

2
Monographic Journals of the Near East

General Editor: Giorgio Buccellati

Afroasiatic Linguistics

Editors:

Robert Hetzron, Santa Barbara

Russell G. Schuh, Los Angeles

Advisory Board:

Ariel Bloch, Berkeley

Talmy Givón, Los Angeles

Thomas G. Penchoen, Los Angeles

Stanislav Segert, Los Angeles

Volume 7

Issue 3

January 1980

The Syntax of Indicator Particles in Somali: Relative Clause Construction

by

Francesco Antinucci and Annamaria Puglielli

Undena Publications



Malibu 1980

AFROASIATIC LINGUISTICS

AAL includes contributions in linguistics within the vast domain of Afroasiatic (Hamito-Semitic) languages. Articles of general, theoretical interest using Afroasiatic material, descriptive, historical and comparative studies are included.

Editors:

Robert Hetzron (698 Zink Ave., Santa Barbara, CA 93111, U.S.A.)

Russell G. Schuh (15337 Hart St., Van Nuys, CA 91406, U.S.A.)

Send all manuscripts to Robert Hetzron or (for Chadic) to Russell G. Schuh. Consult stylesheet on back cover for editing format.

MONOGRAPHIC JOURNALS OF THE NEAR EAST

MJNE is a system of journals on the Near East, with each journal devoted to a specialized study area, and each issue consisting normally of a single article. Current journals in the system are *Afroasiatic Linguistics*, *Assur*, *Computer Aided Research in Ancient Near Eastern Studies*, *Occasional Papers on the Near East* and *Syro-Mesopotamian Studies*.

General Subscription. - For a prepayment of \$17.00 the subscriber selects random issues from within the entire system as desired, up to a total of 200 pages. (A plate counts as two pages.) The subscriber is also entitled to (1) periodical lists of abstracts from all journals in the system, and (2) reservation to any journal within the system whereby issues of a given journal are sent on approval immediately upon publication (and may be returned within two weeks).

Library Subscription. - A prepayment of \$17.00 for each journal in the system secures all issues of a single volume as soon as they are published. This subscription schedule does not allow the selection of random issues.

Library subscriptions are available to both institutions and individual scholars.

Individual issues are numbered *sequentially* within each volume. Each issue has its own pagination. A volume is closed when a total of about 200 pages is reached.

A *title page* and a *table of contents* listing all issues within each volume are sent to all subscribers at the close of a volume.

Periodicity in the order of appearance of issues is not predetermined. A volume, however, is generally completed within one year.

Back volumes are available for \$20.00 per volume. Payment must accompany orders from individuals. A handling fee of \$1.00 will be charged to libraries if order is not prepaid.

Order from: UNDENA PUBLICATIONS, P.O. Box 97, Malibu, California 90265, U.S.A.

ISBN: 0-89003-001-4

All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photo-copy, recording, or any information storage and retrieval system, without permission in writing from the publisher.

THE SYNTAX OF INDICATOR PARTICLES IN SOMALI: RELATIVE CLAUSE CONSTRUCTION

by

Francesco Antinucci and Annamaria Puglielli

Istituto di Psicologia
Via dei Monti Tiburtini, 509
Roma, Italia

In Somali there is an obligatory focus-marking system. In every main declarative clause one of the constituents must be marked by a particle indicating the focus of assertion. The semantic functions and grammatical behaviour of these particles, termed "indicators", have been described by several authors. This article attempts to show the central role of indicators in Somali syntax. More specifically, it is shown that the rules governing some syntactic constructions, such as relative clauses, subordinate clauses and noun-modifiers, are crucially dependent on them.

CONTENTS

1. Introduction	2
2. Relative clauses	2
2.1 Derivation of relative clauses from main clauses	2
2.2 Evidence for derivation	4
2.2.1. The behaviour of subject pronouns	4
2.2.2. Subject-Verb agreement	10
3. Subordinate clauses	12
4. Noun modifiers	13
4.1 Types of noun modifiers	13
4.1.1. Noun-"Adjective"	14
4.1.2. Noun-Noun- <i>ah</i>	15
5. Some semantic considerations: a problem for linguistic theory	16
5.1. Semantic function of indicators	16
5.2. Topic, focus and relativization	17
References	18

1. INTRODUCTION*

This paper is the first part of a larger work intended to show the fundamental role played by the so-called “indicator particles” in the syntactic organization of the Somali language.¹ We will try to show that most of the Somali sentence-patterns (relative coordinated and “presentative” sentences, etc.) can be optimally accounted for if we derive them from a basic kernel containing only main declarative sentences. The different types of sentence-patterns will naturally correlate with the different types of main declarative clauses, once these are defined in terms of their indicator-structure.

In other words, we will try to present a picture of Somali sentence structure as organized in two levels: a basic one where a fairly simple and restricted set of main declarative structures are directly generated and a derived one where the remaining sentence-patterns are derived through transformation-like operations. As we will see, indicator particles have a crucial role in this process of derivation. We hope in this way to shed some light not only on the structure of the Somali language, but also on some issues of general linguistic theory, given the peculiar nature of indicator particles.

This paper will be devoted to accounting for the construction of relative clauses, subordinate clauses and some types of noun modifiers.

2. RELATIVE CLAUSES

2.1. Derivation of relative clauses from main clauses

In accordance with the program outlined above, we will argue that all Somali RCs have to be derived from main declarative clauses in which

- (a) one of the NPs is identical to the head-noun;
- (b) this NP is always marked by the focus indicator particle *baa*;
- (c) this NP is deleted together with *baa*.

Claims (a) and the essence at claim (c), i.e. the NP deletion, are commonplaces in current linguistic theory. Current views on RC structure assume that they are derived from main clauses through deletion or pronominalization (depending on the particular language or type of RC involved) of the NP identical to the head-noun. English RCs such as

- (1) *The man who came yesterday is here*
- (2) *The man I saw is here* are derived respectively from underlying structures like
- (3) [*the man_i [the man_i came yesterday]_S]_{NP} is here²*
- (4) [*the man_i [I saw the man_i]_S]_{NP} is here*

In (3) the NP *the man* internal to the RC is pronominalized by *who*, and in (4) the same NP is deleted.

