore has an interrogative copula *-ko* (Hayward 1984a: 122) which is required with interrogation intonation, and in Alagwa and Burunge a copula suffix is required for the questioning intonation and preceding a negative suffix, e.g. Alagwa *ɬangaɬangay xulxumbimô-ko* /chameleon insect:QUES-M.PRED 'is a chameleon an insect?' and *kurunkurú ts'irari-ko-baɬ* /bat bird-M.PRED-NEG/ 'a bat is not a bird' Mous (unpublished). Rendille has *-mee* (Pillinger and Galboran 1999: 35-36); Harar-Oromo has *-mihi* as a negative copula suffix which lengthens the preceding vowel and changes its tone to High, e.g. *bishaaníi-mihi* 'it is not water' (Owens 1985a: 79-82), or a free form *miti* as a negative copula, sentence-finally (Ishetu 1989: 90); K'abeena has the negative element *-ba* following the copula suffix; Arbore has a sentence-final element *and'í* for negation; and Dhaasanac has *muuniɲ*. Other languages use negative forms of a verb 'to be', such as *yahay* in Somali.

Past tense requires either the use of full verb 'to be' rather than a copula (Oromo *tur-* , Dullay, Konso, Dhaasanac) or a past tense inflectional element on the subject pronoun (Alagwa, Iraqw, Dahalo). K'abeena uses a past marker that follows

the copula suffix, comparable to the formation of a negative nominal equative clause. Future also requires a full verb. The verb 'to become' is used for future nominal clauses, e.g. Oromo *tah* 'be, become'; in Konso this is *c-aad'* 'to become' which is middle derived from 'to be'; similar to Dullay which had middle derived *ooll-ad'* 'be, stay, wait' which is used in all tenses. Subordinate nominal clauses require verbs rather than copulas: K'abeena *'ih* 'to be', Oromo (with the exception of the affirmative adjective which can be used on its own in a relative clause).

Locative and existential nominal clauses usually require a verb. For example Oromo *jir-* locative 'be', 'exist' (Ishetu 1985: 90), Somali *jir-*, Dhaasanac *'iddik* 'be there, stay, live', Dullay *'ak* 'be, be somewhere, live', Alagwa and Burunge *waar*; Kemant has deictic locative and existential *wan-* and locative *səmb*. Iraqw has a locative copula *a/i/ta* for first-and second-person subject, third-person subject and collective third-person subject respectively; this is different from the equative copula; in addition, an existential defective verb *deer* exists, and there is a full deictic locative verb *diirii'* 'be here' developed form *diirí* 'this place' (Kießling 2002).

Clauses with adjectives used predicatively often have some verbal qualities. For a number of languages adjectives are in fact stative verbs (see Afar, above). In Iraqw and its relatives the adjective is preceded by a sentence element (selector; see section 27 below) which is comparable to the one used in passive clauses; in Dhaasanac adjectival clauses are negated with the element *ma*, used otherwise in verbal clauses and different from nominal clauses. Somali uses the verb *yahay* 'to be' with adjectives.

Bilin has a copula that is used for nouns and adjectives as complements, and a locative verb 'to be' is used with locative adverbs and nouns in the locative case. Both have suppletive forms. These verbs and the verb 'to have' have the intriguing property that there is a complete reversal of the usual aspect/time relations. For example, in the pair *'ɐxɐx*^{w} 'who is' and *sɐŋéx*^{w} 'who was' the former has the vowel sequence and tone pattern that is otherwise used for the past tense, e.g. *tamɐx*^{w} 'who tasted', and the latter has the properties of the present tense, compare with *taméx*^{w} 'who tastes' (see Palmer 1965). Palmer proposes that the historical explanation is that the verb 'to have' is from 'to take', and hence 'took' (past) is 'have' present; one of the verbs 'to be' is from 'to happen', and hence 'it happened' (past) is 'it is' (present).

Cushitic languages often have a verb 'to have': Dullay *seeq*, Iraqw and Alagwa *koom*, but also Kemant (Appleyard 1975: 341-342) and Bilin (Palmer 1965) have such verbs.

27. Selectors/indicator particles/INFL/sentence type markers

Cushitic languages are verb final, but many of them have an additional inflectional element in the sentence that is separate from the verb and that has been termed in various ways: "selector" in South Cushitic languages, "indicator particle" in Somali, "focus marker" in Oromo. The prime function of selectors is to express elements of information structure. The Cushitic languages that have selectors are Alagwa, Arbore, Boni, Burunge, Dahalo, Dhaasanac, Dullay, Elmolo, Dirayta, Iraqw, Konso, Oromo, Rendille, and Somali; the languages that have no selector are Afar, Agaw, Bayso, Beja, Burji, Haddiyya, Kambaata, and Sidamo. In all languages that have a selector either the selector has a function as sentence-type marker and these sentence types are at least partly related to backgrounding information, or the selector expresses focus in one way or another. The only exceptions are Elmolo and Dahalo. Nearly all languages with a selector with the exceptions of Boni and Rendille also mark the subject in the

selector. These latter languages use independent subject pronouns where others use subject suffixes or clitics. Rendille and Boni do, however, have an impersonal subject marker that is integrated into the selector. They also have object pronoun clitics that are part of the selector. Inflectional subject marking is typically a characteristic of the verb. Thus selectors take up part of typically verbal functions. In this sense the sentence-defining properties are divided over verb and selector.

While in some languages the position of the selector determines the scope of focus, in a number of other languages the position of the selector is more fixed and the position of the object vis-à-vis the selector determines the information value of the object. Syntactically there are three types of selectors: (i) those that define the left border of a syntactic unit such as the verbal piece in Somali; (ii) those that indicate focus as a pro-clitic to the verb, and (iii) those that indicate focus by their position in the sentence. Once the selector has a fixed position, then it also has a stronger syntactic function in the semantics of the placement of complements in relation to the selector; in addition to subject marking, these selectors also have the verbal quality of valency. By developing more verbal functions, such a pivot attracts other inflectional marking such as tense/aspect marking. There seems to emerge a division of marking of grammatical roles in several of these languages: subject on verb, object in selector, and others in the "case" clitics which have a fixed position between the selector and the verb.

