THE CAUSATIVE IN RENDILLE

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Afrikanistische Arbeitspapiere - Schriftenreihe des Kölner Instituts für Afrikanistik, No. 15

1988: 5-65

This is an electronic version of a paper I published in 1988. It is identical with the original text apart from technical changes. These comprise

1. The spelling of the Rendille examples has been adjusted to the conventions adopted later (e.g. Pillinger, Steve and Francis Letiwa Galboran, 1999, *Rendille-English Dictionary*, Köln: Rüdiger Köppe; Schlee, Günther and Karaba Sahado, 2002, *Rendille Proverbs in their Social and Legal Context*, Köln: Rüdiger Köppe). The consonant signs in the left column have been replaced by those in the right (in Rendille words only! In other languages other conventions have developed).

 $\begin{array}{ccc} c & \rightarrow & ch \\ d' & \rightarrow & d \\ d & \rightarrow & 'd \\ h & \rightarrow & h \\ h & \rightarrow & 'h \\ x & \rightarrow & kh \end{array}$

In some instances the ethnonym 'Galla', which I had taken over from my sources even though it was outdated even then, has been replaced by 'Oromo' which has evolved into the only accepted designation of that group. In 1988 I had been content with explaining in brackets that the group referred to by my sources as Galla are the Oromo.

2. Minor inconsistencies in diacritics on vowels have been left. I used to underline open vowels, but as the original text was type written (before the computer age!), underlining was also used as the type writer convention for italics. The distinction then became non-visible. It may not be phonemic anyhow. In the cases where underlining was visible in the

original, I kept it. After h, a u becomes centralized (ü). The trema has been left in those cases where this phonetic particularity was marked in the original.

AAP 15 (1988): 5-65

Günther Schlee, Bielefeld

The causative in Rendille

Rendille is an Eastern Lowland Cushitic language, closely related to Somali, spoken by, at the most, 20.000 pastoral nomads of the Marsabit district of Northern Kenya.¹

There are two partly divergent morphophonemic analyses of the causative, in Schlee (1978) and Sim (1981). Apparently these two approaches are independent, since the earlier work is not quoted in the later. In the first part of this paper we shall compare these two analyses and discuss them within the Rendille framework. In a second part we shall widen the perspective to include the comparison with neighbouring languages to enable us to answer questions on which the Rendille material alone is inconclusive. In a third part we shall try to push the analysis beyond the points reached by Schlee (1979) and Sim (1981) by including problems that have been neglected by both authors.

1. The internal analysis

Taking Sim's examples² (p. 21) we first describe the surface forms for which we have to account.

	k <u>a</u> r-	kh <u>o</u> rkh	<u>go</u> ll <u>o</u> l-	<i>g00</i> -	:Root
	'cook'	'swallow'	'feed'	'cut'	:derived stem
1st sg.	k <u>á</u> rche	kh <u>ó</u> rkhiche	g <u>ó</u> ll <u>o</u> liche	góoche	meaning
2nd	k <u>á</u> risse	kh <u>ó</u> rkhisse	g <u>ó</u> ll <u>o</u> lisse	góosse	
3rd m.	k <u>á</u> rche	kh <u>ó</u> rkhiche	g <u>ó</u> ll <u>o</u> liche	góoche	
3rd f.	k <u>á</u> risse	kh <u>ó</u> rkhisse	g <u>ó</u> ll <u>o</u> lisse	góosse	

Since 1974 I have done five years of field research in this and neighbouring areas. The first research period, 1974 to 1976, involved active and passive language learning and resulted in an anthropological monograph with many original oral texts (Schlee 1979) and a grammatical sketch with a glossary to go along with them (Schlee 1978). Later linguistic research was done by Heine (1975/76), Oomen (1978, 1981) and Sim (1981). My recent research has also involved Boran and Somali speaking peoples and their languages. The present paper is a revised version of a contribution to the XXII. Deutsche Orientalistentag in Tübingen, March 21-26, 1983.

^{2.} Our only modifications of his examples are that in the third paradigm we prefer <u>góllo</u>liche etc. to his gollice and in the second *khórkhiche* etc. to his *xorxice*. This, however, does not effect the analysis. [End of page 5]

1st pl.	k <u>á</u> rinne	kh <u>ó</u> rkhinne	g <u>ó</u> ll <u>o</u> linne	góonne
2nd	k <u>á</u> rissen	kh <u>ó</u> rkhissen	g <u>ó</u> ll <u>o</u> lissen	góossen
3rd ³	k <u>á</u> rchen	kh <u>ó</u> rkhichen	g <u>ó</u> ll <u>o</u> lichen	góochen

Sim proceeds by postulating an underlying *ich* to be inserted between root (i.e. noncausative stem) and the personal endings, here of the perfect aspect, which in their underlying form are:

1st sg.	- <i>e</i>	like in	sug-e	'I waited'
2nd	-te		sug-te	'you waited
3rd m.	- е		sug-e	etc.
3rd f.	-te		sug-te	
1st pl.	-ne		sug-ne	
2nd	-ten		sug-ten	
3rd	-en		sug-en	

(We would rather write *ich* than *ich* because it is unstressed and has a low tone.)

In a footnote (p.21) Sim discusses and rejects the alternative to set up ch instead of ich as the underlying form of the causative. The postulation of ch would require an insertion of i by epenthesis in the appropriate environments, while a postulation of ich would require vowel deletions in the cases where we find a bare ch on the surface. Schlee (1978) actually goes the way rejected by Sim. His rule 6

R6 (Schlee) ch +
$$\begin{cases} t \\ n \end{cases} \rightarrow + \emptyset + i \begin{cases} s \\ n \end{cases} / Cons _[End of page 6] \end{cases}$$

produces such an inserted *i*. This provides us with two explanatory models whose respective merits we are now going to discuss. (Sim 1981:21–23 and Schlee 1978:8, 12–14, 47f)⁴

^{3.} To call this person a third person plural is only a rough approximation. Actually, it is used as a concord to collective nouns, composite and some pronominal subjects while other subjects typically have complementary gender/number distribution, plurals of masculine nouns being feminine and vice versa. Problems of subject/verb agreement are discussed by Schlee (1978:25–28 and 48f).

^{4.} A third possibility is proposed by Robert Hetzron (personal communication). He asks why Schlee considers *c* and not the *is* of the 2nd pers. sing. & pl. and 3rd pers. f. to be the underlying form. Hetzron points out that

Sim has an empirical argument in favour of <u>i</u> forming a part of the underlying morpheme as he sees difficulties to account otherwise for 1st person forms like *hawóyche*, *khorkhéyche*, *suujáyche*, *futennáyche* which he believes to be free variants of *hawóoche* (recounted (tale)), *khorkhíiche* (swallowed), *suujáache* (spoiled), *futennáache*⁵ (loosened⁶).

Unfortunately this argument could not be empirically confirmed. The first set of forms has never occurred to me in my long speaking experience of Rendille and a native speaker⁷ whom I consulted about this also expressed her puzzlement. We must therefore assume that theoretical assumptions here have interfered with Sim's auditive perception.

As both analyses account for the entire set of surface forms the question which one to prefer can only be decided by two criteria:

- which explanation is shorter and more elegant?, i.e. the economy principle or Ockham's razor, and
- 2) which analysis appears more generalizable and historically more plausible in the light of other East Cushitic languages. [End of page 7]

To decide the question of economy and elegance, we have to compare the sequence of explanatory steps taken and the internal co-herence of the rules postulated by both authors.

Sim specifies the contexts in which *ch*, *ich* and *ych* (which we do not recognize) occur. He states

(Sim) (43)

we would then get s+n in the 1st pl., which could then, by an appropriated rule, be simplified to n if Rendille can be shown not to tolerate -sn- groups. Examples like nas+na 'we rest', however, show that no such process is at work in Rendille. I thank R. Hetzron and R.G. Schuh for such and other stimulating comments and their encouragement to publish something on Rendille under their editorship. Unfortunately, by the time I received their letter while I was in Africa doing field-research, my 1978 book had been published elsewhere and without discussion of their valuable comments.

^{5.} I prefer to write *háwooche*, *khórkhiche*, *súujache* and *futétnache* or *futénnache*. In one place Sim writes a question mark instead of a form (p. 23). Here we should read *hüsúbnache* (I renewed).

^{6.} The correct meaning of this form is 'I lightened, made easy'.

^{7.} Isir Schlee

Following	monosyllabic CVC	the surface form is <i>ch</i>
	polysyllabic roots root final –CC –VVC	the surface form is <i>ich</i>
	root final V	the surface form is $Vch \sim ych$

(Our comment: The examples Sim gives for the bottom line do by no means only consist of root with final V but also of roots plus a variety of other elements, these ending in a vowel, inserted before the causative element. E.g.

suuj	'bad'	suujache	'I spoiled'
fut <u>e</u> t	'easy'	fut <u>e</u> tnache	'I eased'

This bottom line provides for the residual category of the list, since, if we drop the requirement that the V has to be final to a "root", it says rather tautologically that if other elements ending in a vowel are inserted here, we find such vowels before the *c*. We shall come back to this point below.)⁸

To produce the *ss* and *nn* of the 2nd, 3rd f, 1st pl.and 2nd pl. persons (cf. the above paradigm) Sim postulates [end of page 8]

(Sim)R 16	$ch + t \rightarrow ss$
(Sim)R 17	$ch + n \rightarrow nn$

^{8.} We further have to note that the statement that the surface form is *ch* following monosyllabic CVC is not always true in the case of verb stems ending in a back consonant, even if the stem vowel is short:

suga	'I wait', caus. <i>sugicha</i> (rare)
s <u>e</u> ha	'I stir', caus. s <u>e</u> hicha
<u>o</u> khicha	'I lift' (no basic verb recorded)
bukha	'I become distached', bukhicha 'I uproot'
rukhan	'I lean', rukhicha, 'I let s.b. slim down'
but:	
dagda	'I hide', caus. dagcha
b <u>a</u> ha	'I go out', caus. <i>b<u>a</u>hcha</i>
n <u>a</u> ha	'I fear', caus. <i>n<u>a</u>hcha</i>
k <u>a</u> ha	'I rise', caus. k <u>a</u> hcha

e.g. $khorkhich + te \rightarrow khorkhisse$ 'you swallowed'

 $khorkhich + ne \rightarrow khorkhinne$ 'we swallowed'

The output of these rules gives all the surface forms required.⁹

Schlee (1978) considers only *ch* the underlying causative morpheme and the *i* to be epenthetic. The likeliness of this view would be increased if there were other cases of epenthetic *i* in this language. There are, in fact, at least two non-causative verbs which have *i* between stem and ending¹⁰:

	'hold'	'avoid'
1st	khúche	búje
2nd	khúchise	bújise
3rd m.	khúche	búje
3rd f.	khúchise	bújise
1st pl.	khúchine	bújine bunne~bujne
2nd	khúchisen	bújjen
3rd	khúchen	bújen
Imp. sing.	khuchi!	buj!
Imp. pl.	khucha!	buja!

To explain the 2nd persons singular and plural and the 3rd person feminine of these paradigms, we first have to apply R 3 (Schlee 1978) which we have to expand to include j^{11} [end of page 9]

^{9.} To explain other paradigms than the ones given above, Sim also postulates R 18 : $t + ch \rightarrow cc$. I personally have difficulties in hearing or pronouncing a difference between tc and cc and therefore have no objections to Sim making this assimilation if he likes to do so. Here, however, we shall limit our discussion to the controversial point instead of going into further detail.

^{10.} There are quite a number of verbs which are of perfect causative shape but where the question, whether they are causatives or not, is open to interpretation, because there are no basic verbs to which they form a contrast: *baicha, baissa* 'collect', *kondicha, kondissa* 'collide with', *kokicha, kokissa* 'push, hit, toss', *kuumicha, kuumissa* 'sneak', *siicha, siissa* 'give'.

^{11.} As the epenthesis of *i* does not affect the 2nd pers. pl. and some variants of the 1st pers. pl. we better speak of a mere tendency to insert <u>i</u> after *-j*. The only other verb in *-j* which we have found, *kaja*, *kajta* 'try', has no such epenthesis.

R 3a (Schlee)
$$t \rightarrow s / \begin{cases} 1 \\ s \\ ch \\ (j) \end{cases} + _$$

we thus get

*
$$khuch + te \rightarrow khuch + se$$

Schlee's R 3 is a general rule with a wide application. This explanation therefore is not *ad hoc* but in harmony with other processes occurring elsewhere in Rendille (cf. below). We then have to formulate an *i* epenthesis rule to break the non-permissible *chC* and *jch* clusters. (Since this is the same process as the one covered by Schlee's (1978) rule 6, we call this rule R 6a):

R 6a (Schlee)
$$\varnothing \rightarrow i / \begin{cases} ch \\ (j) \end{cases} + \dots ch$$

**khuch* + *se* \rightarrow *khuchise* 'you, she held' **buj* + *ne* \rightarrow *bujine* 'we avoided'

The order of the two processes cannot be inverted. If we allowed the *i*-epenthesis to occur before the spirantization $(t \rightarrow s)$, we would obtain non-existant forms like **khúchite* which would then not provide the conditions of spirantization because *ch* and *t* are already separated.