* We wish to thank Axmed Cabullaahi Axmed, Cabdalla Cumar Mansuur, Ciise Maxamed Siyaad, Cusmaan “Noobel”, Dahabo Farax Cilmi, Maryan Xaaji Cilmi, Maxamed Xasan Warsame “Akhiyaar”, Sacdiya Maxamed Xasan, Xasan Xaashi Horri “Majiste”, Yislam Maxamed Yislam for their help in supplying and analyzing the Somali data. We also wish to thank Dr. B.W. Andrzejewski for kindly discussing with us several topics of Somali grammar.

¹ The term is taken from Andrzejewski (1975), which provides the most extensive treatment of this topic of the Somali grammar. Aspects of the syntax and semantics of indicator particles are also dealt with in Hetzron (1965) and Zholkovsky (1966).

² The index _i indicates that the NPs marked by it share the same reference.

With respect to Somali RCs, the process of derivation involves always deletion of the NP. Thus, sentences like

- (5) *gabarta muuska cuntay waa walaashay*³ 'The girl who ate the banana is my sister'
the-girl the-banana ate P(article) my-sister
- (6) *igu sallan wiilka yimid* 'Greet for me the boy who came!'
for-me greet the-boy came

are derived from underlying structures like

- (7) [*gabarta*_i [*gabarta*_i *muuska cuntay*]_S]_{NP} *was walaashay*
- (8) *igu salaana* [*wiilka*_i [*wiilka*_i *yimid*]_S]_{NP}

through deletion of the NP internal to the embedded S, which is identical to the head-noun, according to claims (a) and (c). Claim (b) is, on the other hand, specific to Somali. In order to see its relevance, we will have to consider systematically the construction of the different types of RCs in Somali. There are four of them which we will label I, II, III and IV, exemplified by the following four sentences:

- I. *wiilka kuu soo qoray waa walaalkay* 'The boy who wrote to you is my brother'
the-boy you-to hither wrote P my-brother
- II. *warqadda Cali qoray maanta bay tegi doontaa* 'The letter that Ali wrote will leave now'
the-letter Ali wrote now P-she go will
- III. *anigu wiilkii Jaamacadda adayay baan la hadlay* 'I spoke to the boy who was going to the University'
I the-boy University was-going P-I with spoke
- IV. *akhri buugagga Cali kuu keenay* 'Read the books that Ali brought to you!'
read the-books Ali you-to brought

These four types have been established taking into account the two possible functions that a NP can have in a Somali sentence, i.e. subject or non-subject.⁴ Sentences of type I are those in which both the

³ Somali sentences are quoted following the conventions of the national Somali orthography (see Andrzejewski, 1974). Note that *c* stands for a voiced pharyngeal fricative (ʕ), *x* for an unvoiced pharyngeal fricative (ħ), *kh* for an unvoiced velar fricative, and *dh* for a dental retroflex (*ɖ* or *ɗ*). In the English glosses P stands for "indicator particle".

⁴ Subject NPs are those which determine verb-agreement. All other NPs are not functionally distinguishable in Somali, since all grammatical relations are marked on the verb through a system of prefixes as shown by sentences like

- wiilkaas baan la hadlay* 'I spoke with that boy'
boy-that P-I with spoke
- Cali baa toban shilin buug ugu soo ibiyay Farax* 'Ali bought a book for ten sh. for Farah'
Ali P ten shilling book for-with bought Farah

Notice that the NPs *toban shilin* and *Farax* in the second sentence have exactly the same positional and distributional characteristics of the direct object NP *buug*. They can all occupy the same (pre-and post-verbal) positions and they can cooccur with the same grammatical markers (as we will see below, when we will consider the distribution of the indicator particle *baa*). Notice further that sentences like

- Aniga baa u geeyay Maryan Axmed*
I P to brought Maryan Ahmed

are perfectly ambiguous between the two readings 'I took Maryan to Ahmed' or 'I took Ahmed to Maryan.' The two NPs can be equally well interpreted as direct object or locative goal, since the grammatical structure of the sentence does not distinguish them.

It must be mentioned that the dialects of Somali spoken in the northern part of the country also mark the distinction between a subject and a non-subject NP morphologically. This case-marking system is fairly complex in both its formal exponents (involving a combination of segmental and tonal features) and its distribution. It is fully described in Andrzejewski (1964). This system is however absent from the dialects spoken in the coastal and southern regions. In this paper we will disregard it, since all we are

head-noun and the deleted NP are subjects of their respective clauses. In sentences of type II the head-noun is subject of the main clause, but the deleted NP is a non-subject of the RC. In type III the head-noun is a non-subject of the main clause, while the deleted NP is subject of the RC. In type IV the head-noun and the deleted NP are both non-subjects of their respective clauses. The four types can be schematically represented as follows:

- I. $S_i [\$ N V]_{RC} \dots V$
- II. $S_i [S \cancel{N}_i V]_{RC} \dots V$
- III. $S \dots N_i [\$ N V]_{RC} \dots V$
- IV. $S \dots N_i [S \cancel{N}_i V]_{RC} \dots V$

where S stands for a subject NP and N for a non-subject NP; the index *i* marks the two NPs which are identical and the slash the NP which is deleted in the process of derivation.