An overview of the categories that are expressed in and on selectors is given in Table 12. The column *Sub* indicates whether the subject is indicated in the selector, *SenType* whether sentence type is indicated, *Mood* whether questioning or negation is indicated, *Focus* whether the selector has focus meaning, *ImpS* whether the selector may contain an impersonal subject, *Object* whether the object can separate selector and verb, *Obj pro* whether the language has an object pronoun series different from the independent pronouns, *Case* whether adverbial "case" markers occur on the selector. *Deixis* indicates direction marking and *Tense/Aspect* whether tense/aspect is expressed on the selector (in addition to the verb).

Table 12: Overview of the properties of selectors

	Sen type	Mood	Foc	Sub	Imp Sub	Object	Obj pro	Case	Deixis	Tense / Aspect
Arbore	y	y	n	y	y	y	n	y	y	y
Dhaasanac	y	y	n	y	n	y	y	y	n	n
Elmolo	n	-	n	y	y	n?	y	y	y	y
Dullay	n	n	y	y	n	y	y	y	n	n
Konso	y	y	y	y	n	y	y	n	n	n
Oromo	n	y	y	(y)	n	n	n	n	y	n
Boni	n	y	y	n	y	n	y	y	y	n
Rendille	n	n	y	n	y	n	y	y	y	n
Somali	y	y	y	y	y	y	y	y	y	n
Dahalo	n	y	n	n	n	y	n	y	y	y
Alagwa	y	y	y	y	y	y	y	y	y	y
Burunge	y	y	y	y	y	y	y	y	y	y
Iraqw	y	y	n	y	y	y	y	y	y	y

Source: Mous (2005).

Selectors with all the inflectional categories that can be expressed on them can develop into quite extensive inflectional complexes, specifically in Dahalo, Alagwa, Burunge, and Iraqw, as can be seen for Dahalo in (27) and for Iraqw in (28).

(27) b'á-ka-vá-ji łággwa (Dahalo, Tosco 1991: 71)
NEG-IRR-PAST-HAB love:E1:3M
'He didn't love him.'

(28) mu-s-tu-nd-a-y haníis (Iraqw, Mous 1993: 123)
QUES-REAS-IMPS-O.2.PL-PERF-DIR give:PAST
'Why were you (plural) favoured?'

In Alagwa, Burunge, and Iraqw there are different sets of selectors for main clauses as opposed to consecutive clauses, and yet another set for object relative clauses. In Arbore the selector indicates both sentence type, which is (definite) indicative in (29), and subject, which is third-person singular in (29). Other sentence types that are indicated in the selector are indefinite indicative future, indefinite indicative present, jussive and negative.[5] The subject marking is either suffixed or prefixed to these sentence-identifying selectors. Not every sentence, however, has a sentence identifier (Hayward 1984a). In Dhaasanac too there are these two categories, of sentence type (indicative and non-indicative) and subject. In Konso independent, dependent, jussive, and negative clauses all require slightly different selectors.

(29) mo 'í-y k'or k'úure (Arbore, Hayward 1984a:110)
manDEF.IND-3S tree cut:3SG.M:PERF
'The man cut the tree.'

In addition to the main distinctions in sentence type expressed in the choice of selector, some languages also have mood prefixes that mark negative and prohibitive sentences, as well as sentences questioning *what*; the marker for both is commonly *ma*. Different ways of expressing questions exist as well, e.g., in the form of question words; for negation, most languages have additional negation marking on the verb. Additional mood distinctions in the selectors such as conditional and concessive are made in Alagwa, Burunge and Iraqw. Some of these originate in grammaticalized adverbs.

Focus is the central concept for the selectors. In some languages the selector itself marks focus, most often verb focus or sentence focus. Several languages have constituent focus markers that are separate from the selectors. For example, in Dhaasanac topic and focus are the main organisational factors in syntax. Neutral sentences have subject-case marking on the subject and no focus selector (30a). The presence of a selector indicates verbal focus, i.e., the verbal focus marker ^{h}a in (30b); there is an additional verbal subject pronoun as in (30b) or a full (subject) pronoun as in (30c). When the subject is topicalized, a subject pronoun is used, as in (30d). Subject focus is expressed by the addition of a nominal focus marker cliticized to the subject NP (30e), as shown in Tosco (2001: 261-273).

[5] The distinction definite/indefinite in Arbore refers to aspect marking, independent of the aspectual suffix to the main verb.

(30) a. ’ar kufi
bull:S die:PF.A
‘The/A bull died.’ (neutral)

b. ’ár ʰa ʰí d’iyyime
bull FOC 3.VERB make.noise:IMPF.A
‘The bull *is making noise*.’ (verbal focus)

c. só ʰa yú muura
meat FOC I cut
‘I’ll cut the meat.’

d. ’ár ʰé kufi
bull 3S die:PF.A
‘The bull died.’ (as answer to ‘What happened to the bull?’)

e. ’ár=ru kufi
bull=FOC die:PF.A
‘*The bull* died.’ (subject focus)

Selectors differentiate at least between speech act participants and third persons (Alagwa, Burunge, Iraqw) or make person distinctions without gender and number differentiation (Dullay, Konso) or distinguish both person and number (Arbore, Dhaasanac, Elmolo), and gender as well (for third person) in Somali. Cushitic languages do not distinguish second singular and third feminine in the subject agreement on the verb; and many of them also do not distinguish between first singular and third masculine. Thus the subject marking in the selector resolves that ambiguity.

Many of the Cushitic languages have a separate impersonal subject pronoun that is used in passive-like sentences (see section 23 on pronouns above). The verb form used in the impersonal construction is always in the third-person singular masculine form (3M), except for Arbore where it is 3PL (Hayward 1984a: 305). For those that have 3M one could also argue that the verb is simply not conjugated for person. There are some indications that this impersonal subject marker is of a different order than the subject pronouns. One such indication is that its structural position is different from the subject pronouns in Somali, according to Svolacchia et al. (1995).[6] In Alagwa, Burunge, and Iraqw the same markers, impersonal subject plus object pronoun, are used for predicative adjective constructions (31).

(31) tluway ku ħéer (Iraqw, Mous 1993: 203)
rain(m) O.3:IMPS:O.M insufficient:M
‘Rain is insufficient.’

Object marking in the selector is not always compulsory but is dependent on the position of the full noun object; it is also related to the information structure. Those languages that have object pronouns in the selector complex (Elmolo, Dullay, Rendille, Somali, Dahalo, Alagwa, Burunge, and Iraqw) have them as enclitics to the selector, often replacing the fronted full object noun. Somali, Rendille, Boni and Elmolo have a second series of object pronouns.

[6] But not for Saeed (1993: 216).