We notice that the <u>i</u> epenthesis occurs at the morpheme boundary between the stem and the first (and in this case only) suffix. Across this boundary the progressive assimilation $(t \rightarrow s)$ is allowed to occur while the epenthetic <u>i</u> shelters the stem final *ch* or *j* from any regressive assimilatory influences. It is this feature, the persistence of the *ch*, which makes *khuchise* recognizable as a non-causative form, since a causative morpheme *ch* would be regressively assimilated:

*
$$goo + ch + te \rightarrow goosse$$
 'you cut'

[End of page 10]

The *i*-epenthesis in causative verbs, contrary to our two non-causative verbs with root final consonants reminiscent of the causative c, does not shelter the c from regressive assimilation. To explain this difference we have to look at the morpheme structure.

We have said above that <u>i</u>-epenthesis occurs at the morpheme boundary between the stem and the first suffix. In the case of *khuch*+ this means after the *ch* and in the case of a causative verb like kar+ch+ this means before the *ch*. If we add a personal suffix with an initial consonant to kar+kh+, we have to break the resulting cluster of three consonants by *i*-epenthesis at the obligatory stem-ending boundary.

$$R \ 6b \ \emptyset \rightarrow i / C + _ ch + \begin{cases} t \\ n \end{cases}$$

we thus get:

$$*kar + ch + te \rightarrow *kar + ich + te$$

Here, assimilation between ch and t or n occurs also regressively, since the i, being to the left of the ch, does not shelter it from such influences.

*
$$k\underline{a}r + ich + te \rightarrow k\underline{a}risse$$
 'you/she cooked'

Schlee (1978) combines *i*-epenthesis and consonantal assimilation in one rule, his R 6, which we have quoted above. Here, we have analysed this process in its constituent parts to show.

- a) that *i*-epenthesis in causative and non-causative verbs occurs in the same place (immediately after the stem) and is the same process, and
- b) that the difference in the behaviour of ch (which stays if it is root final and is assimilated if it is a causative suffix) is explained by the morpheme structure: -ch+ is structurally different from +ch+. [End of page 11]

The similarity of the position and environment of this *i* in causative and non-causative verbs makes it plausible to account for it by the same mechanism in both cases. If it is epenthetic in one case, it must also be epenthetic in the other.

After this diversion into non-causative verbs we now return to our comparison of Schlee's (1978) and Sim's (1981) analysis of the causative.

For the occurrence of *ich*, *ch* or V*ch* in the first preson we can only point to Sim's typology (p. 21). The distribution here remains the same, no matter how we explain the origin of the *i*. (Cf. Schlee 1978, 12f and 48).

In the next step of analysis, however, there are major differences between Schlee (1978) and Sim (1981). While Schlee explains the morphophonemic processes by rules of general application, Sim formulates isolated *ad-hoc* rules which jump steps of the underlying processes.

Schlee's rule 3, already familiar to us, transforms $t \rightarrow s$, e.g.

* $kh\underline{o}rkhich + te \rightarrow *kh\underline{o}rkhich + se$ * $gooch + te \rightarrow *gooch + se$

and it also provides for cases which have nothing to do with the causative like

* $t\underline{o}l\underline{o}l + te \rightarrow *t\underline{o}l\underline{o}l + se$ 'you/she stood' * $nas + te \rightarrow nas + se$ 'you/she rested'

Schlee's rule 4 then produces the surface forms.

(Schlee) R4
$$\begin{cases} 1 \\ s \\ ch \end{cases} \rightarrow \emptyset / _ + s < rule 3 \\ 12 \end{cases}$$

thus: [end of page 12]

$$*khorkhich + se \rightarrow khorkhise$$
'you/she swallowed' $*gooch + se \rightarrow goose$ 'you/she cut' $*tolol + se \rightarrow tolose$ 'you/she stood'

^{12.} Schlee (1978) fails to specify that in rules 1 and 4, but not in 3, the *ch* has to be the causative *ch*, or, put in terms of morpheme structure, the *ch* after +(i).

Schlee's rule 1 accounts for the 1st person plural:



thus:

**khorkhich* + *na*
$$\rightarrow$$
 khorkhina 'we swallowed'
etc.

The derivation of the other forms of the paradigms is implicit in what we have said so far.

Sim keeps the geminate consonants while Schlee (1978) eliminates them. Empirically the question might be difficult to decide whether the number of morae these consonants occupy is actually closer to 1 or to 2. As the forms with geminate consonants look morphologically more transparent, we might, however, decide to follow Sim in keeping the geminates. This can be achieved quite simply by writing *s* instead of \emptyset in R 3 and *n* instead of \emptyset in R 1.

The rules of Schlee (1978) have the advantage of reflecting general morphophonemic processes which are not limited to causative derivation and not even to the verb. To explain processes between noun and numeral, Schlee (1978:23) makes use of the same rules 3 and 4:

$$\begin{array}{rccc} & R & 3 \\ *makhabal + to & \rightarrow & *makhabal + so \\ *makhabal + so & \overrightarrow{R} & 4 \\ & & & & makhábasó & `one lady' \end{array}$$

On the other hand, Sim's rules R 16 and R 17 transform ch + t to *ss* and ch + n to *nn* directly, without intermediate steps, without reflecting how and why this happens and how far these rules can be generalized. [End of page 13]

Schlee's rules 3 and 4 are implicit in his rule 6, since they provide the environment in which epenthetic *i* occurs. Therefore this rule alone suffices to produce the whole paradigm of the causative verbs with *ch* instead of *ich* in the first person.

^{13.} cf. fn 12.

(Schlee) R6 ch +
$$\begin{cases} t \\ n \\ 11 \end{cases} \rightarrow \emptyset + i \begin{cases} s \\ n \end{cases} / Cons$$

or, if we want to keep the geminates:

R6' Cons ch +
$$\begin{cases} t \\ n \end{cases} \rightarrow \text{Cons i } \begin{cases} s+s \\ n+n \end{cases}$$

This rule produces:

The rules Sim applies here, his rules R 16 and R 17, produce wrong results if applied to the non-causative verb *khuche*, the whole paradigm of which is rendered above.

$$\begin{array}{cccc} R & 6 \\ khuch + ta & \rightarrow & *khussa & \text{instead of } khuchissa \\ R & 17 \\ khuch + na & \rightarrow & *khunna & \text{instead of } khuchinna \\ R & 16 \\ khuch + tan & \rightarrow & *khussan & \text{instead of } khuchissan \end{array}$$

To avoid these wrong results, Sim would have to specify that the *ch* meant in his two rules is the causative *ch* only.

The status of the i in question can further be elucidated by examining its occurrence in imperative and infinitive forms. It does occur in the imperative singular

unless we find it also in the first person like in [end of page 14]

g <u>ó</u> ll <u>o</u> licha!	'feed!' (pl.)
g <u>ó</u> ll <u>o</u> licha	'I feed'

Verbal nouns are

k<u>a</u>rinán 'cooking' k<u>a</u>ris

One might therefore say that *i* alone marks the imperative singular as belonging to a causative verb and insofar is a causative marker. We remember, however, that one of our non-causative verbs which are phonetically similar, also has its imperative singular ending in *-i*, namely:

khuchi! 'hold!'

Apart from this, even if \underline{i} were the causative marker of the imperative, this does not logically imply that any *i* we might find in personal construction are to be considered the same. There are other imperatives with vowel endings like those of autobenefactive verbs, e.g.

daakho!	'breed!'	(daakhda – I breed)
sinso!	'blow your nose'	(sinsada – I blow my nose)

Nobody would here postulate that *o* has to be related to *da*. The relationship is clearly paradigmatic and possibly the same can be said about the *i*-s in

	yuubi!	'take care!'
and	yuubicha	'I take care'

they might just be two sound of the same kind but of different functions and origins.

The matter is further obscured by final *i* and *ch* being free alternations in some Rendille words:

k <u>a</u> ld <u>a</u> i	k <u>a</u> ld <u>a</u> ch	'alone'
M <u>a</u> lk <u>a</u> i	M <u>a</u> lk <u>a</u> ch	(personal and place name)
nt <u>a</u> l'd <u>a</u> i	nt <u>a</u> l'd <u>a</u> ch	'marabou stork'

At this point a historical process might set in, transforming ch to y which in word final position is indistinguishable from i. This leads us to inter-language comparison (cf. below, part 2) where we might find the clarity we have missed in Rendille.

We may therefore conclude from part 1 of this paper (the internal analysis) that on the ground of Rendille alone – without including the comparative perspective – we tend to regard the \underline{i} in question as epenthetic but have no stringent proof for it. [end of page 15]

The contrary assumption is tempting, because if we assume that the <u>i</u> in <u>karissa</u> etc. is not an epenthetic vowel but a paradigmatic equivalent of <u>ch</u> (i.e. a representation of the causative element itself) we can slightly simplify our set of rules. A modification of rule 6 (Schlee) which we call R 6b (Schuh¹⁴) could simply make an <u>i</u> out of a <u>ch</u>. Together with our rule 3 and a modified version of rule 4 (to be called 4a) we can then satisfactorily explain all phenomena at the morpheme boundary between the causative element and the personal suffix.

R3 (Schlee) t
$$\rightarrow s / \begin{cases} 1 \\ s \\ ch \end{cases} +$$

R 4a (Schuh $\begin{cases} 1 \\ +ch \end{cases} \rightarrow \emptyset / v _ \begin{cases} s \\ n \end{cases}$
R 6b (Schuh) ch $\rightarrow i / C _ + \begin{cases} s \\ n \end{cases}$

We invite the reader to test this set of rules against the above paradigms and restrict ourselves here to two examples to illustrate the order in which these rules have to be applied.

14. R.G. Schuh (personal communication)

This set of rules is more economical and elegant than the rules we have postulated above, at least if we limit our attention to causative derivation.¹⁵

Conjectures about the "meaning" of the i might, however, lead us to abandon this elegant solution. R 6b suggests that ch and i are two different realizations of the causative element while other processes in the same languages (the non-causative verbs quoted above) render it likely that i is an epenthetic vowel (cf. above, rule 6a). We have collected arguments for both views and postpone our judgement until the inter-language comparative perspective (part 2) has been discussed.

The *i* which precedes the causative element (or, in Sim's view, forms part of it) can clearly be seen not to be a paradigmatic equivalent of *ch*, because it co-occurs with *ch* in the syntagmatic chain, forming *-ich*-, like in *yaakhicha* 'I tend'. As I somehow feel that the *i* in *yaakhissa* (from *yaakhicha*) and the *i* in *karissa* (from *karcha*) are the same thing (although there is no logical constraint to accept this), this consideration also speaks against the "philosophy" behind R 6b.

Since the rules we have quoted or set up in the course of this part of our paper were either of a "historical" shape (reflecting the time level of 1978 in Schlee's case) or have been continuously re-written under varying assumptions and premises, the reader might ask for a summary of what we now think to be the optimal analysis of the Rendille causative.

Under the assumption that i is a representation of the causative element, I would suggest the combination of Schuh's and Schlee's rules 3, 4a and 6b which we have just discussed, as such an optimal model.

Under the alternative assumption that the i is epenthetic, I would proceed in the following way:

R 3a (Schlee) accounts for the spirantization of the initial t of certain personal suffixes in causative and non-causative verbs.

^{15.} Like Schlee's rules (1978) this set produces simple consonants where we might prefer geminates. We have said above that the empirical aspect of this question is difficult to decide.

R 3a (Schlee) t
$$\rightarrow$$
 s $\left| \begin{cases} 1\\s\\ch\\(j) \end{cases} \right|^{+}$ [end of page 17]

We thus get:

$$*k\underline{a}r + ch + te \rightarrow *k\underline{a}r + ch + se$$

$$*goo + ch + te \rightarrow *goo + ch + se$$

We now have to account for the emergence of epenthetic \underline{i} , as did our rules 6, 6', 6a, while 6b adhered to a different belief. We formulate a generalized \underline{i} -epenthesis rule 6c which makes 6, 6' and 6b obsolete.

R 6c (Schlee)
$$\varnothing \rightarrow i / \begin{cases} ch \\ (j) \\ c + _ ch + C \end{cases}$$

This rule looks as if it accounted for two different processes, but the verbal paraphrase might show that, in reality, these two processes are only one: *i*-epenthesis occurs at the morpheme boundary between stem final consonant and the first suffix before ch or after ch or, in some cases, *j* if the personal suffix starts with a consonant.