2.2 Evidence of derivation

2.2.1. The behaviour of subject pronouns

The first problem we are going to consider is the possible presence and distribution, inside the RC, of a pronoun referring to the subject of the RC. Consider first sentences of type II and IV, i.e. sentences where the deleted NP is a non-subject. The relevant facts are exemplified by the following sentences:

- (9) *warqadda Cali qoray maanta bay tegi doontaa* (see II)
- (10) *warqadda uu Cali qoray maanta bay tegi doontaa* (same meaning)
...he...
- (11) *warqadda Cali uu qoray maanta bay tegi doontaa* (same meaning)
- (12) *warqadda uu qoray Cali maanta bay tegi doontaa*
- (13) **warqadda qoray Cali maanta bay tegi doontaa*
- (14) *warqadda aad qortay maanta bay tegi doontaa*
...you wrote (sg.2)...
- (15) **warqadda qortay maanta bay tegi doontaa*
- (16) *warqadda aad qorteen maanta bay tegi doontaa*
...you wrote (pl. 2.)...
- (17) **warqadda qorteen maanta bay tegi doontaa*
- (18) *akhri buugagga Maryan kuu keentay* 'Read the books that Maryan brought to you!'
read the-books M. you-to brought
- (19) *akhri buugagga ay Maryan kuu keentay* (same meaning)
...she...

going to say applies equally well to both varieties of Somali. The interplay between case-system and RC construction in the different dialects is described in Antinucci and Puglielli (1978).

- (20) *akhri buugagga Maryan ay kuu keentay* (same meaning)
 (21) *akhri buugagga ay kuu keentay Maryan* (same meaning)
 (22) **akhri buugagga kuu keentay Maryan*
 (23) *akhri buugagga aan kuu keenay*
 ...I you-to brought (sg.1.)...
 (24) **akhri buugagga kuu keenay*
 (25) **akhri buugagga aan kuu keennay*
 ...we you-to brought (pl.1.)...
 (26) **akhri buugagga kuu keennay*

The pronoun in question (*aan*, *aad*, *uu*, *ay*.) is the short form of the subject pronoun.⁵ Let's summarize its distribution. When the subject of the RC is 3rd person (masc. (9-13) or fem. (18-22)), the pronoun *may* be present (10-12, 19-21) or absent (9, 18). If, however, a noun subject *follows* the verb (as in 12 and 21), the pronoun *must* be obligatorily present [(13) and (22) are, in fact, ungrammatical]. When the subject of the RC is a 1st or 2nd person, either singular or plural (14-17, 23-26), the pronoun must be obligatorily present (as shown by the ungrammaticality of (15, 17, 24, 26).

A second fact to notice is that the short form of the subject pronoun can never occur by itself in main clauses. In those clauses it occurs instead always combined with the indicator particles:

- (27) *anigu wiilkii baan la hadlay* 'I spoke to the boy'
 I the-boy P-I with spoke
 (28) *wiilkii baan la hadlay* (same meaning)
 (29) **anigu wiilkii aan la hadlay*
 (30) **aniga baa wiilkii aan la hadlay*
 (31) *wiilkii waan la hadlay* (same meaning)⁶
 P-I
 (32) **wiilkii aan la hadlay*
 (33) **wiilkii aan waa la hadlay*

On the other hand RCs can never contain an indicator particle (cf. II. above):

⁵ The long and the short forms of the subject pronouns are listed in the following table:

Person	long form	short form
Sg. 1.	<i>anigu</i>	<i>aan</i>
2.	<i>adigu</i>	<i>aad</i>
3m. masc.	<i>isagu</i>	<i>uu</i>
3f. fem.	<i>iyadu</i>	<i>ay</i>
Pl. 1.	<i>annagu</i>	<i>aan</i>
2.	<i>idinku</i>	<i>aad</i>
3.	<i>iyagu</i>	<i>ay</i>

⁶ "Same meaning" means here (and in the glosses to follow) "same cognitive meaning". Different types of indicators (as well as their different positions) convey differences in the topic-focus structure of the sentence. On the semantics of indicators see below section 5.1 and the references quoted in footnote 1.

- (34) **warqadda buu Cali qoray maanta bay tegi doontaa*
 (35) **warqadda Cali buu qoray maanta bay tegi doontaa*
 (36) **warqadda Cali baa qoray maanta bay tegi doontaa*
 (37) **warqadda Cali wuu qoray maanta bay tegi doontaa*
 (38) **warqadda Cali waa qoray maanta bay tegi doontaa*

Ungrammatical sentences parallel to (34-38) can be constructed for any of the four types of RCs.

The presence of the short form of the subject pronoun in RCs, its distribution and the absence of indicator particles in RCs can all be explained by our claim (b), i.e. that the NP to be deleted in a RC is always marked by the indicator particle *baa*, which is deleted together with it. In order to show how this can be accomplished we will have to consider briefly the structure of main declarative sentences in Somali. In order to be grammatical every main declarative clause must contain either the indicator particle *baa* or *waa*.⁷ Thus, sentences like

- (39) **ninkii muus cunay*
 the-man banana ate
 (40) **ninkii yimid*
 the-man came

are ungrammatical. They become grammatical if either *baa* or *waa* are appropriately inserted, as in

- (41) *ninkii baa muus cunay* 'The man ate a banana'
 the-man P banana ate
 (42) *ninkii muus buu cunay*
 (43) *ninkii baa yimid* 'The man came'
 (44) *ninkii waa yimid*
 (45) *ninkii wuu yimid*

The semantic function of these particles is to mark the focus of assertion. *baa* focalizes the assertion on the NP marked by it, and *waa* on the verb. Syntactically, *waa* has to occur at the beginning of the verb-complex, i.e. the verb plus its prefixal clitics (particles and pronouns), while *baa* has to occur at the end of the whole NP. As sentences (41) and (42) show, *baa* can mark any NP of the sentence, as long as this NP precedes the verb. We said above that Somali shows a distinction between subject vs non-subject NP (see fn.4). Let us first consider the cases where *baa* marks a non-subject NP. In these cases *baa* can or must combine, according to the relative position of the NPs in the sentence, with a pronoun referring to (and agreeing with) the subject of the sentence. This pronoun is the short form of the subject pronoun seen above.⁸ The distribution of *baa* in such cases is shown by the following set of sentences:

- (a) if the subject is 3rd person (sing. or pl.):

⁷ The particle *baa* has also a variant form *ayaa*. Andrzejewski (1975) includes two more indicator particles among those which can occur in a main affirmative clause: *waxa* and *weeye*. We did not include them because they can be derived from the basic particles *baa* and *waa*

⁸ The combinations of *baa* with the short form of the subject pronouns are the following:

baa + *aan* = *baan*
baa + *aad* = *baad*
baa + *uu* = *buu*
baa + *ay* = *bay*

- (46) *ninkii muuska buu cunay* 'The man ate the banana'
 the-man the-banana P-he ate
- (47) **ninkii muuska baa cunay*
- (48) *muuska buu ninkii cunay*
- (49) *muuska baa ninkii cunay*
- (50) *muuska buu cunay ninkii*
- (51) **muuska baa cunay ninkii*

Schematically:

S	Nbuu/bay	V
*S	Nbaa	V
Nbuu/bay	S	V
Nbaa	S	V
Nbuu/bay	V	S
*Nbaa	V	S

(b) when the subject is 1st or 2nd person (sing. or pl.):

- (52) *(adigu) muuska baad cuntay* 'You (sg.) ate the banana'
 you (sg.) the-banana P-II ate
- (53) *(*adigu*) *muuska baa cuntay*
- (54) *muuska baad (adigu) cuntay*
- (55) **muuska baa (adigu) cuntay*
- (56) *muuska baad cuntay (adigu)*
- (57) **muuska baa cuntay (adigu)*

Schematically:

S	Nbaan/baad	V
*S	Nbaa	V
Nbaan/baad	S	V
*Nbaa	S	V
Nbaan/baad	V	S
*Nbaa	V	S

Summarizing, when the subject of the sentence is 1st or 2nd person, the short form of the subject pronoun must always accompany *baa* (compare (52, 54, 56) with (53, 55, 57)). When the subject NP is 3rd person, instead, the pronoun must accompany *baa* if the subject follows the verb (50 v. 51) or if the NP marked by *baa* follows the subject (46 v. 47). If the NP marked by *baa* precedes the subject NP (and this is preverbal), then the pronoun can be either present (as in (48)) or absent (as in (49)).

Let's now go back to our RCs of type II and IV (9-26) and construct their underlying structure according to our three claims, namely that they derive from main clauses in which the NP to be deleted is always marked by *baa*. When the subject of the RC is 3 person and preverbal (as in (9-11) and (18-20)) there will be three possible underlying main clauses in which the (non-subject) NP to be deleted is marked by *baa*, as shown in (46-49), i.e.:

- (58) [*warqadda*_i [*Cali warqadda*_i *buu qoray*]_s]_{NP} *maanta bay tegi doontaa*
 (59) [*warqadda*_i [*warqadda*_i *buu Cali qoray*]_s]_{NP} *maanta bay tegi doontaa*
 (60) [*warqadda*_i [*warqadda*_i *baa Cali qoray*]_s]_{NP} *maanta bay tegi doontaa*
 (61) *akhri* [*buugagga*_i [*Maryan buugagga*_i *bay kuu keentay*]_s]_{NP}
 (62) *akhri* [*buugagga*_i [*buugagga*_i *bay Maryan kuu keentay*]_s]_{NP}
 (63) *akhri* [*buugagga*_i [*buugagga*_i *baa Maryan kuu keentay*]_s]_{NP}

Now by applying the deletion rule hypothesized in (c), i.e. by deleting the NP inside the RC together with the particle *baa*, we are able to derive the correct sentences, automatically. Applied to (58), the deletion rule will leave the subject pronoun *uu* between the subject NP and the verb, thus giving rise to (11). Applied to (59), it will leave the pronoun *uu* before the subject NP, thus giving rise to (10). Finally, when the rule is applied to (60), nothing will be left (since *baa* in this case is not accompanied by the subject pronoun) and (9) will be produced. The relevant part of the derivation can be sketched in the following way (where slashes mark the portion subject to the deletion operation):

- (58) [*Cali warqadda baa* + *uu qoray*] \implies [*Cali uu qoray*] (= (11))
 (59) [*warqadda baa* + *uu Cali qoray*] \implies [*uu Cali qoray*] (= (10))
 (60) [*warqadda baa* *Cali qoray*] \implies [*Cali qoray*] (= (9))

In the same way, (61) will give rise to (20), (62) to (19) and (63) to (18).

Consider now the cases where the subject is post-verbal. Here there is only one possible main clause construction with *baa* (as shown by (50-51)); correspondingly there is only one possible underlying structure from which a RC can be derived, i.e.

- (64) [*warqadda*_i [*warqadda*_i *buu qoray Cali*]_s]_{NP} *maanta bay tegi doontaa*
 (65) *akhri* [*buugagga*_i [*buugagga*_i *buu keentay Maryan*]_s]_{NP}

while structures like

- (66) * [*warqadda*_i [*warqadda*_i *baa qoray Cali*]_s]_{NP} *maanta bay tegi doontaa*
 (67) * [*akhri* [*buugagga*_i [*buugagga*_i *baa kuu keentay Maryan*]_s]_{NP}

will be ill-formed. The deletion rule will again automatically obtain the correct results. It will derive (12) from (64) and (21) from (65); the ill-formedness of (66) and (67) will result in the ungrammaticality of (13) and (22).