28. Verbal Derivation

The common verbal derivations are causative *s*, middle *d* (also called reflexive, intransitive, or autobenefactive), passive *m*, inchoative *w* and reduplication for frequentative and habitual. The non-reduplicative derivations are suffixes. Only Afar, Saho and possibly Burji have derivational prefixes in addition to suffixes. A number of other derivations occur in a subset of languages only. The non-reduplicative verbal derivations are reconstructed for East Cushitic by Hayward (1984b) and for Agaw by Appleyard (1986). Konso and Dullay have a singulative or punctual derivation that is formed by geminating the final root consonant, which indicates that the action is done once or a little bit. The forms for the common derivations given here are not valid for all languages; some Agaw languages have *-st* for passive, for example, and others use these derivations in different functions; for example, Iraqw has a durative *-m* and no passive; in the Agaw languages the reflex of the *m* derivation denotes reciprocity (Appleyard 1986a: 17-18). Other derivations exist too; for example, Dullay has a "social" derivation in some verbs such as *d'ih-im* 'give advice', *hor-im* 'settle an appointment' (Amborn et al. 1980: 118); several languages show signs of frozen derivations that are no longer productive and to which no meaning can be attached, e.g. *-pp'* and *-ott'* in K'abeena (Crass 2005: 145), *-an* in Dullay (Amborn et al. 1980: 118); *-ab'* in Ts'amakko (Savà 2005: 185) and *-b* in Dahalo (Tosco 1991: 48); *-a'* in South Cushitic for stative (Kießling 2002: 301). South Cushitic has a suffix *-eel* for sound-expressing verbs derived from ideophones and onomatopoeia. In a number of languages the vowel of the derivational suffix is analysed as a morphological epenthesis; see Lloret (1987) for Oromo and Mous (1993) for Iraqw.

28.1. The Causative

The causative is marked by a suffix *-s* or *-sh* preceded by a vowel *i* which is sometimes analysed as epenthetic; the causative is *-d* in Dahalo and Bilin. The causative introduces an external causer to the state of affairs. The causative may be doubled, or languages have two causative forms, a short and a long one. There are in-depth studies of the Oromo causative (Owens 1985b, Lloret 1987, and Dubinsky et al. 1988). The picture that arises from these is that the number of causative morphemes in a verb stem reflects the number of agents in the state of affairs; an unaccusative (agentless) intransitive basic verb requires a double causative, while an active (agentive) intransitive verb requires only one causative morpheme. This generalisation requires that certain double causatives are recognized as reduplicated causatives rather than double causatives and function as intensives. In the related language Konso double causatives are also common, but there is no agent counting; instead the double causative increases the indirectness of influence of the extra causer onto the state of affairs (Mous 2004c). Wondwosen (2006) also reports for Oromoid Dirayta that the distribution of single and double causatives is not along the lines of counting underlying agents. Double causatives are very common and reconstructed for East Cushitic by Hayward (1984b) in several combinations of the reconstructed causative suffixes; double causatives are also reported for the Agaw languages (except for Kemant) (Appleyard 1986), but are absent in South Cushitic and Dahalo; these latter languages have an intensive meaning as one of the functions of the causative; such a function is restricted to the reduplicated causative in Oromo (Lloret 1987).

The following Konso example shows that the derived causative in (32b) has the external cause expressed in the subject and differs from the underived verb in the expression of an external cause; interestingly the causative verb is still intransitive.

(32)a. i awd-é
s3 bright-PF
'It is midday/totally bright.'

b. waag'a i awd-ish-é
god s3 bright-CAUS-PF
'The weather is clear again [God has cleared up/caused brightness].'

The indirect causative in Konso expresses that the external causer has less direct control of the action expressed in the verb as in the Konso sentence (33b)

(33)a Mammó damtáa oorra dam-sh-é
Mammo food people eat-caus-pf
'Mammo fed the people.'

(33)b Mammó oorra damtáa dam-aciis-é
Mammo people food eat-icaus-pf
'Mammo ordered the people to eat food.'

28.2. The Middle

The middle is very common in Cushitic. In many languages the productive meaning of the middle is to express that the action is benefactive (or occasionally malefactive) to the subject and hence it is called autobenefactive; the term "subject-reflexive" is also used. This sense of the middle meaning is applicable to a wide range of verbs, and once the autobenefactive sense of the middle develops in a language, it becomes productive. The autobenefactive sense possibly spreads through language contact, since it is absent in the geographically distant South Cushitic languages; Hayward (1975: 221) considers the autobenefactive function as a good isogloss. Hayward distinguishes between middles of agentive verbs that have either reflexive or autobenefactive meaning and middles of patient-type that are always intransitive and often derived from nouns or adjectives (Hayward 1984b: 83-84). He also points to the formal complexity of the middle derived stems often showing alternation of consonants in different persons of the paradigm in conjugation. The Cushitic languages show the centrality of the body in the semantics of middles. The evidence for this lies in the presence of the subcategories of the body in all the languages in Table 13 and in the fact that a number of derived verbs are used for actions performed by the body as opposed to the individual. The fact that the marking is derivational rather than inflection allows for a more lexical or concrete and a less grammatical meaning, when compared to inflectional middles and to syntactic constructions as in Kemmer's (1993) study of the middle.

The spontaneous action middles are well represented in Cushitic middle derived verbs and this semantic aspect should actually be considered as part of prototypical middle meaning. The facilitative use which is closely connected to the spontaneous action middle (Kemmer 1993: 148) is not or is rarely present in Cushitic languages. In the Cushitic languages there is relatively little use of the inherent

reflexive and inherent reciprocal meanings of middle markers, which is not surprising given the presence of reciprocal/reflexive pronouns. Remarkable is the near absence of certain lexicalisation patterns: There are virtually no commissive, intentive middles and relatively few emotional speech middles. Other lexicalisation patterns emerge in Cushitic: the middle marking of verbs for 'to hide', 'to remain, stay', and a middle denominal verb 'to work'. See Hayward (1975) for a historical overview of middle marking, Mous (2001) for a typological overview of the middle in Cushitic, Saeed (1995) for the middle in Somali, Mous and Qorro (2000) for the middle in Iraqw and Mous (2007) for the middle in Konso.

The body orientation for the subject of middle derived verbs is evidenced by the Iraqw example (34).

(34a) ya'e-r-'ée' a-ga tunquláa'
leg-F-my O.F-PF sprain:1SG
'I sprained my ankle.'