In both cases, in the top and in the bottom line of R 6c, it is the neighbourhood of ch or j and the consonant of the personal suffix which jointly necessitate the *i*-epenthesis and in both cases this epenthesis occurs at the morpheme boundary immediately following the stem. (It is perfectly normal that the epenthetic vowel produced by a palatal consonant is *i*.)

If we restrict ourselves to the causative, we only need the bottom line:

We now proceed with the regressive assimilation (the only difference to Schlee (1978) is that we produce gemination instead of cross-boundary delection): [end of page 18]

R 4b (Schlee)
$$\begin{cases} 1\\ ch \end{cases} \rightarrow s / _ s$$

R 1a (Schlee) $\begin{cases} d\\ t\\ 1\\ ch\\ m \end{cases} \rightarrow n _ n$

We thus get:

$k\underline{a}r + ich + se \rightarrow$	k <u>a</u> risse	'you cooked'
$*goo + ch + se \rightarrow$	goosse	'you cut'
$k\underline{a}r + ich + ne \rightarrow$	k <u>a</u> rinne	'we cooked'
$*goo + ch + ne \rightarrow$	goonne	'we cut'

We now have to do one of two things: We either have to specify that these rules have to be applied in the order we have applied them now, or we have to specify that the *ch* in rules 4b and 1a is +(i)ch. Otherwise these rules would produce ungrammatical results in the case of stem final *ch* like in *khuche* 'I held', as we have demonstrated above. With either of the two specifications, however, this set of rules explains all phenomena concerning causative and subsequent suffixes and, being generally applicable, many other phenomena.

There are phenomena to the left of +ch for which neither Schlee (1978) nor Sim (1981) account and which do not affect these rules. We reserve these phenomena for part 3. Before that, in part 2, we want to look in neighbouring languages for evidence about the nature of the *i* in question. [End of page 19]

2. The causative in inter-language comparative perspective

Above, we found some alternation in Rendille between $i \sim y$ and ch and suspected that an historical process may have started there transforming ch to y. In Somali, we indeed have y in many contexts where we have ch in Rendille, including causative derivations.¹⁶

Rendille	<u>Somali</u>	<u>English</u>
w <u>e</u> n	weyn	big
a-wéinata	wùu weynáanayya	he's becoming big
a-wéinacha ↑	wùu weynáynayya ↑	he's enlarging

In the past tense, however, in certain verbs we find forms which mark the causative by *sh* $[\int]$ and others with *iyy* as free variants:

a-ráaha	wuu ráa'cayya	He follows, accompanies
a-ráahche ↑	wùu ráa'ciyyey ↑	he caused to follow
	~ ráa'shey ↑	

A whole paradigm might illustrate the matter more clearly:

a-gáabiche	wàan gáabiyyey ~ gáabshey	I shortened
a-gáabisse	wàad gáabisey	you shortened
a-gáabiche	wùu gáabiyyey ~ gaabshey	he shortened
a-gáabisse	wàay gáabisey	she shortened
a-gáabinne	wàaynnu gaabinney	we shortened
a-gáabissen	wàaydin gaabisseenn´	you (pl.) shortened
a-gáabichen	wàay gaabiyyeenn´ gaabsheenn´	they shortened

^{16.} The Somali examples are taken from Abraham's dictionary.

We thus find that ch in Rendille can be represented by y, iyy, or sh in Somali.

In a wider framework, Plazikowski-Brauner obtains a similar set of equivalences. Calling the causative element *s gemeinkuschitisch* (p. 137), she discusses conditions under which it becomes *ch* in Galla. (We shall have a closer look at Oromo below.) She finds [end of page 20] -*i* and -*si* in Somali, *ch* and *z* in different Agaw dialects, *k*, *s*, *sh*, *z*, *y* in Shinasha¹⁷ etc. She also discusses sporadically how such forms derive from each other. (1959:134 ff)

If indeed we should find out that all these causative elements have developed from only one proto form, this has an implication for our question whether the *i* in Rendille -ich- is epenthetic or belongs to the underlying causative morpheme. If the causative morpheme of a proto language in one historical development becomes a *ch* and in another development becomes *i* we should expect the distribution of the two shapes to be complementary; in other words: we should expect one of them at a time and not both syntagmatically combined in one morpheme.

Sasse, limiting himself to Eastern Cushitic, postulates the following chains of development of Proto-East-Cushitic (PEC) consonants to their modern reflexes (we omit the conditions under which we find one or the other of these reflexes):

$$*k \rightarrow k^{y} \rightarrow t^{y} \rightarrow ch \rightarrow sh \rightarrow s$$

Apart from this series which starts with the palatalization of *k, Sasse postulates another sequence going out from the palatalization of *t:

$$*t \rightarrow t^{y} \rightarrow ch \rightarrow sh \rightarrow s$$

Shorter chains, with the same direction of development, start with PEC *sh, and *s:

$$sh \rightarrow s$$

 $s \rightarrow f$

In Oromo, these chains can be expanded since any \underline{s} under certain conditions can become \underline{f} which, in its turn, can also have other reflexes:

$$s \rightarrow f \rightarrow b \rightarrow m$$

The Somali y, too, finds its place here. It is said to be derived from sh. (Sasse, 1975:251ff).

^{17.} According to Fleming in Bender (1976:365) a Gonga language spoken in the Blue Nile Valley, i.e. an Omotic language.

The intermediate steps in these chains show, I think, that the monogenetic origin of all suffixed causative elements found by Plazikowski-Brauner indeed is phonetically plausible and that the initial puzzlement at finding a k and an f or a s and an m in similar positions can be overcome. [End of page 21]

Certain fragments of these derivation chains are relevant to the discussion of the causative in Northern Somali/Boni, Jiddu, Rendille, Galla, Konso and Gidole which we find in Sasse (1979:32). For reasons of convenience and because the other languages reflect the same processes, we here limit ourselves to Somali, Rendille and Oromo (Sasse's 'Galla').

While we have tried above to explain our causative paradigm by synchronic morphophonemic rules, Sasse relegates his explanation to an earlier level of time. He assumes that a rule like

$$sh \rightarrow s/_C$$

was already at work in Proto-East-Cushitic. This rule produced the PEC paradigm of causative endings to the left, from which, in different historical processes, the Somali, Rendille and Oromo paradigms derived.¹⁸

	PEC	N. Somali/Boni		Rendille		Oromo	
1st pers	sha	ya	$[*sh \rightarrow y]$	cha	$[*sh \rightarrow ch]$	sa	$[*sh \rightarrow s]$
2nd	sta	sa	$[*st \rightarrow s]$	sa	$[*st \rightarrow s]$	fta	$[*st \rightarrow ft]$
3rd m	sha	ya	[like 1st]	cha	[like 1st]	sa	[like 1st]
3rd f	sta	sa	[like 2nd]	sa	[like 2nd]	fta	[like 2nd]
1st pl.	sna	na	$[*sn \rightarrow n]$	na	$[*sn \rightarrow n]$	fna	$[*sn \rightarrow fn]$
2nd pl.	stana	san	[like 2nd]	san	[like 2nd]	ftani	[like 2nd]
3rd pl.	shana	yan	[like 1st]	chan	[like 1st]	sani	[like 1st]

In the *ch* of Rednille, which he also thinks to be present in an earlier stage of Somali, Sasse sees "a merger of the reflexes of palatalized k and those relics of PEC š that had not become *s*". (1979:13)

^{18.} We here closely follow Sasse's line of argumentation. The orthography, however, is adjusted to the present paper and the brackets are ours.

Since Sasse is only interested in consonantal processes here it would be unfair to blame him for not taking into account the presence or absence of i to the left of his Rendille set of causative endings. Allowing for this, Sasse's analysis is stimulating (or depressing) in so far as it suggests the question whether the inclusion of the diachronical perspective might not offer so simple explanations that the intricate synchronical morphophonemic exercises of part on of this paper appear as futile as shadow boxing. [End of page 22]

Sasse's analysis, however, is not beyond doubt since he implicitly postulates $*sn \rightarrow n$ and this simplification rule cannot be shown to be of general application since Rendille forms like *nasna* 'we rest' and *disna* 'we build' should then also have been simplified. As Sasse (1979:61, 63) lists both verbs¹⁹ in his Proto-Cushitic vocabulary, they must have been a part of the language at the time such a historical process occurred and can not have remained exempt from it. Also R: *tusna* 'we show', *ruusna* 'we become fat', *gisna* 'we share', *kasna* 'we notice', *wasna* 'we copulate' belong here but are less suitable as proofs of internal contradictions in Sasse's analysis since Sasse does not list them in his PEC vocabulary. (At least *tusna*, *kasna* and *wasna* could be traced back some distance since they have cognates in Somali.)

We shall see below that Sasse's Galla (Oromo) paradigm represents only one of many possibilities. (Sasse is aware of this and gives other forms elsewhere.)

While Sasse simplifies **sta* to *sa* in Rendille, Somali and Boni (in the 2nd pers. sing. & pl. and the 3rd f.) and thus assumes an \underline{s} in the proto form, Zaborski, following Tucker, in Aweera (Boni) assumes *y* in the underlying form. The verb 'to cook' (familiar to us from Rendille, cf. the first paradigm above) is conjugated and explained thus (1975:81):

Sing.	1.	karia	
	2.	karesa	(< *karey-ta)
	3.m.	karia	
	3.f.	karesa	(< *karey-ta)
Plur.	1.	karena	
	2.	karese	(< *karey-ten)

^{19.} Sasse, however, seems to confuse the roots for 'rest' and 'breathe' which I believe to be distinct.

3. karii

Heine (1982:42) gives the same paradigm, possibly in another Boni dialect, in a shape which makes it more obvious that the i of *karia* represents the y, whatever may be the more accurate surface form.

Sing.	1.	á-kar-iy-a
	2.	á-kar-as-sa
	3.m.	á-kar-iy-a
	3.f.	á-kar-as-sa

[End of page 23]

Plur.	1.	á-kar-an-na
	2.	á-kar-is-si
	3.	á-kar-ii

(\dot{a} is a focus marker.) To assume they y which corresponds to Rendille ch) as underlying and to explain the s by assimilation between y and t (ch and t in Rendille) reflect the same spirit as our own analysis of the Rendille causative (cf. above).

While in the 1st and 3rd person m. the difference between *i* and *iy* seem to be so slight that we get different spellings by different authors, in the final position one only hears (and writes), *i*, whatever the underlying form. Although I could nowhere find the imperative singular of Boni: kar-iy-, we can conclude by a safe analogy to other Boni verbs that it is kari! - cook!, like in Rendille and Somali.

	1st pers. perf.	imperative sing.	
Boni	kariye	kari!	'cook!'
Somali	kariyey	kari!	'cook!'
Rendille	k <u>a</u> rche	k <u>a</u> ri!	'cook!'
.د	gese	gei!	'put in!'

Boran	galce	galc!	'drive home!'
(Oromo)			
Rendille	m <u>a</u> rche	m <u>a</u> ri!	'make turn!'

The general rule for the imperative singular is that it is formed by omitting the personal suffix (here: -ey in Somali and -e in the other languages) from the 1st pers. singular. We thus find that the imperative ends in whichever consonant precedes the personal ending in finite forms. This also applies to basic verbs (but not to autobenefactive verbs) in Rendille and Somali, e.g.

R:	tuse	'I showed'	tus!	'show!'
S:	furey	'I opened'	fur!	'open'!

In Boran causatives (cf. the above list) we find that the imperative is indeed formed in this way. The consonant which is left as final after the removal of the personal ending happens to be the causative element represented by c or s. In the imperatives of Boni, Rendille and Somali causative verbs, on the other hand, we find i instead of the consonantal elements we should expect. My solution to this apparent contradiction is that it is this very i which is or represents the palatal consonant, being phonetically akin and structurally equivalent to it: $c \sim y \sim i$. [End of page 24]

This would mean that the *i* in kari! 'cook!' is a completely different thing from the *i* in karissa 'you cook', the latter being epenthetic and between the stem and the causative element while the former is the causative element itself, and thus represents the first *s*, if anything, and not the *i* of karissa.

Whether the *i* of personal causative constructions actually is epenthetic or not, might become clearer from an analysis of the causative in Oromo.

The causative in Oromo

The most complete and consistent analysis of the causative in Oromo I could find so far is in Moreno (1939:91–95)²⁰. Much of the later literature falls back behind Moreno. I here briefly

^{20.} When I read this paper at Tübingen, Owen's analysis (1985, 1985a) had not appeared. As Owens (1985:22, 63) confirms the epenthetic nature of the <u>i</u> in question, there was no need to change my basic line of argument after reading his work. I shall refer to him in occasional footnotes.

summarize his analysis, giving Moreno's rules and examples with minor modifications, namely formalizing and numbering the former and modernizing the orthography of the latter.