When the subject of a main clause is 1st or 3rd person, *baa* must be accompanied by the subject pronoun, as shown in (52-57). Thus, underlying structures like

- (68) [*warqadda*_i [*warqadda*_i *baad qortay*]_s]_{NP} *maanta bay tegi doontaa*
 (69) [*warqadda*_i [*warqadda*_i *baad qorteen*]_s]_{NP} *maanta bay tegi doontaa*
 (70) *akhri* [*buugagga*_i [*buugagga*_i *baan kuu keenay*]_s]_{NP}
 (71) *akhri* [*buugagga*_i [*buugagga*_i *baan kuu keennay*]_s]_{NP}

will be well-formed, while underlying structures like

- (72) **[warqadda_i [warqadda_i baa qortay]_s]_{NP} maanta bay tegi doontaa*
 (73) **[warqadda_i [warqadda_i baa qorteen]_s]_{NP} maanta bay tegi doontaa*
 (74) **akhri [buugagga_i [buugagga_i baa kuu keenay]_s]_{NP}*
 (75) **akhri [buugagga_i [buugagga_i baa kuu keennay]_s]_{NP}*

will be ill-formed. Consequently, sentences like (14), (16), (23), (25), respectively derived from (68-71) will be grammatical, while sentences like (15), (17), (24), (26) will be ungrammatical as a result of the ill-formedness of (72-75). As it can be seen, by assuming that RCs are derived from main *baa*-clauses where the NP identical to the head-noun is always marked by *baa* and deleted together with *baa*, we are able to explain simultaneously the fact that in RCs indicator particles can never occur (since they are deleted), the fact that the short form of the subject pronoun occurs by itself (since it comes out as a residue of the deletion operation), and the distribution of the subject pronoun inside the RC. Furthermore, notice that the co-relation between main *baa*-sentences and the position of the subject pronoun inside the RC, explained by our hypothesis, extends far beyond the few cases we quoted. For example, in RCs where more NPs are present, such as

- (76) *buugagga Cali wiilka toban shilin ugu soo iibiyay waa kuwaas*
 the-books Ali the-boy ten shilling for-with hither bought P those
 'The books that Ali bought for ten sh. for the boy are those'

the subject pronoun referring to *Cali* can alternatively appear in any preverbal position:

- (77) *buugagga (uu) Cali (uu) wiilka (uu) toban shilin (uu) ugu soo iibiyay waa kuwaas*

All four sentences of (77) are perfectly grammatical. Now the main clause underlying the RC of (77) can be constructed in any of the following ways:

- (78) *buugagga buu Cali wiilka toban shilin ugu soo iibiyay*
 (79) *Cali buugagga buu wiilka toban shilin ugu soo iibiyay*
 (80) *Cali wiilka buugagga buu toban shilin ugu soo iibiyay*
 (81) *Cali wiilka toban shilin buugagga buu ugu soo iibiyay*

Again, (78-81) are perfectly grammatical sentences. The deletion rule will thus automatically produce all the possibilities of (77).

Up to now, we have been considering only RCs of type II and IV. However, our analysis of RCs applies equally well to RCs of type I and III, i.e. those in which the deleted NP is the subject of the relative clause. Consider the following sentences:

- (82) *gabarta muuska cuntay waa walaashay* (= (15)) 'The girl who ate the banana is my sister'
 The-girl the-banana ate P my-sister
 (83) **gabarta ay muuska cuntay*aa walaashay*
 (84) **gabarta muuska ay cuntay waa walaashay*
 (85) *anigu wiilkii Jaamacadda adayay baan la hadlay* (= III) 'I spoke to the boy who was going the University'
 I the-boy University was-going P-I with spoke
 (86) **anigu wiilkii uu Jaamacadda adayay baan la hadlay*

(87) **anigu wiilkii Jaamacadda uu adayay baan la hadlay*

In these types of RCs the subject pronoun can never be present, as shown by the ungrammaticality of (83-84) and (86-87). Consider now main sentences where *baa* marks the subject NP:

(88) *ninka baa muuska cunay* 'The man ate the banana'
the-man P the-banana ate

(89) **ninka buu muuska cunay*

(90) *muuska ninka baa cunay*

(91) **muuska ninka buu cunay*

When *baa* marks the subject NP, it can never combine with the subject pronoun. Since RCs of types I and III are those in which the subject NP is deleted, according to our claim (b) the main clauses from which they derive will always have their subjects marked by *baa*. Consequently they will never allow the subject pronoun to be combined with *baa* and this explains why we can never find the subject pronoun in these types of RCs. Sentences like (82) and (85) have only one possible underlying source, namely

(92) [*gabarta_i [gabarta_i baa muuska cuntay]_s]_{NP} waa walaashay*

(93) *anigu [wiilkii_i [wiilki_{iii} baa Jaamacadda adayay]_s]_{NP} baan la hadlay*

Consequently they will never allow the subject pronoun to be combined with *baa* and given our analysis of RCs, the ungrammaticality of (83-84) and (86-87), is automatically predicted by the ungrammaticality of:

(94) **gabarta bay muuska cuntay*

(95) **muuska gabarta bay cuntay*

(96) **wiilkii buu Jaamacadda adayay*

(97) **Jaamacadda wiilkii buu adayay*

which should be their underlying sources.

2.2.2. Subject-Verb agreement

Further evidence for our hypothesis comes from the examination of the form of the verb found in RCs. The crucial feature is here the different types of subject-verb agreement manifested in the different types of RCs. In RCs of type II and IV, the subordinate verb shows a complete agreement-pattern with its subject:

(98) *warqadda uu Cali qoray maanta bay tegi doontaa* (=II) 'The letter that Ali wrote will leave now'
the-letter he Ali wrote now P-she go will

(99) *warqadda ay Maryan qortay maanta bay tegi doontaa*

(100) *warqadda ay wiilashaasi qoreen maanta bay tegi doontaa*
...those-boys...