(34b) ya'e-r-'ée' aa tunqulu'-út
leg-F-my S3:PF sprain-MIDDLE:3F
'My ankle sprained.'

The middle is also used to express lack of control by external force as in the following Konso examples (middle is expressed by the suffix *-ad'*.

(35) pisha i urqén 'water flowed'
pisha i urq-ad'-én 'water found its way by itself'
i sukumé 'he rolled'
i sukum-ad'-é 'he rolled by himself'

The benefactive reading of middle derived verbs is productive in Konso, (36).

(36) i-'aan-ad'-é 'he tavelled for his own purpose'
i-kod-ad'-é 'he worked for himself'
alal-ad'-é 'he chewed for himself'

One of the differences between the middle and the passive is that in the middle situtation no agent or cause/source of the action is present or imagined, compare (37b) with (37a) in Iraqw.

(37a) inqwari kaa kunjuu-s
sheet.F O3:IMPS:O.F:PF fold-CAUS:IMPS
'The sheet has been folded.'

(37b) inqwari aa kunjut
sheet.F S3:PF fold:MIDDL:3SG.F:PAST
'The sheet is folded in a crooked way (you don't know how it got folded).'

Table 13: Semantic subdomains of middles in some Cushitic languages.

subcategory	Iraqw	Somali	Oromo	Afar
body care (groom and wear)	+	+	+	+
body motion (nontranslational motion)	+	+	+	-
motion of hands	+	+	+	-
body activity	+	+	+	+
(negative) body state	+	+	+	+
(change in) body posture	+	+	+	(+)
hide oneself	+	+	+	+
remain-stay	+	+?	+	-
body focused displacement/transl. motion	+	+	+	+
(negative) state of mind (emotion)	+	+	+	+
(complex) cognition	+	+	+	-
commissive, intentive	-	-	-	-
(emotional) speech	-	(+)	-	+
(inchoative) non-control/spontaneous action	+	+	+	+
(evaluative) facilitative	-	-	-	-
inherent reciprocal	-	+	-	-
autobenificient	-	++	++	++
logophoric	-	-	-	-
work	-	?	+	+
intensive	-	-	-	-
separate	+	-	+	+
negative connotations	+	-	+	+

28.3. The Passive

The third valency-changing derivation is the passive. The passive has the patient of the base verb as subject and the agent is no longer expressed. However, with the passive verb an agent is assumed to exist even if it is not expressed; the passive differs in this respect with the middle. Not all Cushitic languages have a derivational passive; for example, the South Cushitic languages, Dhaasanac, and Oromo have no derivational passive. Several Cushitic languages have an impersonal construction, some of them in competition with the passive (e.g. Somali, Afar). The form of the passive is *-am* (Somali, Konso, Dullay, Afar) or *-s(t)* (Khamtanga, Bilin).[7] In the Dullay languages there is overlap in function between the passive and the middle (Amborn et al. 1980: 119; Savà 2005: 180-182). In K'abeena there are two morphemes *-ta'* (probably etymologically related to the middle, Hayward 1984b: 94) and *-am*; in addition there is a fixed combination of middle and passive, *-akk'-am* to express the reciprocal (Crass 2005: 143-145). Rendille has two derivations: the neuter-passive *-am* which does not imply the presence of an outside agent, e.g. *fur-m-a* 'get opened'; and the true passive *-nam* which does imply an outside agent which is, however, never expressed, *fur-nam-a* 'be (able to be) opened' (Pillinger and Galboran 1999: 32-33). Hayward (1984b) reconstructs the Agaw languages with a derivation in *-t* that expresses both middle and, in a small number of verbs, also passive; while

[7] The Dahalo passive is *-ikud* (Tosco 1991: 46).

the combined causative-middle *-əst* is a productive passive derivation, Appleyard (1986: 8, 15)

The semantic restrictions on the base for the passive differ from language to language. In Somali the base verb must be semantically causative and the passive cannot be used with experiencer verbs or with activity verbs such as 'eat', 'carry' (Saeed 1999: 138). In Konso there are no general semantic restrictions on verbs to form a passive; the passive can apply to all kinds of intransitive verbs: unergatives such as 'go', 'swear', 'lie', 'live', and to an unaccusative intransitive verb such as 'be satiated, satisfied' which describes the (resultant) state/quality of the subject, and non-volitional body actions such as 'burp', 'laugh', 'be smothered' (see Mous 2007).

The passive requires the patient to have subject function and the agent need no longer be expressed as in the Konso sentence pair (38). But in Konso even intransitive verbs can be passivized (as is common among the languages of Ethiopia) as in example (39).

(38) anti inna kataata in erg-é
I boy food 1 send-PF
I sent the boy food

b. kataata inna i érg-am-t-é
food.F boy 3 send-PAS-F-PF
Food was sent to the boy

(39) urmalaa i áan-am-é
market 3 go-PAS-PF
The market was frequented.

An impersonal (unspecific) subject construction using the third person plural is commonly used and constitutes a functional competitor to the passive derivation. In Konso sentences describing pictures to elicit expressions for locational relations make abundant use of impersonal constructions to describe situations. Not only the agent but in fact the action is irrelevant in these sentences, (40).

(40) mataafaa shelfeeta kara xaay-e-n
book shelf on put-pf-pl
A book is on the shelf. (They've put a book on the shelf).

28.4. The Frequentative, Habitual

Most languages have a derivation by reduplication that expresses plural action such as continuous, repetitive, or iterative action, or intensive or quick action. Plurality of the subject of an intransitive verb or of the object of a transitive one is a factor that may trigger the use of this derivation but there remains a choice for the speaker to indicate such plurality in this way or not. The reduplication applies to the initial syllable of the verb stem and can take several forms across and within languages: $C_1V_1C_1$- forming a geminate as second radical in the derived verb (except for consonants that do not occur as geminates), e.g. Somali *duudduub* from *dúùb* 'fold' but *jajab* from *jáb* 'break' (Saeed 1999: 49-50, Banti 1988b). In Somali the vowel length in the reduplicant is identical to that in the original syllable, but most other languages, e.g.