The causative morpheme is -s-. The cases where -s- appears on the surface can be summarized thus:



At the morpheme boundary the "usual modifications" take place (*le solite modificazioni fonetiche*):

1.)	V	\rightarrow	$V / _+ s$	(vowel lengthening)
2.)	'	\rightarrow	Ø / _ + s	(elision of glottal stop)
3.)	S	\rightarrow	$f \rightarrow b / _+s$	(starting point irrelevant, both stages optional)

Moreno gives the following (and many other) examples, all infinitives:

ad 1)	báu	'go out'	baasu	'make s.b. go out'
ad 2)	bú'u	ʻgo down'	buusu	'make s.b. go down, pour s.th.'
ad 3)	chisu ²¹	ʻlie'	chifsu ~ chibsu	'to put down'

[End of page 25]

After *l*, *s* is replaced by *c*:

4) s \rightarrow c/1+_ ad 4) bulu 'spend the bulcu 'to accommodate s.b. for the night' (\leftarrow *bul+su) "ight'

-ay and -aw at the end of the stem change to ee.

^{21.} *ch* stands for the emphatic sound as distinct from *c*.

5)
$$-ay \\ -aw \\ s \\ ee/_+$$

ad 5) $gau (\leftarrow *gay)$ 'reach' $geesu$ 'make s.b. reach'

After roots ending in geminate consonants, "the usual euphonic \underline{i} is introduced" (*I temi in doppia consonante introducono dinanzi a –s il solito i euphonico*). Moreno thus postulates for Galla an epenthetic \underline{i} in the same place as Schlee (1978) does for Rendille.

6)
$$\emptyset \rightarrow i / -C_x C_x + s$$

(The co-incidence that in numbering Moreno's rules we have arrived at the same number as Schlee (1978) has with his equivalent rule for Rendille, does not make it less necessary to distinguish in the following between R6 (Moreno) and R6 (Schlee).)

R6 (Moreno) reflects the spirit of his more general statement "Un grupo di tre consonanti è evitato mediante l'introduzione di un' i eufonica. Es. erg-i-na noi mandiamo per *érg-na," (1939:21) under the heading epentesi. It is also in harmony with what Sim and Schlee found in Rendille. (Cf. Sim's 2 C constraint (1981:6ff) and Schlee's rules 6 and 7 (1978:37)²²

ad 6)
$$rakk-$$

 $d'ipp'^{23}$ be afraid' $rakk-is-u$ 'frighten' 'frighten'

In addition, or exclusively, many verbs have a double causative -s-is-. [End of page 26]

d'ugu 'drink' $d'ugsu \sim d'ugsisu$ 'make s.b. drink'²⁴

In accordance with Moreno's rule 4, roots ending in -l form the double causative as -c-is-.

galu 'enter' galcu ~ galcisu 'make s.b. enter'

^{22.} Owen (1985:22) states, in agreement with this: CCC → CCiC, if C₂ is not /l, r/. If it is, then: CSC → CaSC (S = l, r), example: *k'ofl+siis* → *k'ofalciis* 'make someone laugh' (p. 21).

^{23.} *d*' stands for the postalveolar retroflexive as opposed to the addental Stopp *d*.

^{24.} Many examples are added here by Moreno, one of them, I think, wrongly. I do not agree to his etymology of *ajesu* (or rather *ijjesu*) (p.93) 'kill' and believe that Moreno's subsequent (p. 95) difficulties to treat this verb as a causative result from this confusion.

Roots ending in <u>t</u>, <u>t</u>'²⁵, <u>d</u> and <u>d</u>' do not form a simple but only a double causative, which takes the shape - ccis- ($\leftarrow *tsis$ -, *t'sis, *dsis, *d'sis). This phenomenon is covered by one of Moreno's rules on p. 29:

$$\begin{array}{ccc} 7) & t \\ & t' \\ & d \\ d' \end{array} \right\} + s \rightarrow cc$$

8)

ad 7) gatu 'throw away' gaccisu 'make s.b. throw away'

To generate the finitive forms, Moreno again takes recourse to his "euphonic" i.

$$\emptyset \rightarrow i / \begin{cases} C \begin{cases} s \\ c \end{cases} \\ \\ \\ \\ ee-s \end{cases} - + \begin{cases} t \\ n \end{cases}$$

ad 8)
$$*cab + s + ta \rightarrow cabsita$$
 'you break'
 $*cab + s + na \rightarrow cabsina$ 'we break'
 $*tol + s + ta \rightarrow tolcita$ 'you make (to be alright)'
 $*gee + s + na \rightarrow geesina$ 'we take, make reach'

s and *f* alternate on the surface in the following way (we here slightly deviate from Moreno's explanation, which seems unnecessarily complicated)²⁶: [End of page 27]

9) s
$$\rightarrow$$
 f / V_(-ee) $\begin{cases} t \\ n \end{cases}$
*baas + ta \rightarrow *baafta 'you take out, make s.b. go out'

**deebis* + *na* \rightarrow *deebifna* 'we return s.th, make s.b. return'

25. emphatic

ad 9)

^{26.} In the Harar dialect of Oromo described by Owens (1985, 1986) this alternation is only optional (1985:63)

*argis + is + t	\rightarrow	argisifta	'you show'
*nyaaccis + na	\rightarrow	nyaaccifna	'we make s.b. eat'

The structural similarities to Rendille, where it is also the personal suffixes with an initial \underline{t} or \underline{n} which effect such changes, is obvious if we compare a whole paradigm. (We here leave Moreno and proceed with our own examples, unless otherwise specified.)

Rendille	Boran	<u>English</u>
b <u>a</u> hcha	baasa	I take out
b <u>e</u> hissa ~ b <u>i</u> hissa ²⁷	baafta	you take out
b <u>a</u> hcha	baasa	he takes out
b <u>e</u> hissa ~ bihissa	baafti	she takes out
b <u>e</u> hinna ~ bihinna	baafna	we take out
b <u>e</u> hissan ~ bihissan	baaftani	you (pl.) take out
b <u>a</u> hchan	baasani	they take out

The parallelism of the occurrence of the epenthetic *i* is illustrated by another example:

<u>Rendille</u>	Boran	<u>English</u>
j <u>e</u> bcha	chabsa	I break
j <u>e</u> bissa	chabsita	you break
j <u>e</u> bcha	chabsa	he breaks
j <u>e</u> bissa	chabsiti	she breaks
j <u>e</u> binna	chabsinna	we break
j <u>e</u> bissan	chabsitani	you (pl.) break
j <u>e</u> bchan	chabsani	they break

[End of page 28]

^{27.} Harmonic processes as the one affection the vowel of the stem here, /a/ to /e/ or even /i/ under the influence of /i/ (but keeping the feature –ATR!), are partly, but not satisfactorily, discussed by Schlee (1978:30). Sim (1981) and Heine (all relevant publications) grossly simplify the vowel system of Rendille and do not discuss harmony at all. For the future, much remains to be said about Rendille phonetics, phonemics, and morphophonemics which cannot be covered in the framework of this paper. In a number of points also Schlee (1978) needs revision.

Another analysis of the Oromo causative diverges strongly from Moreno (and thus also from the emerging overall Eastern Lowland Cushitic pattern). This is Heine's description of the causative in Korokoro (1980:159f). Since the dialectal differences between Korokoro and other southern Oromo dialects are negligible these divergences cannot be explained away as a difference *in re*.

While Moreno postulates a simple *s* as the underlying causative marker and generates other forms by morphophonemic changes of this element and additions by epenthesis, Heine goes the other way round. He postulates the highly complex *-*siibs* as the underlying form and generates the surface forms by deletion rules, (1) deleting *b* before *s*, and (2) *s* preceding *t*. He also specifies that "these rules are ordered – applying rule (2) before rule (1) would generate ungrammatical forms." (p. 159) If we proceed as Heine tells us to do, however, we obtain forms which are different from Heine's; we get

$$(1)$$
*há fayyi-ssibs-t^e \rightarrow *há fayyi-siis-t^e

$$(2)$$
*há fayyi-siis-t^e \rightarrow *há fayyi-sii-t^e

The resulting form is ungrammatical. Heine, mysteriously, gets the correct form *há fayyisibte* 'you have cured'. The solution of the riddle is that the two rules have to be applied in inverse order: (2) before (1). We shall then obtain the paradigm Heine gives on p. 160. We would only need to write f instead of b to obtain the equivalent Boran forms.

Assuming that our correction corresponds to Heine's intention, we nevertheless hesitate to adopt this model for three reasons:

It does not cover the many common Oromo causative verbs of other types which Heine quotes in his glossary without recognizing them as causatives or discussing them as such in his grammatical sketch (e.g. break, to -c'abs, extinguish, to -d'aams, mould, to -mi'daas, pay, to -baas, pour, to -buus (Heine 1980:164ff) to quote but a few common ones).

2. The principle of postulating overly lengthy and complicate underlying forms (or diachronically spoken: proto-forms) and deriving surface forms (diachronically spoken: recent forms) by deletion, leads us, wrongly I think, to viewing the language of the underlying

structure (diachronically spoken: of earlier stages of development) as clumsy and complicate. [End of page 29]

3. Heine's model is unique. No parallels can be found in related languages.

Therefore, we see no reason to abandon Moreno's (1939) model in favour of Heine's (1980).²⁸

To summarize our findings about the Oromo causative we can say that the causative morpheme is s which also surfaces as ch and f and occurs single or doubled. i-s which we find at the morpheme boundaries to the left or to the right of the causative element emerge by epenthesis (Moreno's rule 6 generates the one to the left and his rule 8 the one to the right.)

More about the Oromo causative will be seen from the comparative list of Rendille and Boran causatives in an appendix to this paper.

* * *

We may conclude part 2 of this essay with the question what the comparative perspective adds to our analysis of the Rendille causative. Numerous parallels of construction have, I think, shown that indeed the i of personal constructions is epenthetic, like in Boran, while the causative element is represented by c, which in certain environments changes to s and in word final position (imperative singular) to i. Structurally we thus have two different i-s: one being epenthetic and the other representing the underlying causative element c.

4. Derivational elements to the left of the causative morpheme

In passing we criticised above, in part one, that Sim classifies any vowels other than *i* which he finds to the left of the causative *ch* as root final vowels without isolating the root and actually showing that the vowels in question belong to it. We there quoted two causatives derived from adjectives where such vowels obviously do not belong to the root, namely:

suuj 'bad' suuj-a-che 'I spoiled' fut<u>e</u>t 'easy' fut<u>e</u>t-na-che 'I eased'

[End of page 30]

^{28.} In passing we notice that Heine does not worry about the *i* of *fayyi*- (← *fayy +) which, as the reader will have noticed, is the bone of contention in the present debate. He does not recognize his causatives as double since he does not recognize any simple causatives either.

By lumping the -a- and the -na- of these verbal forms and similar elements of other verbs together with the root, Sim circumvents the discussion of a whole class of phenomena. This third part of our essay shall be dedicated to these phenomena: any elements, other than epenthetic *i* which has been discussed already, which we may find between the stem and the causative morpheme.

To explain whether or not such elements are introduced here and which and why, we have to introduce word classes into our analysis.

<u>Verbs</u>

In causatives which are derived from basic verbs, the causative element either directly follows the stem or is separated from it by *i*, according to what has been said above in part 1.

Causatives, however, can also be derived from derived verbs, like autobenefactive extensions:

noun:	sugúb	'thirst'
autobenefactive verb:	súbgada ²⁹	'I become thirsty'
causative:	súbgacha	'I make s.b. thirsty'
autobenefactive:	s <u>á</u> mada	'I recover'
causative:	s <u>á</u> macha	'I heal'

Unlike in Boran (cf. below, appendix), the derivation of causatives from autobenefactives is not a usual procedure in Rendille and is only carried out if no corresponding basic verb exists. From such examples we can generalize that the vowel which precedes the +da in the autobenefactive derivation is maintained in the causative where it precedes the +cha.³⁰ [End of page 31]

^{29.} Sim (1981:9f) discusses metathesis at some length, but does not account for this case $(gb \rightarrow bg)$. Examples which contradict Sim's rules, either by showing that things he declares "non permissible" indeed happen or "permissible" clusters are avoided, can easily be multiplied. His categorization of consonants on which his metathesis rule rests, also needs revision. Rendille *r* is not an approximant, like the American *r*, but an iterative alveolar plosive like in Spanish.

^{30.} While in Boran (cf. below, appendix) we have causative[s] of autobenefactives (generalized meaning: I cause s.b. to do s.th. with repercussions on himself) **and** autobenefactives of causatives (generalized meaning: I cause s.th. to my own benefit), only the former type can be found in Rendille.

The autobenefactive, apart from other uses, also serves for de-nominal or de-adjectival derivation. It is not, however, the only shape a verb with a noun or adjective equivalent might take. The same function can be filled by basic verbs:

noun/adj.:	'd <u>ála</u> m	'fool, foolish'
basic verb:	'd <u>á</u> lma	'I become a fool'
causative:	'd <u>á</u> lmicha	'I confuse (s.b.) to the point of his losing his judgement'

In this case, it is hard to decide whether the adjective is derived from the verb or the verb from the adjective since both are of an equally simple shape and none of them shows any derivational affixes. The causative here is assumed to be derived from the basic verb in the already familiar way, so that we do not need to elaborate on such cases.