(101) *akhri buugagga uu Cali kuu keenay* (=IV) 'Read the books that Ali brought to you!'
read the-books he Ali you-to brought

clauses underlying RCs of type I and III will show the partial subject-verb agreement pattern. Thus, sentences like (100) and (103) are derived from

(115) [*warqadda_i* [*warqadda_i* bay wiilashaasi qoreen]_s]_{NP} *maanta bay tegi doontaa*

(116) *akhri* [*buugagga_i* [*buugagga_i* bay wiilashaasi keeneen]_s]_{NP}

Since in both clauses the plural subject *wiilashaasi* is not marked by *baa*, the verb agrees with it as in the a-sentences (114), *qoreen*, *keeneen*. Sentences like (105) and (107) are derived from

(117) [*wiilasha_i* [*wiilasha_i* baa kuu soo qoray]_s]_{NP} *waa saaxiibaday*

(118) [*gabdhaha_i* [*gabdhaha_i* baa talyaaniga baray]_s]_{NP} *baan hadlay*

Since in these clauses the plural subject *wiilasha*, *gabdhaha* is marked by *baa*, the verb agrees with it as in the b-sentences (114), *qoray*, *baray*. Thus, the subject-verb agreement pattern found in RCs constitutes independent evidence in favour of our analysis of RCs.

3. SUBORDINATE CLAUSES

We wish now to consider the construction of (what in other languages are) non-relative subordinate clauses, i.e. complement and adverbial clauses. Given our analysis of RCs, we can show that in Somali all subordinate clauses are syntactically construed as relative clauses, and that, therefore, they are all RCs of type IV. Evidence for this claim is not hard to find. Let's consider some examples of complement and adverbial subordinate clauses:

(119) *in Cali yimaado baan doonayaa* 'I want Ali to come'
that Ali comes P-I want

(120) *goorta qorraxdu dhacdo imow* 'Come when the sun sets!'
when the-sun sets come

(121) *sida Axmed doonaya u qor ereyga* 'Write the word as Ahmed wants it!'
As Ahmed wants at write the-word

First of all notice that all these clauses are introduced by an element which is a real noun (*in* means 'part', *goor* means 'time', *si* means 'manner'), as shown by the fact that it can be modified by the definite article (giving *inta*, *goorta*, *sida*). This noun acts as the head-noun of a RC. Notice further that these clauses can contain the short form of the subject pronoun, as RCs of type II and IV, and that its distribution is exactly the same as in RCs. Specifically, when the subject is 3rd person, the pronoun can be absent, as in (119), (120), (121), or present, and in the last case it can occupy any preverbal position:

(122) *in uu Cali uu yimaado baan doonayaa*

(123) *in Cali uu yimaado baan doonayaa*

(124) *goorta ay qorraxdu dhacdo imow*

(125) *goorta qorraxdu ay dhacdo imow*

(126) *sida uu Axmed doonayo u qor ereyga*

(127) *sida Axmed uu doonaya u qor ereyga*

When the subject of the subordinate clause is 1st or 2nd person the pronoun is obligatory:

- (128) *in aad timaado baan doonayaa* 'I want you to come'
 (129) **in timaado baan doonayaa*
 (130) *sida aan doonayna u qor ereyga* 'Write the word as we want it!'
 (131) **sida doonayna u qor ereyga*

In view of these facts, subordinate clauses like (119-130) are to be derived, in a way completely parallel to RCs, from underlying structures like the following (underlying, respectively, (119), (124), (127)):

- (132) [*in_i [in_i baa Cali yimaado]_s]_{NP} baan doonayaa*
 (133) [*goorta_i [goorta_i bay qorraxdu dhacdo]_s]_{NP} imow*
 (134) [*sida_i [Axmed sida_i buu doonaya]_s]_{NP} u qor ereyga*

In these structures the NPs *in*, *goorta*, *sida* are head-nouns of a RC construction. NPs identical to them are contained in the RC and are always marked by *baa*. In the process of derivation these are deleted together with *baa* by the ordinary deletion-rule operating in the derivation of RCs. Since, on the other hand, NPs like *in*, *goorta*, *sida* will never be either subject of the main clause or subject of the RC, all complement and adverbial clauses will be RCs of type IV.

The examination of the subject-verb agreement pattern confirms this analysis. If complement and adverbial subordinate clauses are RCs of type IV, we predict that the subordinate verb will agree with its subject according to the complete pattern, and in fact when the subject is Pl. 3 the verb shows the Pl. 3 ending (-*aan*):

- (135) *in ay wiilashassi yimaadaan baan doonayaa*
 (136) *sida ay wiilashaasi doonayaan u qor ereyga*

4. NOUN MODIFIERS

4.1 Types of noun modifiers

Besides RCs, there are in Somali three other kinds of constructions that modify a head-noun. They are exemplified by the following NPs:

- (137) a. *guriga macallinka* 'the house of the teacher'
 the-house the-teacher
 b. *macallinka gurigiisa*
 the-teacher his-house
 (138) a. *nin wanaagsan* 'a good man'
 man good
 b. *wiilka dheer* 'the tall boy'
 the-boy tall
 (139) a. *naag dug ah* 'an old woman'
 woman old-person is

b. *miis qori ah*
table wood is

'a wooden table'

The type exemplified in (137) is the genitive-possessive construction. When a noun stands in the genitive-possessive relation to the head-noun it can either follow the head-noun (as in (a)), or precede it, in which case the head-noun acquires the suffixal possessive pronoun, as in (b). These constructions and the formal means marking them have been described by Andrzejewski (1954, 1975), and we will not say anything further on them.

We would like instead to consider the head-modifier constructions appearing in (138) and (139). In the type exemplified by (138) the head-noun is modified by a (so-called) "adjective", which follows it; in the type exemplified by (139) the head-noun is modified by a noun, which, however, does not stand in the genitive-possessive relation to it. We want to consider these two constructions from the point of view of our analysis of RCs.