Oromo (Owens 1985a: 84) and Dahalo, require this vowel to be shortened, e.g. Dahalo *gagaalij* from *gaalij* 'go home' (Tosco 1991: 48). A second type of reduplication is $C_1V_1C_2$-. Rendille has both, e.g. *furfura* from *fura* 'be open' and *diddiiba* from *diiba* 'hand over'. In addition Rendille has aC_1- geminate forming an alternative derivation, e.g. *ahhida* or *hidhida* from *hida* (Pillinger and Galboran 1999: 33). The third common type of initial reduplication is C_1V_1-. Note that this can also occur as a variant of the other reduplications where the reduplication would lead to inadmissible geminate consonants or consonant clusters. Nevertheless, a separate C_1V_1- reduplication has to be recognized. It occurs, for example, in Dhaasanac where the vowel in the reduplicant must be long, e.g. *fáafa'* from *fá'* (Tosco 2001: 142), and in Boni where the vowel has to be short, e.g. *sisii* from *sii* 'give' and *d'ud'uud'* from *d'uud'* 'consider' (Heine 1977: 280-281). South Cushitic has C_1V_1- and $C_1V_1C_2$- reduplication with a difference in meaning, the former for frequentative and the latter for distributive/frustrative action (Kießling 1992: 192). Afar has a different type of reduplication for intensive action and in the Aussa dialect for frequentative action: The onset and the shortened rhyme of the final syllable is reduplicated and closed by the onset consonant giving rise to a geminate, thus $C_xV_xC_x$- where x is the penultimate consonant and inserted before the final syllable, e.g. *usussuul* 'laugh heartedly' from *usuul* 'laugh', *biyayyaak* from *biyaak* 'hurt'. If C_x is a geminate in the base, we get successive geminates, e.g. *iggiggif* 'kill brutally' from *iggif* 'kill'. An exception to this pattern is *camcamm* 'throw hard' from *camm* 'throw' (Bliese 1981: 127-128). Final reduplication is very common in South Cushitic where the last root consonant is reduplicated but only if the verb is derived or has a form that is identical to a derived verb; de facto, the penultimate consonant is reduplicated with an epenthetic *a* if the ultimate consonant is *m*, *s* or *t*, that is, a consonant that appears in one of the segmental verbal derivations; see (41) which also contains an example of initial frequentative derivation, long *aa* as "epenthetic" vowel to express habitual (Mous unpublished).

(41) Alagwa imperfective derivation (Mous unpublished).

'ag 'eat'	
'ag-im	future
'ag-amim	durative
'ag-ag-im	present progressive
'ag-aag-im	habitual
'aga-'agim	frequentative

A number of different reduplications are used to derive verbs in the imperfective domain; in some languages several reduplication types are used for the same broad function; in others, distinctions in function can be made for the various reduplications. There are also languages that use segmental means for the same functions. K'abeena has *-ans*, a fixed combination of passive and causative, for repetitive, iterative and frequentative (Crass 2005: 146); Dahalo has *-ameemit* for frequentative (Tosco 1991: 47), similar to the South Cushitic fixed combinations *-maamiit*, *-maamiis*, *-aamiim* for habituals.

Dullay and Konsoid have a singulative derivation that consists of gemination of the final consonant which expresses that the action is done once or a bit. Some examples from Ts'amakko are *'ug* 'to drink': *'ugg* 'to sip', *kad'* 'to climb': *kadd'* 'to climb with one movement', *ka'* 'to get up': *ka''* 'to get up suddenly', *cox* 'to milk':

coxx ‘to squeeze the udder once’. The singularity can refer to the number of objects, *šab* ‘to tie’: *šabb* ‘to tie one thing at one time’, *d’iš* ‘to plant’: *d’išš* ‘to plant one plant at one time’. Singulatives are preferred in imperatives (Savà 2005: 187). The derivation cannot apply to verbs that have a final geminate consonant, but some of those originate in this derivation. In Dullay there is free variation for a number of lexemes between single and double final consonant, *far ~ farr* ‘to die’ (Amborn et al. 1980: 117).

28.5. The inchoative and verbalizers

The inchoative, or inceptive, derivations are de-nominal or de-adjectival verbalizers. Several forms are attested within one language and across languages. The inchoative derivation is *-aw(w)*, *-uy* or *-um* in Dullay (Amborn et al. 1980: 117-118), *-ow* in Somali (Saeed 1999: 135-136), *-ow* or *-aw* in Rendille (Pillinger and Galboran 1999: 33), *-uw* in South Cushitic, *-um* in Konso, *-a’*, *-aaw*, or *-ee* in K’abeena (Crass 2005: 146-147).

Verbalizing derivation in general contains verbal derivational suffixes such as causative or middle, depending on the meaning of the resulting verb, and often containing different vowels, *oo* or *ee*. The difference in the vowel is a relic of fusion with a preceding inchoative derivation. The typical verbalizing suffixes are *-ees* (K’abeena, South Cushitic), *-ood* (South Cushitic). In K’abeena there is also *-aar* (Crass 2005: 153).

29. Structure of the simple clause

The coding of relationships between noun phrases and the predicate include coding on the verb, subject and object pronouns in an inflectional complex, case marking on the noun phrase, preverbal adverbial case clitics, postpositions, linear order with respect to an inflectional complex, incorporation by the verb, by verbal derivation, by pause and other intonational means.

The syntax of many Cushitic languages is primarily governed by pragmatic principles. In a number of Cushitic languages there is a subject clitic (selector, see section 27) which is independent of the verb and which plays a role in focus. For some of these languages the subject clitic marks the beginning of what has been termed the verbal piece or the verbal complex and which ends with the verb. Even though this syntactic unit may contain the object, it is not comparable to a verb phrase for various reasons in the different languages. One such reason is that non-objects and sometimes subjects also occur within the verbal piece. Languages in which such a unit can be recognised are Somali and the South Cushitic languages. These languages show signs of polysynthicity.

30. Syntactic categories and relations

The syntactic relation of subject is expressed by inflection on the verb. The object is less uniformly encoded. Some languages have an enclitic object pronoun. In most Somali dialects this pronoun is empty for the third person. Despite gender and person (and sometimes number) agreement of the subject on the verb and, in some cases, of an object in an object pronoun, the subject and object are not always uniquely distinguished. Independent pronouns often do not distinguish between the subject and object and are not obligatory. In the northern languages the subject and object may be

distinguished by word order. In the Lowland East Cushitic and South Cushitic languages word order is determined by information structure.