Still another way of de-adjectival or de-nominal derivation is represented by the verbs in – *awa*, –*auta*. These correspond to Andrzejewski's root extension class OOB (1 B) in Somali: "To become or turn into what is denoted by the corresponding nominal." (1968:5)

noun/adj.:	aarrári	'old'	
de-adjectival verb:	áararowa	'I become old'	
causative:	áararoucha	'I let (s.b.) become old'	
noun/adj.:	bulach	'slightly sour milk that has stayed c. one day and is no longer fresh and not yet sour'	
haanu búlachnowen	'the milk has become slightly sour'		
haanu búlacnouche	'I allowed the milk to become slightly sour'		
éisim	'remainder, rest'		
éisimowa	'(s.th) becomes a mere leftover, is partly eaten'		
éisimoucha	'I eat a bit (of the food) here and there so that it all becomes (unappetizing like) leftovers'		
1 6 201			

[End of page 32]

We see that the intervocalic *w* appears as u (or: $u \sim w$) if followed by a consonant. *ou* or *au* to the left of the causative element can always be traced back to this type of derivation.

With this, we leave the field of verbs and proceed to causatives which are directly derived from nouns or adjectives, without verbal links.

Nouns

Causative derivation from nouns works just like the derivation from verbal roots: monosyllabic nouns with a short vowel take *-ch*, those with a long vowel and polysyllabic words *-ich*:

<i>ur</i> (f)	'smell (n)'
urcha	'I smell'
<i>uum</i> (m,f,)	'smoke'
uumicha	'I expose (s.th.) to smoke'
foor (m)	'satellite camp'
fooricha	'I herd (animals) in the satellite camp'
amur (ex Arab.)	'order, command'
amuricha	'I give orders'
ham <u>a</u> d	ʻjoy'
ham <u>a</u> dicha	'I let (s.b.) rejoice'
nebei	'peace'
(isi-) <i>neibicha</i> (metathesis!)	'I make peace (between them)'

Adjectives

Following Oomen's ingenious analysis (1978:44) we have to distinguish two classes of adjectives, the pseudonominal adjectives and the pseudoverbal ones. The former, in predicatives position, follow the copula a and are negated by the suffix *-me*, just like nouns.

The latter, in addition to the copula a^{31} take the suffixed prefix conjugation verb -<u>*ehe*</u>, -*t<u>ehe</u>*, *y<u>ehe</u> 'to be' and form the negative by the <i>ma*-prefix, just like verbs. [End of page 33]

Pseudonominal adjectives

adjectival predicate:	<i>a buur</i> ³²	'it is big'
negation thereof:	buurme	'it is not big'
causative:	buuracha	'I make it big'
suuj	'bad'	
suujacha	'I spoil'	
y <u>e</u> r	'small'	
y <u>e</u> ryeracha	'I reduce, make si	mall'
y <u>e</u> r	'different'	
y <u>e</u> racha	'I isolate, separate	e, make different'
chini	'sweet, tasteful'	
chinacha	'I sweeten'	
kul <u>e</u> l	'hot'	
kululacha	'I heat'	
uskulo	'evil, unpropitiou	s'
uskulacha	'I spoil'	

The clear pattern emerges that these causative verbs are formed by adding *-acha* to the adjective. In those cases where we can find corresponding autobenefactive verbs like

buurada 'I become big'

the replacement of the autobenefactive ending by the causative ending leads to the same result (cf. above).

There are, however, some rare adjectives which keep other final vowels than \underline{a} when incorporated into causative verbs:

^{31.} *a* largely corresponds to Somali *waa* and in a verbal context can also be interpreted as a focus marker with complementary distribution to -*e* in the governing noun (cf. Oomen 1978).

^{32.} In Somali, this word means 'hill' and is a full noun.

khobo	'cold'
khobocha	'I cool'

Yet others take *-na*- like numerals

séiy <u>a</u> h	'three'
séiy <u>a</u> hnacha	'I triplicate'
uyúg	'smelling nicely'
uyúgnacha	'I perfumate'

We shall discuss this type of derivation below in connection with numerals. [End of page 34]

Pseudoverbal adjectives

adjectival predicate:	a kh <u>a</u> n <u>a</u> n <u>e</u> h <u>e</u>	'I am sick'
negation thereof:	makh <u>a</u> n <u>a</u> n	'I am not sick'
causative:	kh <u>a</u> nicha	'I make s.b. sick'
háagan	'good beautiful'	
háagicha	'I make good, re	pair'
w <u>e</u> n	'great'	
wéinacha	'I exaggerate', 'e	enlarge'
bísan	'well done, cook	ted'
bísacha	'I make well dor	ne, cook'
gudúdan	'red'	
gudúdicha	'I paint red'	
d <u>á</u> rgan	'satiated'	
d <u>á</u> rgicha	'I satiate'	
dow	'near'	
dówacha	'I approximate'	
gaaban	'short'	

gaabicha	'I shorten'
néiban	'awake'
néibacha	'I wake (s.b.) up'
nool	'entire, alive'
noolacha	'I revive'
b <u>á</u> ll <u>a</u> dan	'wide'
b <u>á</u> ll <u>a</u> dicha	'I widen'
súbgan	'thirsty'
súbgacha	'I make thirsty'
nugúl	'small'
núgulacha	'I make small'

At some of these causatives we can also arrive by other means, e.g. by direct derivation from nouns

haag(m) 'beauty'

or by derivation from autobenefactive verbs

weinada 'I grow, become old'

The regularities we have noted above hold true. There is, however, another aspect which might serve as a parallel explanation. If we list all vowel sequences of causative verbs in the above list (i.e. a-i, ei-a, i-a etc. starting from the top listing the penultimate and the ultimate vowel to the left of the causative element) and symbolize them by one arrow each, we obtain the following distribution: [end of page 35]



This diagram³³ helps us to recognize the following pattern which is one of mutual attraction of contrasts: The lowest vowel is followed by the highest front vowel while the high and middle vowel are followed by the lowest. In one case u is followed by i, i.e. the back-most vowel by the front-most.

Numerals

Rendille numerals exhibit, as Oomen remarks somewhere, much of the behaviour of feminine singular nouns, taking the corresponding verbal and pronominal concords even if used in adjectival position. Since plurality is not expressed twice and is implicit in the numeral (other than "one") already, the noun to which an adjectival numeral refers, is in the singular. That the verbal concord is not governed by semantic plurality or gender but by the grammatical quality of the numeral which is always feminine and singular, can be seen from these two examples

(1) *albe ayimi* 'the girls have come'

(2) *albe afare timi* 'four girls have come' [end of page 36]

In (1), the verbal concord is masculine singular which is normal for a language with number/gender inversion since the noun, a *plurale tantum*, has feminine plural meaning. In (2), the concord is feminine singular because of the numeral.

^{33.} For the sake of simplicity we write a five vowel system because the fact that Rendille has an opposition between a + ATR and a - ATR or a "close" and an "open" series of vowels, whichever name we choose, does not affect this particular matter.

Feminine nouns take genitive suffixes, -*et*, pl. -*et* or -*ot*. (The singulars of pluralic feminines, are, of course, masculine.)

sakássi ín <u>a</u> met	'the apron of the girl'
$(\leftarrow sakal + ti inam + et)$	
gei (m)	'tree'
ge(y)o(f)	'trees'
inti geot	'the place of the trees'

Numerals, being feminine, also take such genitive suffixes (thus forming ordinal numbers). Between the cardinal shape and the suffix, the syllable *-nat-* is inserted. It is this *-na-* which we find again in the causative.

séiy <u>a</u> h	'three'
weili séiy <u>a</u> h-nat- <u>e</u> t	'the child of three' = 'the third child'
séiy <u>a</u> h-nat-cha	'I triplicate'
séiy <u>a</u> hnacha	
séiy <u>a</u> h-nas-sa	'you triplicate'
$(\leftarrow *seiy\underline{a}h+nat+ch+ta)$	
áfar	'four'
koli <u>á</u> farnatet	'the fourth time'
<u>á</u> farnacha	'I take times four, I make it four, quadruplicate'

Similarily:

6:	l <u>i</u> h	7:	t <u>ée</u> ba
	l <u>i</u> hnatet		t <u>ée</u> banatet
	líhnacha		t <u>ée</u> banacha
8:	siyy <u>é</u> t	9:	saagál
	siyy <u>é</u> tnatet siyy <u>é</u> nnatet		saagálnatet
	siy <u>é</u> tnacha, siy <u>é</u> nnacha		saagálnacha

Numerals which end in nasals tend to simplify:

5:	ch <u>a</u> n	10:	tom <u>ó</u> n
	ch <u>á</u> natet		tom <u>ó</u> natet
	ch <u>á</u> nacha		tom <u>ó</u> nacha

[End of page 37]

One might write *channatet* for theoretical reasons but I think that this would do violence to the material. I, at least, do not hear a geminate here.

Two, lámma, forms an exception. I suspect that the nasal of the stem has "swallowed" the na.

2: l<u>á</u>mma l<u>á</u>mmatet l<u>á</u>mmacha

One, kou^{34} , forms the ordinal (= genitive) in the usual way: *kóunatet*. I have, however, never heard the causative **kounacha*, but only the circumlocution

kou ka-(y)éla 'I make it one'.

The syllable *-nat-* or *-na-* (the t is invariably assimilated by following causative element) is, however, not limited to derivation from numerals but can also be found in causatives derived from other adjectives, be it by analogy or for other reasons unknown to us:

fut <u>é</u> t	'easy'
fut <u>é</u> tnacha ~ fut <u>e</u> nnacha	'I ease'
uyúg	'nicely smelling'
uyúgnacha	'I perfumate'
hüsúb	'new'
hüsúbnacha	'I renew'

We can, with our present state of knowledge, not fully predict the occurrence of *-na-*. The Rendille language, therefore, may provide us with some excitement in the future. [End of page 38]

^{34.} *kou* is the isolated (counting) form, the adjectival form is -(k)ó, -tó. This numeral is gender sensitive and does not have a gender of its own.

Appendix

A comparative list of Rendille and Boran causatives³⁵

The lists include basic verbs, or where these are not used, verbs in autobenefactive shape, and the corresponding causative derivations. Autobenefactive extended forms are given instead of the basic verbs where these latter are non-existant or unusual.

Part 1

This first part only includes verbs which by regular, i.e. recurrent sound correspondences between Rendille and Boran are known to be cognates.

Rendille	Boran	<u>English</u>
<u>á</u> nkhada, <u>á</u> nkhata	hanqada, hanqatta	I stay away, abstain from
<u>á</u> nkhicha, <u>á</u> nkhissa	hanqisa, hanqifta	I keep (s.b.) away from (s.th.) hinder, hold at distance
<u>á</u> nkhicha, <u>á</u> nkhissa	hanqisisa, hanqisifta	I make s.b. abstain

N.B. The distinction between simple and double causative is not made in Rendille. Formally, there is only a simple causative and this form, semantically, either covers the whole range of both causative derivations, or the meaning of the double causative is rendered by other means in Rendille.

b <u>a</u> ha, b <u>a</u> hta	baha, bata	I go out
b <u>a</u> hca, b <u>e</u> hissa	basa, bafta	I take out, put out, pay
	basisa, basifta	I make (s.b.) pay

N.B. The meaning of the second causative (B: *basisa*) would be circumscribed as *behi iidah* – "pay! I said" or similarly in Rendille. [End of page 39]

^{35.} For the list, I have made heavy use of Venturino's Boran-Italian dictionary. The responsibility for the spelling is mine, because I have made changes here and there.

búkha, búkhta	buqqaha, buqqati	it falls out, loses hold, is uprooted ³⁶
búkhica, búkhissa	buqqisa, buqqiftam buqqasa	I uproot, pull out
	buqqisifta	I make s.b. uproot

N.B. Again the double causative has no close equivalent in Rendille.

baríya		
baríia, baríita	baria, barita	I spend the night
baríicha, baríissa	barisisa, barisifta	I make (s.b.) spend the night

N.B. The Boran form is a double causative which, however, is semantically equivalent to the Rendille form which, of course, is simple.

b <u>á</u> rra, b <u>á</u> rrta	barad'a, baratta	I get used to
b <u>á</u> rrcha, b <u>á</u> rrissa	barsisa, barsifta	I teach, make (s.b.) get used to

N.B. In the top line we find an autobenefactive verb in Boran and a basic verb in Rendille which nonetheless are semantically equivalent as are the causatives in the bottom line, the Rendille form being simple and the Boran form being double.

bisata	bilcata	[the food] is being well done
bisacha, bisassa	bilcesa, bilcesita	I cook thoroughly
dáaga, dáagta	daga (dagaha), dageta	I hear
dáagica, dáagissa	dagesisa, dagesita	I make (s.b.) hear (s.th.)