4.1.1. Noun-"adjective"

Given this analysis, we can argue that constructions of the type of (138) are all relative clauses, and that, consequently, there is no need of postulating in Somali a formal class of adjectives as distinct from the category of verbs. Notice in fact what happens when "adjectives" occur as predicates in main clauses. As for verbs, there is a difference in their conjugation according to whether or not the subject NP is marked by *baa*: (the order is as in (108-114): sentences mean "X is good":¹⁰

- | | | |
|-------|---------------------------------------|--------------------------------|
| (140) | a. <i>anigu waa wanaagsan ahay</i> | b. <i>aniga baa wanaagsan</i> |
| (141) | a. <i>adigu waa wanaagsan tahay</i> | b. <i>adiga baa wanaagsan</i> |
| (142) | a. <i>isagu waa wanaagsan yahay</i> | b. <i>isaga baa wanaagsan</i> |
| (143) | a. <i>iyadu waa wanaagsan tahay</i> | b. <i>iyaga baa wanaagsan</i> |
| (144) | a. <i>annagu waa wanaagsan nahay</i> | b. <i>annaga baa wanaagsan</i> |
| (145) | a. <i>idinku waa wanaagsan tihiin</i> | b. <i>idinka baa wanaagsan</i> |
| (146) | a. <i>iyagu waa wanaagsan yihiin</i> | b. <i>iyaga baa wanaagsan</i> |

Notice further that in the past tense equivalents of (140-146), where the endings of the verb 'to be' for the b-sentences remain, we have the typical difference in the pattern of agreement between subject and verb, already seen for verbs:

- | | | |
|-------|--------------------------------------|-----------------------------------|
| (147) | a. <i>anigu waa wanaagsanaa</i> | b. <i>aniga baa wanaagsanaa</i> |
| (148) | a. <i>adigu waa wanaagsanayd</i> | b. <i>adiga baa wanaagsaaa</i> |
| (149) | a. <i>isagu waa wanaagsanaa</i> | b. <i>isaga baa wanaagsanaa</i> |
| (150) | a. <i>iyadu waa wanaagsanayd</i> | b. <i>iyada baa wanaagsanayd</i> |
| (151) | a. <i>annagu waa wanaagsanayn</i> | b. <i>annaga baa wanaagsanayn</i> |
| (152) | a. <i>idinku waa wanaagsanaydeen</i> | b. <i>adinka baa wanaagsanaa</i> |

¹⁰ Since in sentences (140-146) and (147-153) there is only one NP (and *baa* marks only NPs), we have to use the indicator particle *waa* in order to show their behavior when the subject NP is not marked by *baa*. This is not a problem, however, because affirmative sentences containing *waa* always determine the form of the verb in exactly the same way as affirmative sentences where *baa* marks a non-subject NP (see Andrzejewski, 1975).

- (153) a. iyagu waa wanaagsanayeen b. iyaga baa wanaagsanaa

When *baa* marks the subject NP the distinctions among Sg. 2, Sg. 3m, Pl. 2, and Pl. 3., are neutralized, exactly as it happens in verbal sentences. In view of the syntactic parallelism between (147a-153a) and (147b-153b) on the one side, and (140a-146a) and (140b-146b) on the other, we propose to treat all so-called “adjectives” as verbs; the paradigm given in (140b-146b) is the special present tense of this kind of verb when their subject is marked by *baa*.

Modifier constructions like those in (138) can then be treated as ordinary relative clauses, since they will be automatically generated by our general rules for the derivation of RCs. As all RCs, they will be derived from main clauses where the NP to be deleted is marked by *baa*. Since in these constructions this NP will always be the subject of the clause, the corresponding RCs will all belong to type I or III, and consequently their verb will show the partial subject-verb agreement pattern. Thus NPs like (138a) and (138b) will be derived from underlying structure like

- (154) $[nin_i [nin_i \text{ baa wanaagsan}]_S]_{NP}$

- (155) [*wiilka*_i [*wiilka*_i *baa dheer*]_S]_{NP}

The usual deletion rule will delete the NP identical to the head-noun together with *baa*, thus producing (138a-b).

4.1.2. Noun-noun -ah

The same analysis can be extended to modifier constructions of the type shown in (139), i.e. they can all be treated as RCs of type I or III. In fact, if we turn the NP into a predicative main clause, we can again observe a difference in the verbal form, according to whether or not the subject of the clause is marked by *baa*, (the sentences mean 'X is old'):

- | | | |
|-------|-----------------------------------|-----------------------------|
| (156) | a. <i>anigu duq baan ahay</i> | b. <i>aniga baa duq ah</i> |
| (157) | a. <i>adigu duq baad tahay</i> | b. <i>adiga baa duq ah</i> |
| (158) | a. <i>isagu duq buu yahay</i> | b. <i>isaga baa duq ah</i> |
| (159) | a. <i>iyadu duq bay tahay</i> | b. <i>iyada baa duq ah</i> |
| (160) | a. <i>annagu duq baan nahay</i> | b. <i>annaga baa duq ah</i> |
| (161) | a. <i>idinku duq baad tihiiin</i> | b. <i>idinka baa duq ah</i> |
| (162) | a. <i>iyagu duq bay yihiin</i> | b. <i>iyaga baa duq ah</i> |

In the past tense the typical difference in the pattern of agreement between subject and verb emerges again:

- | | | |
|-------|------------------------------------|--------------------------------|
| (163) | a. <i>anigu duq baan ahaa</i> | b. <i>adiga baa duq ahaa</i> |
| (164) | a. <i>adigu duq baad ahayd</i> | b. <i>adiga baa duq ahaa</i> |
| (165) | a. <i>isagu duq buu ahaa</i> | b. <i>isaga baa duq ahaa</i> |
| (166) | a. <i>iyadu duq bay ahayd</i> | b. <i>iyada baa duq ahayd</i> |
| (167) | a. <i>annagu duq baan ahayn</i> | b. <i>annaga baa duq ahayn</i> |
| (168) | a. <i>idinku duq baad ahaydeen</i> | b. <i>idinka baa duq ahaa</i> |

(169) a. *iyagu duq bay ahayeen*

b. *iyaga baa duq ahaa*

As it can be seen, all these sentences are ordinary verbal clauses whose main verb is the verb *ahaansho* 'to be'. Again on the basis of the syntactic parallelism between (163-169) and (156-162), we can say that the form *ah* in (163b-169b) is the special present tense form of the verb 'to be' when its subject is marked by *baa*. We can now treat modifiers like those in (139) as ordinary RCs where the NP subject is deleted. Consequently, we will derive them from underlying structures like

(170) [*naag_i [naag_i baa duq ah]_S]_{NP}*

(171) [*miis_i [miis_i baa qori ah]_S]_{NP}*

Since in these RCs the subject NP is marked by *baa* the verb "to be" appears in its special form *ah*. Application of the deletion rule will produce (139a-b).