31. Position of the verb in the clause
The verb tends to be final in the sentence. Most languages allow for material to appear after the verb for pragmatic functions, not only as an afterthought, e.g. Somali, Alagwa, Burunge. The position of the verb does not distinguish subject and object. The position immediately before the verb is one for out of focus. Nouns can form a phonological and intonational unit with the verb for pragmatic reasons showings signs of noun incorporation; see Sasse (1984) for Boni and related languages, Kooij and Mous (2002) for Iraqw, Tosco (2004) for Somali, and Kießling (2007) for Alagwa. See also section 37 on topic and focus.

32. Coding the second argument (object)
The coding of the second argument, the object, is most straightforward for those languages that have accusative case. For example, in Awngi the object is marked by the accusative case suffix:

(42) ə́nná ɣuna ŋiws ənkantís
this:FEM woman his/her:MASC.GEN:DAT lover:DAT
ɣošéstâ ŋárgê digayšíɣ^{w}à
milk:ACC:and honey:ACC she:presented:PREDISTINATIVE:DURATIVE
'This woman used to treat her lover to milk and honey.' (Hetzron 1976: 34)

However, the majority of the languages have a subject case system in which the object is not marked. In such languages objects may be defined on the basis that they can undergo passivization. Such is the case in Oromo: 'me' in (43a) is an object because it can become the subject of the passive verb of (43b), but 'house' in (44a) is not an object, because it cannot become the subject of a passive verb (as in 44b) (Owens 1985a: 167).

(43) a. inníi ná arke
he me saw
'He saw me.'
b. an ní-n ark-am-e
I FOC-I see-PAS-PAST
'I was seen.'

(44) a. inníi maná deeme
he house went
'He went to the house.'
b. *na-níi ní deem-am-e
house-NOM FOC go-PAS-PAST

In other languages objects are the arguments that do not trigger agreement and thus are not subjects and that are not marked by case clitics or adpositions. Thus, the object is negatively defined among the arguments (Sasse 1984: 245). Grammatical relations tend not to be the most central organisational principle in Cushitic syntax.

In a number of languages objects are the arguments that can be referred to with object pronouns. Such is the case in the South Cushitic languages. For example, in Iraqw the feminine object pronoun *a* agrees with the object 'beer' (45), and replaces an understood object in (46).

(45) buura a-ga wáh
beer O.F-PERF drink:1.SG
'I drank beer.'

(46) g-a-na alhhe'ées
O.3-O.F-PAST finish:3.SG.M:PAST
'He finished it (i.e. the field (f)).' (Mous 1993: 244)

33. Coding a third argument (adverbial case, postposition)
There are two different ways to code a third argument in Cushitic. One is by means of an adverbial case clitic. This is either linked to the noun or syntactically linked to the verb in which case it may end up on the "wrong" nominal (anti-iconicity); see section 15 on non-core cases and clitics. The other manner is by means of an adposition (see section 16 on adpositions) which is sometimes a clitic.

The semantics of a case clitic can be quite diverse. For example, the case clitic *=nu* in Ts'amakko marks the beneficent (47), the representative (48), the goal (49), the purpose (50), the locative direction (51), and the basis for comparison (52) (Savà 2005: 103-107).

(47) bašare 'abba kaayu=nu paš-o q'od-as-i
Bašare father PRON.M.1SG.M.POSS=from field-M plough-Caus1-3SG.M.UNM
'Bašare ploughed the field to the benefit of my father.'

(48) bog'ol-k-o=nu q'ol-e c'ox-ind'a
king-SG-M=from cattle-P milk-PLUR.IMP.B
'Milk the cattle on behalf of the king!'

(49) laabl-e gaan-t-e=nu šeed'-i
cloth-F woman-SG-F=from bring-1SG.UNM
'I brought the cloth to the woman.'

(50) korkor-o=nu gor-e 'ergad'-e q'ets'-inki
house.wall-M=from people-P assemble-3PL.UNM cut-3PL.CONS.A
'The people assembled and cut (wood) for (building) the wall of the house.'

(51) žinka=nu kol-i
Jinka=from return-1.SG.UNM
'I returned from Jinka.'

(52) baq'q'ala miša=nu q'arra ki d'al-ad'-i
Baq'q'ala Miša=from before Sent.3 give.birth-MID-3SG.M.UNM
'Baq'q'ala was born before Miša.'

Locatives are often expressed through a combination of locative nouns and adpositions or case clitics. In the following Konso example, the locational noun *xati* is followed by the clitic *pa* and again by a directional marker.

(53) g'oyra tika kap-ee deh-e ma xati-pa-xa ca
tree house near-3 grow-PF but down-DEST-downwards be:IPF
'The tree grows near the house, but further down.' (Daudey and Hellenthal 2004: 87)

34. Clause chaining

There are several strategies to link clauses. One common strategy is to have a series of subordinate predicates to the final main verb. An example from a long stretch of such subordinate verb forms or converbs is the following string in Awngi.

(54) ándeskí án aqí lángiswa beráwa
and-from-that that man both(-ACC) oxen-(ACC)
keseramá əntakíntakí zurúsi,
lost-and both-here-and-there while-he-was-in-the-state-of-turning,
ŋáji lángigi kecerŋúnuda bətída lángiso
they both in-that-they-fixed in-place both(-ACC)
beráwa ɣaska kaskamá aredkamá ɣʷékamá
oxen-(ACC) they-took-and they-went-and they-slaugthered-and they-ate-and
widúnidés fallengá, əndegena demeka
from-finishing after, again once-more
"tayô dadeɣŋá kanəs!" təŋúnà.
'sheep-(ACC) to-steal let-us-go!' they-said-to-each-other.
(Hetzron 1969: 11)
'Then while the man, having lost both oxen, was turning here and there, they both (the thieves) went to the fixed place taking both oxen with them, and slaughtered and ate them; after they finished, they said again to each other: "Let us go to steal sheep!".'

Another strategy is to concatenate clauses with a coordinating particle. This strategy is common in Konso stories. The clause-coordinating clitic *-ka* appears in the position after the subject in the second clause (see 55).