N.B. The Boran causative is formally double. [End of page 40]

d <u>é</u> la, d <u>é</u> ssa	d'ala, d'alta	I give birth
d <u>é</u> la, d <u>é</u> ssa	d'alca, d'alcita	I beget
d <u>é</u> lca, d <u>é</u> lissa	d'alcisa, d'alcifta	I make s.b. give birth, deliver

^{36.} In cases where the first and second pers.sing. semantically do not make sense, we quote the verb in the formally similar 3rd m and f. The only difference is between *-ta* (2nd) and *-ti* (3rd f) in Boran.

N.B. The basic verb in Rendille semantically covers also the range of the simple Boran causative, while the Rendille simple causative and the Boran double causative share their meaning.

fóofa, fóofta	bobbaa, bobbeti	(the herd) goes out to pasture
fóofica, fóofissa	bobbasa, bobbafti	I drive (the herd) to pasture

N.B. Rendille *f* and Boran *b* correspond to each other in some rare cases like R: *afar-tena*, B: *abran-ten* 'the four of us' (B: *afur*, R: *afar-*'four'); R: *jirif*, B: *cibre* 'trenses'(B: *cirfa*, R: *jirfa* – 'I plait')

In somes cases, *b* and *f* are interchangeable in Boran; $ofsa \sim obsa$ 'I tolerate'; buba - 'wind', *bubisa* 'to blow (wind)', *bafa* 'bellow', *fufa* 'I blow' (R: *fufa* 'I blow')

There are, however, other, more frequent sound correspondences between Rendille and Boran in the domain of \underline{f} and \underline{b} . These can be summarized thus:

Boran
f
b
f
b

Such a pattern of multiple equivalences points to repeated mutual influences between the two languages at different stages of development.³⁷ [End of page 41]

<u>ge</u> la, <u>ge</u> ssa	gala, galta	I enter, go home
<u>ge</u> cha, <u>ge</u> ssa	galca, galcita	I drive (the herd) home

^{37.} It ist he lack of regularity of sound equivalences which leads Andrzejewski to dispense with a "genetic" relationship altogether and put forward the hypothesis that "The morphological and linguistic similarities between Galla and other members of the Cushitic group may be a result of some kind of intimate and prolonged contact […] It might have consisted of a series of linguistic fusions, divisions and developments upon a series of shifting nomadic substrata, extending over a very long period. […] This applies even more to the relationship between the Cushitic group and the Semito-Hamitic family […]" (Andrzejeweski 1964).

Also Möhlig's concept of homogenization is of interest in this context (Möhlig, W. 1976, 1979). Homogenization and genetic relatedness, are, of course, not mutually exclusive. Interaction between neighbouring and related languages seems to be a normal case.

<u>ge</u> cha, <u>ge</u> lissa	(seenisa, seenifta from seena – 'I enter')	I put into, make enter
	galcisa, galcifta	I tell s.b. to drive (the herd) home
g <u>e</u> cha, <u>ge</u> ssa	gesa, gesita	I take (s.b. or s.th. by a means of transport) to

N.B. This very frequent verb is undergoing a process of formal and semantic differentiation. The 2nd person <u>gelissa</u> is regularly derived from a basic stem <u>gel</u>- $\leftarrow *gel + ch + ta$ (rule 6 (Schlee)), while the 1st person <u>gecha</u> is irregular since no regular loss of *l* before *ch* can be postulated cf. R: <u>hela</u> - 'I get', <u>helcha</u> - 'I help s.b. to get', more frequent in derived forms like <u>ka-so-hélcha</u> - 'I make s.b. remember', literally: <u>ka-</u> 'from (the past)' -so (venitive) 'towards here' -<u>helcha</u> 'I make (him) get'. The second person <u>gessa</u>, on the other hand, is regularly derived from the (irregular) first person <u>gecha</u> and does no longer take into account any underlying *l*. I cannot explain B: <u>gesa</u>, <u>gesita</u> within the Boran framework. Mutual loans and "stimulus diffusion" by analogy between early Oromo and Somaloid languages can, however, not be excluded. [End of page 42]

jiifa, jiifta	cisa, cifta	I lie (flat)
jiificha, jiifissa	crisisa, cisifta	I put down in a horizontal position
j <u>e</u> ba, j <u>e</u> bta	chaba, chabdi	(s.th.) breaks, gets broken
j <u>e</u> bcha, <u>je</u> bissa	chabsa, chabsita	I break (s.th.)
	chabsisa, chabsifta	I make (s.b.) break (s.th.)

N.B. Rendille *j* corresponds to both *c* and <u>*ch*</u> (emphatic) in Boran. In *chabdi* (\leftarrow **chab* + *ti*) the *t* of the suffix by partial assimilation acquires the feature (+ voiced) from the preceding *b*. This affects all verbs with root final *b*.

k <u>ée</u> na, k <u>ée</u> nta	kenna, kennita	I give, bring
k <u>ée</u> nicha, k <u>ée</u> nissa	kennisisa, kennisifta	I make s.b. bring, make s.th. produce like in
gólola háanu		this food will make
ki-k <u>ée</u> nicha		you give milk

N.B. The quantity the vowel has in Rendille is preserved by the consonant in Boran.

k <u>á</u> ha, k <u>á</u> hta	kaa, kaata	I get up
k <u>á</u> hcha, k <u>é</u> hissa	kaasa, kaafta	I make (s.b.) get up

N.B. Here the loss of h is compensated by the vowel quantity in Boran.

k <u>ó</u> ra, k <u>ó</u> rta	kora, korta	I mount, climb
k <u>ó</u> rcha, k <u>ó</u> rissa	korsisa, korsifta	I put onto
m <u>á</u> ra, m <u>á</u> rta	mara, marta	I turn (intransitive), come around
m <u>á</u> rcha, m <u>á</u> rissa	marsa, marsita	I turn (s.th.), (s.th.) surrounds
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[End of page 43]

N.B. For the whole semantic range cf. Schlee (1978) which is exclusively dedicated to this and one other verb.

n <u>á</u> ha, n <u>á</u> hta	naha, naata	I am afraid, fear, feel awe or piety
n <u>á</u> hcha, n <u>é</u> hissa	naasisa, naasifta	I frighten

N.B. *néhissa* exhibits the same vowel harmony as *bahcha*, *behissa*. We have discussed this above in a footnote.

óya, óita	iya, iyita	I cry
óicha, óissa	iyisisa, iyisifta, osisa, osifta	I make (s.b.) cry

N.B. It is difficult to determine which of the two Boran verbs corresponds more closely to the Rendille verb, which looks like the sum of the two, containing both the *o* and the *i y*. All these words, of course, are onomatopoetic, the point of disagreement being whether crying means to utter *iii* or *ooo* or both.

s <u>é</u> ha, s <u>é</u> hta		I move, stir (intransitive)
s <u>esé</u> ha, s <u>esé</u> hta	sossoha, sossota,	I move, stir
(iterative)	socoha, socota	

s <u>é</u> hicha, s <u>é</u> hissa	socosa, socofta	I stir, wag (s.th.)
s <u>e</u> s <u>é</u> hicha, s <u>e</u> s <u>é</u> hissa		
túfa, túfta	tufa, tufta	I spit
túfcha, túfissa	tufsisa, tufsita	I make (s.b.) spit

Part 2

The following examples are verbal derivations from nouns or adjectives. Many other verbs which are not included here also have nominal forms related to them, but in those cases we may [end of page 44] consider the noun to be derived from the verb. In the following cases, we assume the verb to be derived from the noun or adjective because of the simpler shape of the latter.

amur	amur	order, command
		(ex Arab.: <i>amr^{u n}</i> via
		Swahili: amri or
		Somali: <i>ámar-kii)</i>
amuricha, amurissa	amurisa, amurifta	I give orders, I command
b <u>á</u> ll <u>a</u> dan	balla(m),	wide
	ballo (f)	
b <u>á</u> lladan <u>ehe</u> , -t <u>e</u> h <u>e</u>	ballad'a, ballata	I am broad, stout
b <u>á</u> llasada, -sata	ballad'a, ballata	I become broad thick
b <u>á</u> lladicha,		
b <u>á</u> lladissa	ballisa, ballifta	I widen (s.th.)
	ballisisa,	I make (s.b.) widen (s.th.)
	ballisifta	

N.B. -<u>ehe</u>, -t<u>ehe</u>, -y<u>ehe</u> in the second line is a verb of the prefix conjugation and is suffixed to one class of adjectives (cf. Oomen 1978:44) with the meaning of 'to be'. The corresponding Boran verb has autobenefactive shape.

deer d'eera (m),

	d'eertu (f), d'eero (coll.)	long, tall
déerada, déerata	d'eerad'a, d'eeratta	I become long
déeracha, déerassa	d'eeresa, d'eeresita	I stretch (s.th.)
diig	d'iga, d'igi	blood
díiga, díigta	d'iga, d'idda	I bleed (intr.), lose blood [end of page 45]
díigicha, díigissa	d'isisa, d'isifta	I bleed, extract blood

N.B. B: <u>d'igi</u> is the subject case as distinct from *d'iga* which for the moment we can call the general case although we further have to distinguish between realizations of the *a* as a full vowel or as a "vowel coloured breath" respectively. This, however, is not the place to elaborate on Boran nouns. An interesting form is B: *d'idda* ($\leftarrow *d'ig + ta$) where the <u>g</u> in the course of being assimilated by the following *t* bestows its voiced quality on the resulting geminate.

foor	fora	satellite camp
fóoricha, fóorissa	forsa, forsita	I tend (a satellite herd)
gáaban	gababa (m), gababdu (f)	short
gáabda, gáabata	gababada, gababatta	I become short, shrink
gáabicha, gaabissa	gababsa, gababsita	I shorten, cut down
	gababsisa, gababsifta	I tell (s.b.) to shorten (s.th.)
had <u>á</u> d	hadd'a	bitter
	hadd'owa, hadd'ofti	(s.th.) is bitter
had <u>á</u> dicha, had <u>á</u> dissa	hadd'ofsisa, hadd'ofsifta	I make (s.th.) bitter and, (at least in Rendille) give bitter laxatives to (s.b.)

iin <u>a</u> af	(?)	jealousy, envy
iin <u>a</u> afa, iin <u>aa</u> fta	hinafa, hinofta	I envy, I am jealous
iin <u>aa</u> fcha, iin <u>aa</u> fissa	hinafsisa, hinafsifta	I make (s.b.) jealous, envious
l <u>á</u> mma	lama, lamanu	two [end of page 46]
l <u>á</u> mmacha, l <u>á</u> mmassa	lammesa, lammesita	I double, make two
m <u>a</u> l		wit, reasoning, mind
	mala, mali	opinion, idea, mind
m <u>á</u> lda, m <u>á</u> lata	malca, malcita	I think
	mald'a, malatta	I give my opinion, I opine
	malcisa, malcifta	I advise, give council
m <u>á</u> lm <u>a</u> la, m <u>á</u> lm <u>a</u> ssa		I hesitate
málcha, m <u>á</u> lissa		I think for s.b.
m <u>á</u> lm <u>a</u> lcha, m <u>á</u> lm <u>a</u> lissa		I delay s.b.

N.B. The idea of thinking in Rendille is rendered by an autobenefactive, in Boran by a causative verb. These could be translated as "I use my wit to my own benefit" and "I put my mind to work" respectively, if this is not over-interpreting the semantic implications of verbal derivations.

khobo	qabbana	cool
khobóba, khobóba	qabbanawa, qabbanofta	I cool down
khobócha, khobóssa	qabbanesa, qabbanesita	I cool (s.th.)