(55) [isheeta i xa'a-t-i-][ka dag'int-aadd-i yag'-at-i-]
she 3 wake-F-PF-and body-3SG.POSS-3 wash-MID:F-PF-

[ka hapurss-at^{i}] [nes-att-i]
and dress-MID:F-PF rest:MID:F-PF

[tiká (kara) saha-t-i][-ka sekkammaa-yyé sook-t-^{i}]
house (inside) clean-F-PF-andhere.after-SET leave-F-PF

'She got up, washed herself, got dressed, cleaned the house and went out.' (Mous 2006)

(56) [arp-oo-se ana turaa xa'-ad-e] [ka aan-ee] [takal-ee pi'-e]
elephant-REF-DEM me front flee-MID-PF andgo-PF cliff-SET fall-PF

[ka qeq-qep-e]
and INT-break-PF

[ka xosaltaa paay-e] [ka oppaa-ee-w paq-e] [ka twee].
and laughter start-PF and on-SET-too burst-PF and die:PF

'That elephant fled from me and left and fell into the ravine and broke into pieces. And he (bedbug) started to laugh and likewise burst on it and (in doing so) died.' (Mous 2006, example from Korra Garra 2003)

Yet another common strategy is tail-head linking, which is common, for example, in Alagwa. In a story new entities are usually introduced in the post-verbal position, as is the case in the first sentence of (57); in the next sentence this previously introduced entity, 'troughs', now appears sentence-initially and with a referential demonstrative, while the new entity, 'milk', appears in the post-verbal position; in the next sentence this information in repeated and the sentence is marked as being background information. Such sequences and repetitions for cohesion are typical for narrative style (Mous 2001).

(57) i-n háts-is mlambabee;
S3-PF full-CAUS:3M troughs;
mlambabee-wá-d i-yaa háts-ir ilibaa.
troughs-P-DEM S3-PST full-3PL milk.

ilibaa ki hats-ir-íi; ...
milk DEP-S3 full-3PL-BGND
'He filled troughs. Milk filled those troughs. The troughs being filled with milk, ...'

35. Negation

Negation is marked in several different ways. Negation may be marked in the selector, i.e., the preverbal inflectional complex. This is the case in Arbore, Dhaasanac, Somali, Boni (58), Dahalo, Iraqw, and Konso (59); and in South Cushitic specifically for prohibitive use (60). Negation may also be expressed by using a specific negative verbal conjugation, as is the case in most languages. The two options may be both present in the same language, as is the case for Konso and Iraqw. In Oromo negative verbs are formed by prefixing a particle *hin* to the verb which receives a high tone on the first syllable and the dependent suffix is used for the imperfective (61) (Owens 1985a: 66-67). Dullay uses subjunctive paradigms for the negative; in Konso one of the negative paradigms has the subjunctive ending *o* but differs from the subjunctive tonally. Zaborski (2005) provides an overview of such negative conjugations in Cushitic and discusses such negative paradigms for Beja, Afar, Rendille, and Arbore.

(58) idohóodi húu-dęęttǫ hą́kį́į
women:DEF NEG-go there
'Women do not go there (while men are allowed to).' (Boni, Sasse 1981: 280)

(59) 'án-íkkin-nean-có
1SG:NEG-drink-NEG-AM
'I don't drink.' (Konso, Bliese and Sokka 1986: 22)

(60) mi-ti taaħ-aar
PROH-us beat-NEG.IMP
'Don't beat us!' (Iraqw, Mous 1993: 165)

(61) hin-déem-u
NEG-go-DEP
'He is not going.' (Oromo, Owens 1985a: 66)

Negative verb paradigms may develop out of a periphrastic construction involving a negative auxiliary verbs such as *rib* 'to refuse' in Beja, *wee* 'to lack' and *hinna* 'not be' in Afar (Zaborski 2005: 697), and *kaaħ* 'be absent' in Iraqw and *baɬ* 'be without' in Alagwa and Burunge (Kießling 2002: 382-389).

36. Questions

There are several ways to form questions. Iraqw can be taken as an example of a language that has three different kinds of question formation. Questions are often formed by questioning intonation with or without additional segmental material. In Iraqw yes/no questions are formed by questioning intonation (rise in pitch followed by an incomplete fall) and the addition of a predicative suffix to the verb which is usually the final element of the clause (62). Content questions are often formed by the use of a question word. In Iraqw these are sentence-final as complements of a cleft construction with a general word as head of the relative clause sentence-initially (and the complement of the cleft can be left out) (63). Another manner of question formation is by prefixing *m* to the selector, the preverbal inflectional complex. This asks for an object of the verb or of the case clitic, e.g. (64) and (65) in Iraqw.

(62) loosí ga dôoɬ-i
beans O3:O.F cultivate:3M:INTER-3:PRED
'Does he cultivate beans?' (Mous 1993: 287).

(63) hée kúung u axwées (a heemá)
man:CON you.M O.M talk:3M (COP who)
'Who is talking to you?' (Mous 1993: 283)

(64) laarí m-a ʻay-áan
today QUES-O.F eat-1PL
'What are we eating today?' (Mous 1993: 287)

(65) m-a-s ʻaaʻam-íin
QUES-O.F-reason cry-DUR:2SG
'Why are you crying?' (Mous 1993: 287)

K'abeena (Crass 2005: 284) and Oromo (Stroomer 1988) combine questioning intonation with a full realisation of the final whispered vowel. K'abeena may have an additional question suffix *ndo* for a leading yes/no question (66) and the question word in situ for information questions and no question intonation is needed (67). In the Agaw languages the questioned element is marked by the particle *ma* in yes/no questions; the interrogative pronoun in content questions is either sentence initial or

precedes the verb; in addition a particle is added sentence-finally (Hetzron 1976: 38-39).

(66) samaan[i] t'aafaa 'udulanu manc[u]
sky teff:ACC thresh:IMPFV:3M:REL man:NOM
lallane-he-ndo?
show:IMPFV:3M-2SG.OBJ-EMPH
'Don't you see the man there in the sky who is threshing teff?' (K'abeena, Crass 2005: 284)

(67) wombisanaan[i] k'omboosana yu ma
K'abeena:INSTR k'omboosana:ACC say:VN:NOM what:ACC
yoh[a]
say:VN:ACC:COP.M
'What is *k'omboosana* in K'abeena?' (K'abeena, Crass 2005: 285)

(68) küt aûl gŭayìtir-aá:
you where you:will:settle-QUES
'Where will you settle?' (Agaw, Hetzron 1976: 39)

Question words are sentence initial and marked as topics in Somali and Oromo (69) (Sasse 1977: 348-349).

(69) eennú-tti arge namá-tti arge
who-TOP see:PF:3M man-TOP see:PF:3M
'Who saw it? It was the man who saw it.' (Borana Oromo, Sasse 1977: 348)

37. Topic and Focus

The syntax of Cushitic languages is primarily pragmatically organised. Focus constructions are common and often involve cleft constructions, as in (70) for Khamtanga. Appleyard (1989) points out that this is an areal phenomenon for Ethiopia and shared with Amharic and Tigrinya.

(70) wämbäriz digil g[w]äyyärd an ŋäŋ
chair:DEF:OF TOP:DEF:on (SUB)REL:1SG:sit 1SG COP
'It is I who am sitting on the chair.' (Khamtanga, Appleyard 1989: 301).

One of the possible functions of the inflectional complex, the selector (see section 27 above), is that of indicating the (type of) focus. In Somali the selector, or indicator particle, is attached to the focus marker. In the following examples the type of focus marker indicates the type of focus: subject focus (71), verb phrase focus (72) or complement focus (73).

(71) naag baa libaax aragtay
woman FM lion saw:she
'A WOMAN has seen a lion.'

(72) Cali moos w-uu cunay
Ali banana FM-he ate:he

'Ali HAS EATEN a banana.'

(73) Cali wax-uu cunay moos
Ali FM-he ate:he banana
'Ali has eaten a BANANA.

Languages with a separate inflectional complex preceding the verb have the option to utilise the position between the inflection complex and verb for backgrounding or out-of-focus expression. Iraqw is such as language; compare (74a) and (74b) where the coffee is backgrounded in (74a).

(74)(a) a kahawú wáh (b) kahawa u wáh
s.1/2 coffee:CON drink:1.SG coffee O.M drink:1.SG
'I use coffee; I am a coffee drinker.' 'I drink coffee'

This phenomenon comes close to object incorporation, although true object incorporation is still different in Iraqw, as it requires a bare noun object without the construct-case marking (as in (75)). The properties of Iraqw noun incorporation are discussed in Kooij and Mous (2002). Noun incorporation for Somali is discussed in Tosco (2004). Sasse (1984) shows the out-of-focus function of noun incorporation in Bayso, Burji and Boni (see also Sasse 1981). The examples in (76) show the different focus types in Boni where the non-focus position in immediately before the verb.

(75) a-ga hee gáas
s.1/2-PAST man kill
'I committed manslaughter.'

(76)a. hác-idohoo biyóo=ta'aka
SGLTV-woman water=drink:IMPFV:3F
'The woman drinks water.'
b. hác-idohoo biyóó-é ta'aka
SGLTV-woman water-NOUN.FOCUS drink:IMPFV:3F
'The woman drinks WATER.'

c. hác-idohoo biyo á-ta'aka
SGLTV-woman water verb.FOCUS-drink:IMPFV:3F
'The woman DRINKS water.' (Boni, Sasse 1984: 252-253)

Cushitic languages make ample use of focus clitics to indicate several types of focus/contrast on specific phrases. In Oromo, for example, the preverbal clitic *hin* indicates that both the subject and the predicate are focussed (77), whereas a post NP clitic *-tu* indicates contrast (78); the particle *d'a* is used for contrast on PPs (79) (see also Clamons et al. 1993).

(77) Túlluu-n hin-d'uf-a
T-NOM FOC-come-3M-IMPF
'Tulluu will come.' (Baye 1988: 368)

(78) Tulluu-tu hoolaa bit-e
T-CONTRAST sheep buy:3M-PF
'It is Tulluu who bought a sheep.' (Baye 1988: 372)

(79) (Tulluu-n) eeboo-d'a-n leenča ajǰee-s-e
T-NOM spear-FOC-with lion kill-CS-3M-PF.
'It is with a spear that Tulluu killed a lion.' (Baye 1988: 379)

There is a topic position preceding the sentence and followed by a pause in, for example, Iraqw and Somali. In the Iraqw example (80) the first noun phrase, the road (that was magically cut in the lake) is the topic but it does not reappear as the subject (lake) or the object (them, the cannibal clan) in the remainder of the sentence.

(80) balbal-dá', tlawi gi-na bara-dí harakí'
road-DEM4 lake O3:O.P-PAST in-DEM4:DIR return:3SG.F
'About that road, the lake returned them into it.' (Iraqw, Mous 1993: 274).

In Somali a subject that is not in focus is realised as a left-hand (sentence-initial) external (extra-sentential) topic (Frascarelli and Puglielli 2007: 123):

(81) Cali MOOS buu cunay.
Cali banana FM.SCL3SGM eat.PAST.3SGM
'As for Cali, he ate a BANANA.'

Sentences may be marked to have no pragmatically motivated internal structure. Tosco (2001: 263-266) shows that such "topicalized sentences" are characterised by the use of a subject pronoun (and not a focus subject pronoun) in Dhaasanac. Such sentences are characterised by the use of *waa* in Somali (see Ajello 1995).

38. Complex sentences

Several events are often combined into one sentence in which the final verb is the main verb and the preceding verbs are converbs, that is, they are less finite, reduced in person and/or tense marking and possibly marked for subordination. For example, in Oromo pre-final perfect verb forms with the same subject tend to be marked either prosodically by a High tone or by a suffix *-ti* plus vowel lengthening of the preceding; with different subjects a gerund/converb/perfective in *náan* is used (Banti 2006).

(82) a. inníi as d'ufé makiináa bité gale
he here come:3M:PF:H car buy:3M:PF:H return:3M:PF
'He came here, bought a car and returned.' Owens (1985a: 215)

b. heddúu ofnáan p'olis-níi ná d'aabe
much drive-PER police-NOM me stopped
'Because I was driving fast, the police stopped me.' Owens (1985a: 151)

The Dullay and South Cushitic languages use clauses with consecutive tenses following the main clauses instead of such "converb" constructions, as is clear from the first lines of a Burunge story:

(83) waka'ilee kwa'i haa daw hingáa
once hare and elephant 3:REFL:PRET
sla'aasla'iyaya letu wak[a] kwa'i higi
like:FREQ:INT:3:IMPFV:3PL day one:F hare 3:SEQUEN
kaah[i] sa daw...
say:3PF for elephant
'Long ago Hare and Elephant were good friends. One day Hare told Elephant...'
(Burunge, Kießling 1994: 165)

Nominalized verbs retain the ability to have an object in Iraqw. In (84) the verbal noun is within the verbal complex in object position, but its logical object precedes the verbal complex and is referred to with an object pronoun, which is excluded if an object of non-verbal origin precedes the main verb.

(84) aníng 'ayto'o a doołár łáa'
1SG maize O.F cultivating:F:CON like
'I would like to cultivate maize.' (Iraqw, Mous 1993)

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