Part 3

This third part of our list comprises those Rendille and Boran verbs which a) are not related to each other or b) may be related to each other but cannot be shown to be so by regular sound correspondences. We include these verbs here because they illustrate the semantic aspect of the causative and the parallelism of this mechanism of derivation of the two languages. [End of page 47] While the first two parts of our list deal with genetically related lexical material, this third part illustrates the analogous functioning of causative derivation even in the case of genetically un-related material. All three parts of our list, therefore, stress the similarities between the two languages. To warn against over-emphasizing these similarities, however, we should like to point to the fact that in our Boran sample of causative verbs we have not less than 161 verbs for which we could not find any parallel derivations, of genetically related or un-related verbs, at all. We do not list these 161 verbs because they do not have direct relevance to our present topic - the Rendille causative. On the other hand, there are only 14 Rendille causatives for which we could not find Boran equivalents. The huge number of Boran causatives seems to indicate that this form of verbal derivation has a much more automatic and productive character in Boran while speakers of Rendille only accept familiar causatives and reject correctly derivated but unusual causatives as artificial.

aabda, aabata	barad'a, baratta	I learn
aabcha, aabissa	barsisa, barsifta	I teach
áararowa, áararowta	dulloma, dullomta	I get old
áararowcha,	dullomsisa,	
áararowssa	dullomsifta	I let (s.b.) become old
<u>á</u> nka	beela	hunger
<u>á</u> nka(w)a, <u>á</u> nkaata	beelaa, beelofta beelawa, beelofta	I am hungry
<u>á</u> nkaacha, <u>á</u> nkaassa	beelesa, beelesita beelesisa, beelesifta	I make hungry
baríya, baríita	bula, bulta	I spend the night [end of page 48]

baríicha, baríissa bulca, bulcita

I put (s.b.) up for the night, give accommodation

N.B. the B. verb *baria* quoted above, in part 1 of this list, under the R. entry *bariya* puts the stress on the course of time and could also be translated as passing the time of 'dawn' (R: *bari*, *barini*, R: *bariyo*). *Bula*, on the other hand, puts the accent on the typical night-time occupation: sleeping. B. *imbúlle*, *irráfne* ($\leftarrow *(h)in+bul+ne$, (*h*)*in*+*raf*+*ne* plus accent shift to stem as negative marker) and R. *mabariin*, *murdin* also mean 'I did not sleep, could not sleep'.

b <u>ólo</u> kh		pain
	d'ukuba, d'ukubani	pain, disease
b <u>ó</u> lkha, b <u>ólo</u> khta	d'ukuba, dúkubdi	(it) pains, burns it pains
b <u>ó</u> lkhica, b <u>ól</u> khissa		I inflict pain, make burn
	d'ukubsa, d'ukubsita	I inflict pain
búuha, b'ühta	guta, gutta	I am full
búuhica, búuhissa	guccisa, guccifta	I fill

N.B. *guccisa* must be derived from an autobenefactive form *gut+d'a which I could not find. The causative of *guta* should be *gutisa (hypothetical)

chíni	miawa (m),	
	mioftu (f)	sweet, tasty
	miawo (coll.)	
chínacha, chínassa	miesa, miesita	I sweeten
	miesisa, miesifta	I tell (s.b.) to sweeten [end of page 49]
d <u>á</u> bakh	lafa (m),	soft, flexible, weak,
	laftu (f),	easy
	lafo (coll.)	
d <u>á</u> bakhnowa	lafad'a, lafatta	I weaken

d<u>á</u>bakhnowta

lafifad'a, lafifatta

d <u>á</u> bakhnowca,	I make (s.th.) soft,
d <u>á</u> bakhnowssa	weaken (s.b.)

N.B. *lafifad'a* must be the autobenefactive of the causative **laficha* (hypothetical), not the causative of the autobenefactive *lafad'a* which should be **lafacisa* (hypothetical).

d <u>á</u> rga, d <u>á</u> ragta	quufa, quufta	I am satiated
d <u>á</u> rgicha, d' <u>á</u> rgissa	quufsa, quufsita	I satiate, give plenty to eat
d <u>á</u> rag	quufti	satiation, filled state of stomach
d <u>ág</u> da, d <u>á</u> gata	d'okada, d'okata	I hide (intrans.)
d <u>ág</u> cha, d <u>á</u> gissa	d'ossa, d'ossita	I hide (s.th. or s.b.)
d <u>a</u> khán	addi	white
d <u>a</u> khnán	addena, addeni	whiteness [end of page 50]
d <u>a</u> khnán	addesa, addesi	first half of the lunar month, when the moon is visible at sunset and after an increasing time after it
d <u>á</u> khnada, d <u>á</u> khnata	addad'a, addatta	I become white, pale
d <u>á</u> khnacha, d <u>á</u> khnassa	addesa, addesita	I whiten (s.th.), paint (s.th.) white
	addesisa, addesifta	I tell (s.b.) to whiten (s.th.)

N.B. *dakhnán* and *addesa* are the complement of R. *mugdi*, B. *dukana*, the "darkness". The periods of the increasing moon on the one hand and the decreasing moon plus the moonless nights on the other hand are thus, unlike in European languages, distinguished by the criterion "state of light after sunset". The sixteenth of the month, therefore, belongs to the "darkness" although the moon is nearly full, because the moon rises only about one hour after sunset (assuming a tropical night of twelve hours, of course).

'd <u>á</u> lam	gowa, gowica	fool, foolish, stupid
		doche

(singulative)

'd <u>á</u> lma, 'd <u>á</u> lanta	gowoma, gowomta	I become stupid
'd <u>á</u> lmica, 'd <u>á</u> lmissa		make stupid, confuse
	gowomsa, gowomsita	I cheat
daayan	gurraca (m), gurra, gurrati (f)	black, liquid, molten [end of page 51]
daai(y)a, daaita	gurrataa, gurratofta, gurracaa, gurracofta	I become black
daaicha, dáaissa		I blackem, melt (s.th.)
	gurracisa, gurracifta	I blacken (s.th.)
'diicha, 'diissa	lakisa, lakifta	I let, release, allow
	lakisisa, lakisifta	I tell (s.b.) to let

N.B. The basic verb in both Rendille and Boran have causative shape; as no causative of the causative is possible in Rendille, the causative meaning cannot be expressed by a second causative morpheme, as in Boran, but has to be circumscribed as in English.

<u>é</u> kawa, <u>é</u> kauta		I am equal to
(youg- <u>é</u> he, -t <u>é</u> he, -y <u>é</u> he)	fakad'a, fakatta	I am similar to, look like
	fakesa, fakesita	I imitate
<u>é</u> kacha, <u>é</u> kasa		I imitate, count, re-count, tell (numerically or as a tale)
físan	qajela (m), qajeltu (f), qajelo (coll.)	straight
fitcha, fitissa	qajelca, qajelcita	I straighten
fúltúmme	oba, obani	journey to the watering place

fúla, fussa	oba deema, deemta	(the herd) goes to water [end of page 52]
fúlcha, fúlissa	obasa, obafta	I drive (the herd) to the water
	obasisa, obasifta	I tell (s.b.) to drive (the herd) to the water
fut <u>é</u> t	sabla (m), sablo (f), pl. sasablo	light, easy
fut <u>é</u> tnacha fut <u>é</u> tnowcha	sablisa, sablifta	I ease, lighten, help with s.b.'s load
<u>ga</u> m <u>a</u> dicha, g <u>a</u> m <u>a</u> dissa	callisa, callifta	to be silent
<u>ga</u> m <u>a</u> dicha, g <u>a</u> m <u>a</u> dissa	calsisa, calsifta	to make (s.b.) shut up, to be quiet

N.B. Like in many cases above, Rendille does not form a causative of a verb with causative shape. Here, one Rendille verb covers the semantic range of two different derivations in Boran.

gird <u>a</u> ma, gird <u>a</u> nta		I dance, play
	sirba, sirbita siribda	I dance
	tabadd'a, tabatta	I play
gird <u>a</u> micha, gird <u>a</u> missa		I make (s.b.) dance, play
	sirbisisa, sirbisifta	I make (s.b.) dance
	tabaaisa, tabaaifta	I make (s.b.) play
góoa, góota	(chita, chitta)	(s.th.) gets torn, breaks (intrans.)
góocha, góosa,	mura, murta	I cut (s.th.)
góosda, góosata	murad'a, muratta	I cut for myself [end of page 53]

mursisa, mursifta I tell (s.b.) to cut

N.B. *goosda* is an autobenefactive derivation derived from a causative derivation. Semantically it includes the cutting of trophies: R: *inenyet goosda*, B: *nam murad'a*, lit.: "I cut a man for myself", means: 'I cut off a man's genitals as a trophy to acquire the killer status.'

gúura, gúurta	godaana, godaanta	I migrate
gúuricha, gúurissa	godaanisa, godaanifta	I make (s.b.) move on
'h <u>á</u> dda, 'h <u>á</u> dda	ola, olta	I stay, pass the daytime
'h <u>áa</u> cha, 'h <u>áa</u> sa	olca, olcita	I make (s.b.) stay

N.B. The quantity of the root vowel in the causative compensates the loss of the geminate consonant dd' (widespread orthographic convention for d'd'). In Boran we would the quantity expect to be preserved by the consonantal element, cf. above: *tabadd'a*, *tabaccisa*.

haag		beauty
háagan	mid'aaga (m), mid'addu (f)	beautiful
haagan- <u>éhe</u> , -t <u>éhe</u> , - y <u>éhe</u>	mid'aaga, mid'aadda	I am beautiful
háagicha, háagissa	mid'aasa, mid'aasita	I decorate, bring in order, repair
	mid'aasisa, mid'aasifta	I tell (s.b.) to repair (s.th.)

N.B. *haagicha* also means 'I make, I do'; in this sense it is comparable to another Boran verb: [end of page 54]

hamád

tolca, tolcita	I make, I do
(tola (m),	
toltu (f),	convenient, honest,
tolo (coll.)	sane)
gamad'	joy

ham <u>á</u> da, ham <u>á</u> ta	gamad'a, gamatta	to rejoice
ham <u>a</u> dicha,	gamacisa,	to make (s.b.) rejoice
ham <u>a</u> dissa	gamacifta	

N.B. With a bit more evidence we might have decided that the R. and B. verbs are cognates and transferred them to part 1 of this list. We could, however, only find on other example of Boran g corresponding to \hbar , h or \emptyset^{38} in Rendille, namely B: *gaggaba*, *gaggabda*, R.: (h)*aagafda*, (h)*aagafata* 'I am unable to'. Above we have discussed the possible historical implications of multiple sound correspondences which reduce any one correspondence to a very short list of examples.

hárma, hámarta	hollada, hollatta	I tremble
hármicha, hármissa	hollacisa,	I make s.b. tremble
	hollacifta	

N.B. Note the metathesis in the basic verb in Renille

hii	(h)ititu,	sour milk, curdled milk
	(h)itituni	
híiyowan	hititani	(the milk) gets sour
híiyoucha, híiyowssa	(h)iticisa,	I let (the milk) become
	(h)iticifta	sour [end of page 55]

N.B. We have given the basic verb in the 3rd person plural (briefly discussed above in a footnote) because it would be the only meaningful concord for "milk", a liquid. The 1st and 2nd person which are semantically absurd would be R: *hiiyowa*, *hiiyouta*; (*h*)*itita*, (*h*)*itita*.

hülés	ulfa (m), ulfo (f)	heavy
a hülés	ulfad'a, ulfatta	I am heavy
hülésnowa, hülésnouta		I become heavy

^{38.} Since *h* and *h* are not distinguished in Boran and not by all speakers of Rendille and since *h* and \underline{h} can alternate with \emptyset in Rendille, we should for our present purpose not overdifferentiate but accept any one of them as an equivalent in Rendille.

hülésnowcha,		I make (s.th.) heavy
hülésnoussa		
	ulfacisa, ulfacifta	I make heavy, render pregnant
	ulfesa, ulfesita	I honour (s.b.)
	ulfesisa, ulfesifta	I let (s.b.) honour (s.b.)

N.B. Compare the semantic domain of the B. word to the Latin concept of *gravitas* which also ranges from heaviness over dignity to pregnancy.

hüles and *ulfo* might be cognates because of $h \triangleq 0$ and $s \triangleq f$ for which we can find more examples.

itáu, itáwe	heddu	many
itawa, itauta	heddumad'a, heddumatti	(s.th.) multiplies (intransitive)
itaucha, itaussa	heddumessa, heddumesita	I multiply (s.th.)

N.B. Also these two words may turn out to be cognates. [End of page 56]

jilbiba, jilbibta	hakkisa haqqisa, hakkifta	I vomit
koosada, -sata	buufad'a, -fata	I pour for myself
ko'dicha, ko'disa	buusa, buufta	I pour
(note compensatory vo	wel length in koosada!)	
lakh <u>á</u> nyouda, lakh <u>á</u> nyoucha	hakkisa ~ haqqisa, hakkifta	I feel nausea
jilbibicha, jilbibissa	hakkisisa, hakkisifta	I make (s.b.) vomit
lakh <u>á</u> nyoucha, lakh <u>á</u> nyoussa	hakkisisa, hakkisifta	I make (s.b.) feel sick
jis	mada, madani	wound
jísowa, jísouta	mada, madofta	I get wounded, am wounded

jísowcha, jísowssa	madesa, madesita	I inflict a wound
jíta, jíta	d'ama, d'amti	(a fire) gets extinguished
jítcha, jítissa	d'amsa, d'amsita	I extinguish

N.B. The Rendille causative also means 'I pull'.

k <u>a</u> mur	duresa, duresi	rich, rich man
k <u>a</u> murowa, k <u>a</u> murouta	duroma, duromta	I become rich
k <u>a</u> muroucha, k <u>a</u> muroussa	duromsa, duromsita	I make (s.b.) rich
	buua, buuti	(s.th.) flows
kóosda, kóosata	buufad'a, buufata	I pour myself (e.g. a cup of tea)
kó'dicha, kó'dissa	buusa, buufta	I pour [end of page 57]
k <u>ó</u> ra, k <u>ó</u> rta,	yabad'a, yabatta	I climb, mount
k <u>ó</u> rcha, k <u>ó</u> rissa	yabacisa, yabacifta	I put (s.th.) on top of (s.th)
kul <u>é</u> l	owa (m), owitu (f), owo (coll.)	warm, hot
a kul <u>é</u> l	owa, owiti	(s.th.) is warm
kululada, kululata		I get warm, heated up (in terms of temperature or temper)
kululacha, kululassa	owisa, owifta	I heat (s.th.) up
kurma, kuranta 'hara, 'harta	d'add'aba d'abb'abda lallafa, lallafta	I become weary
yuufa, yuufta	d'add'aba,	I become tired

d'add'abda

kúrmicha, kúrmissa 'hárcha, 'hárissa yúuficha, yúufissa	d'add'absisa, d'add'absifta	I make (s.b.) weary or tired resp.
kúta, kúta	dabra, dabarta	I pass, cross
kútcha, kútissa	dabarsa, dabarsita	I make (s.th. or s.b.) pass (somewhere)
lóo'da, lóo'da	rarra(h)a, rarrata	I hang (intransitive)
lóo'dicha, lóo'dissa	rarrasa, rarrafta	I hang (s.th.) up, suspend (s.th.)
	rarrarisa, rarrarifta	I tell (s.b.) to hang (s.th.) up
m <u>á</u> ss <u>a</u> da, m <u>á</u> ss <u>a</u> ta	obbaha, obbati	(s.th.) gets finished [end of page 58]
'd <u>e</u> b <u>e</u> sda, 'd <u>e</u> beisata	obbaha, obbati	(s.th.) gets exterminated, finished
m <u>á</u> ssicha, m <u>á</u> ssissa 'd <u>a</u> b <u>a</u> cha, 'd <u>a</u> b <u>a</u> ssa	obbasa, obbafta	I finish
maalím		daylight
	ifaa, ifaani	light, clarity
maalimoucha, maalimoussa	ifsa, ifsita	I illuminate (R: 'make like daytime')
miig, (pl. also:), mimiig	jabba (m), jabdu (f), jabbo (coll.)	strong
a miig	jabbad'a, jabbatta	I am strong
míigowa, míigouta	jabbad'a, jabbatta	I become strong
míigoucha, míigoussa	jabbesa, jabbesita	I strengthen
murúkh	qulla	naked
murukhsan <u>e</u> h <u>e</u> , -t <u>éhe</u> , -y <u>éhe</u>	qullawa, qullofta	I am naked

	qullawa, qullofta	I become naked
múrkhicha, múrkhissa	qullesa, qullesita	I undress (s.b.)
n <u>á</u> ha, n <u>á</u> hta	sodad'a, sodatta	I fear, am afraid of
n <u>á</u> hcha, n <u>é</u> hissa	sodacisa, sodacifta	I scare (s.b.)
núuga, núugta	ooda, oodda	I suck
núugicha, núugissa	oosisa, oosifta	I suckle
óya, óita	boa, bota	I cry [end of page 59]
óicha, óissa	bosisa, bosifta, bosisa	I make (s.b.) cry

N.B. There are two more Boran verbs roughly synonymous to this under R: *oya* in part 1 of this list.

<u>óro</u> nda, <u>óro</u> mata	taa, teeta	I sit down
<u>óro</u> micha, <u>óro</u> missa	teesisa, teesifta	I make (s.b.) sit down, seat (s.b.)
raas	ona	abandoned settlement, site
	ona, onti	(s.th.) is empty, void
ráasowa, ráasouta		(an area) is being abandoned, becomes characterized by abandoned settlement sites
ráasouca, raasoussa	onsa, onsita	I leave an area, taking all my belongings, so that only hearth stones and empty fences (characteristic of <u>raas=ona</u>) betray earlier occupation
réida, réiata	kofla ~ kobla, koflita	I laugh
réicha, réissa	koflicisa, koflicifta, kofalcisa, kofalcifta	I make (s.b.) laugh

N.B. Note the alternative use of a or i as epenthetic vowel according to its position.³⁹ [End of page 60]

rára, rárta	faa, fata	I load (an animal or another means of transport), tie the load
rárcha, rárissa	fasisa, fasifta	I tell (s.b.) to load
(haanu) s <u>é</u> hicha, s <u>é</u> hissa	(anan) rasa, rafta	I churn (milk)
	rarisa, rasifta	I tell (s.b.) to churn

N.B. sehicha from seha has a more general meaning, cf. above, part 1.

rukhada, rukhata	huqad'a, huqatta	I slim down, become meager, skinny
rukhicha, rukhissa	huqisa, huqifta	I make (s.b.) slim down
	huqacisa, huqacifta	

N.B. *huqacisa* is the causative of the autobenefactive *huqad'a* while *huqisa* is the causative derivation from an un-documented basic verb **huqa*.

ruusan	gabba (m), gabbo (f)	fat
ruusa, ruusta	gabbad'a, gabbatta	I become fat
ruusicha, ruusisa	gabbisa, gabbifta	I fatten
	gabbisisa, gabiisifta	I tell (s.b.) to fatten (an animal)
(feiyan)	fayya	healthy
s <u>á</u> mada, s <u>á</u> mata	fayya, fayyita	I recover
s <u>á</u> macha, s <u>á</u> massa	fayyisa, fayyifta	I heal
seyhoda, seyhota	hifad'a, hifatta	I am, become bored, tired, annoyed [end of page 61]
seyhocha, seyhossa	hifisa, hififta	I bore, tire, annoy

^{39.} Owen's rule about the epenthetic *a* (1985:21), cf. also above, footnote, seems to be applied on an optimal basis only by Venturino's Gabbra informants. *koflicisa* would not be tolerated by Owen's rule, and presumably not be accepted by his Harar Oromo speaking informants.

sooma, soonta	agaba, agabda	I am jejune, fasting
soomicha, soomissa	agabsa, agabsita	I make (s.b.) fast, do not allow (an animal) to graze

N.B. R. ex Arab. sawm via vulg. Arab. soom.

sugúb	d'eebu	thirst
súbgada, súbgata	d'eebod'a, d'eebotta	I become thirst
súbgacha, súbgassa	d'eebocisa, d'eebocifta	I make (s h) thirsty
	deeboenta	T make (3.0.) timisty
t <u>ó</u> lola, t <u>ó</u> lossa	ejja, ejjita	I am standing
t <u>ó</u> losada, t <u>ó</u> losata	ejjad'a, ejjatta	I stand up
t <u>ó</u> lolicha, t <u>ó</u> lolisa		I put (s.th. or s.b.) upright
	ejjecisa, ejjecifta	I make (s.b.) stand still, tell to stop
N.B. Also <i>hejja</i> etc. has bee	n recorded.	
urda, udurta	rafa, rafta	I sleep
urdicha, urdissa	rafsisa, rafsita	I make (s.b.) sleep, rock (s.b.) or sing a lullaby
N.B. Metathesis in the basic	e verb in Rendille.	
urgia, urgita	gargala, gargala	I turn over
urgicha, urgissa	gargalca, garcalcita	I turn (s.th.)
ur	garaca	belly
urowa, urowta	garacosa, garacofta	I become pregnant [end of page 62]
uroucha, uroussa	garacisa, garacifta	I make pregnant
uskulo	hama	bad
uskulacha, uskulassa	hamesa, hamesita	I spoil
w <u>é</u> n	gudda (m), guddo (f)	big, great
weinacha, weinassa	guddisa, guddifta	I raise (s.b.), bring (s.b.) up,

declare (s.b.) to be great guddisisa, guddisifta I make (s.b.) raise (s.b.) daba, dabda I become bent kholokha, kholokhta kholokhica, kholokhissa dabsa, dabsita I bend (s.th.) yaakha, yaakhta d'ed'a, detti (an animal) grazes yaakha, yaakhissa d'ecisa, d'ecifta I graze (an animal) cough (n) y<u>a</u>r<u>á</u>h qufa I cough yáhara, yáharta qufa(h)a, qufaata yárhicha, yárhissa qufasisa, qufasifta I make (s.b.) cough

N.B. Metathesis in Rendille.

yée'd	d'ubbi	talk (n)
yée'da, yée'da	d'ubbisa, d'uffifta, d'ubbad'a, d'ubatta	I talk
yée'da, yée'dissa	d'ubbacisa, d'ubbacifta	I make (s.b.) talk [end of page 63]

References

Abraham, R.C.: *Somali-English Dictionary*, London: Univ. of London Press 1964 [end of page 63]

- Andrzejewski, B.W.: Inflectional characteristics of the so-called weak verbs in Somali, in: *African Language Studies*, IX, 1968, pp. 1–51
- ---.: The Position of Galla in the Cushitic Language Group, in: *Journal of Semitic Studies*, 9, 1964
- Bender, Lionel M. (ed.): *The Non-Semitic Languages of Ethiopia*, East Lansing: Michigan State University 1976

Fleming, Harold C.: Omotic Overview, in: Bender 1976, pp. 299-323

- Heine, Bernd: Notes on the Rendille language (Kenya), in: *Afrika und Übersee*, 59, 3, 1976, pp. 176–223
- ---.: *The Non-Bantu languages of Kenya* (Vol. 2 of the Language and Dialect Atlas of Kenya, edited by B. Heine and W. Möhlig), Berlin: Reimer 1980
- ---.: Boni Dialects (Vol. 10 of the Language and Dialect Atlas of Kenya), Berlin: Reimer 1982.
- Möhlig, Wilh. J.G.: Guthries Beitrag zur Bantuistik aus heutiger Sicht, in: <u>Anthropos</u>, 71, 1976, pp. 673–715
- ---.: The Bantu Nucleus: Its Conditional Nature and its Prehistorical Significance, in: *Sprache und Geschichte in Afrika* (SUGIA), 1, 1979, pp. 109–141
- Moreno, Martino Mario: *Grammatica teorico-pratica della lingua galla*, Milan 1939 (reprint: Gregg Press, Eng. 1964)
- Oomen, Antoinette: Focus in the Rendille clause, in: *Studies in African Linguistics*, p. 1978, pp. 35–65
- ---.: Gender and Plurality in Rendille, in: Afroasiatic Linguistics 8/1, May 1981, pp. 35-75
- Owens, Jonathan: A Grammar of Harar Oromo (Northeastern Ethiopia), Hamburg: Buske 1985
- ---.: *The Oromo Causative: Lexical Grammar without Rules*. Reproduced by the Indiana University Linguistic Club. 1985(a)
- Plazikowski-Brauner, Herma: Der Kausativ in den sogenannten kuschitischen Sprachen, in: Anthropos Vol. 54, 1959, pp. 129–140
- Sasse, Hans-Jürgen: Galla /s/, /s/ und /f/, in Afrika und Übersee, 59, 1976, pp. 255–262
- ---.: Weiteres zu den ostkuschitischen Sibilanten, in Afrika und Übersee, 59, 1976, pp. 125– 142
- ---.: The Consonant Phonemes of Proto-East Cushitic (PEC), in: *Afroasiatic Linguistics* 7/1, October 1979

- Schlee, Günther: *Sprachliche Studien zum Rendille*: Grammatik, Texte, Glossar, with English summary of Rendille grammar, Hamburg: Buske 1978
- ---.: Soziale, kosmologische und mythologische Bezüge der Verben "herauskommen" und "sich drehen" im Rendille, in: Jungraithmayr, H. (ed.): *Struktur und Wandel afrikanischer Sprachen*, Berlin: Reimer 1978 (a) [end of page 64]
- ---.: Das Glaubens- und Sozialsystem der Rendille. Kamelnomaden Nordkenias, Berlin: Reimer 1979
- ---.: Somaloid History: oral tradition, Kulturgeschichte and historical linguistics in an area of Oromo/Somaloid interaction, in: Jungraithmayr, H. and W.W. Müller (eds.): *Proceedings of the Fourth International Hamito-Semitic Congress*, Marburg, Sept. 1983, Amsterdamm/Philadelphia: John Benjamins (Vol. 44, 1987, of the series *Current issues in Linguistic Theory*), pp. 265–315
- Sim Ronald J.: Morphophonemics of the Verb in Rendille, in: *Afroasiatic Linguistics*, Vol. 8, 1, May 1981, pp. 1–33
- Tutschek, Karl: Lexicon der Galla Sprache, part 1: Galla-Englisch-German, Munich 1844
- Venturino, Bartolomeo: *Dizionario Borana-Italiano*, Bologna: Editrice Missionaria Italiana 1973

Zaborski, Andrzej: The Verb in Cushitic, Warzawa & Krakow 1975 [end of page 65]