5. SOME SEMANTIC CONSIDERATIONS: A PROBLEM FOR LINGUISTIC THEORY

5.1. Semantic function of indicators

We said above that indicator particles occurring in a Somali main declarative clause mark the focus of assertion. Thus, while

(172) *ninkii waa yimid*

can be glossed as 'the man came,' a sentence like

(173) *ninkii baa yimid*

is more accurately glossed as 'It is the man who came,' i.e. by means of a cleft construction focusing the assertion of the NP rather than on the verb as in (172). Similarly, sentences like

(174) *ninkii muuska buu cunay*

(175) *ninkii baa muuska cunay*

correspond, respectively, to 'It is the banana that the man ate' and 'It is the man who ate the banana.' This property of indicator particles can be formally demonstrated by creating appropriate test-frames for the use of the different sentences. Thus, to a question like

(176) *Yaa muuska cunay?*

'Who ate the banana?'

one can only answer with

(177) *Cali baa muuska cunay*
Ali P the-banana ate

while a sentence like

(178) *Cali muuska buu cunay*
Ali the-banana P-he ate

would be totally inappropriate and impossible to use in this context. On the other hand, to a question like

(179) *Muxuu Cali cunay?*

'What did Ali eat?'

the only possible answer is (178), while (177) would be totally inappropriate. Questions like (176) and (179) create a controlled context such that only one piece of the information conveyed by the following sentence is new while the rest is already given. Therefore, we can say that *baa* has to mark the piece of contextually new information conveyed by a sentence, and it cannot mark a piece which is already contextually given. Using traditional terms, we can say that *baa* marks the comment, focus, or rheme of the sentence, as opposed to its topic or theme.

5.2. Topic, focus and relativization

In our analysis of RCs we presented ample evidence, based on purely formal (i.e., non-semantic), grounds, that in a Somali RC the deleted NP must always be marked by *baa*. In view of the semantic function of the NPs marked by *baa*, this finding constitutes a puzzling problem for the general theory of RC construction.

Kuno (1973) in his analysis of RC construction in Japanese shows that in this language RCs are to be derived from main clauses through deletion of a NP identical to the head-noun, in a way parallel to the derivation we postulated for Somali RCs. But he also argues that the deleted NP in Japanese is always marked by the particle *wa*. Thus, a NP like

(180) *Hanako ga yonda hon*
H. subj. read book

"the book that Hanako read"

is to be derived from an underlying structure like

(181) $[[\text{Hanako ga hon, wa yonda}]_{\text{hon}}]_{\text{NP}}$
top.

through deletion of the NP internal to S, *hon*, together with the particle *wa*. In Japanese main clauses the particle *wa* marks the NP which is topic or theme of the sentence. Thus, Kuno's analysis shows that in RCC the NP to be deleted has to be the topic of the subordinate clause. This finding runs exactly opposite to what we found in Somali RCC, namely, that the NP to be deleted has to be the comment or focus of the subordinate clause.

The problem is not limited to Japanese RCC. In a later paper, Kuno (1976) shows that his claim about the topicality of the deleted NP holds also in English, where the processes involved in the derivation of a RC are different from Japanese or Somali. Furthermore, this generalization seems to be a good candidate for a linguistic universal. Keenan and Comrie (1977) in a cross-linguistic study of relativization noted that different languages have different capabilities of constructing a RC. The fundamental variable affecting this capability is the grammatical function played in the RC by the NP identical to the head-noun, i.e., the NP which is deleted or pronominalized. In this respect the following hierarchy of functions seems to operate:

(182) Subject > Dir. Obj. > Ind.Obj. > Obj. of Prep. > Posses. NP > Obj. of Comparative.

The hierarchy is interpreted in the following way: most languages (perhaps all) allow a RC to be constructed when the NP identical to the head-noun is subject of the RC; fewer languages allow RCC also when this NP is direct object of the RC; still fewer languages also when this NP is indirect object of the RC; and so on. Furthermore, if a language allows a RC to be constructed, for example, on the indirect object, then it also necessarily allows RCC on the direct object and on the subject; if a language allows a Posses. NP to be relativized, then it also allows RCC on the object of preposition, indirect object, direct object and subject; and so on. This finding suggests that it is universally easier to construct

a RC if the NP involved is subject of the RC than if it is direct object; the direct object NP, in turn, is easier than the indirect object; and so on.

Kuno correctly observes that this hierarchy is a "thematicity" hierarchy: the subject NP is usually the theme or topic of a sentence, and certainly a direct object NP is more thematic than a possessive NP. The interpretation of Keenan and Comrie's hierarchy in terms of thematic relations has been independently confirmed in a study of Italian clitic pronominalization (Antinucci, 1977). Pronominalization phenomena are in many respects similar to deletions (as we saw, RCC can involve either of them); thus, the general conclusion seems to be that operations like pronominalizing or deleting are strongly dependent on the thematic relation of the NP involved, and, more specifically, that they tend to affect a thematic or topical NP and not a rhematic or focused NP.

The Somali case runs completely opposite to this apparently universal trend. Not only the NP deleted in the derivation of RCs needs not to be the theme of the clause, but it has actually to be its focus. We have no solution to suggest and will simply leave this as a problem for future research.

REFERENCES

- Andrzejewski, B. W. 1964. *Declensions of Somali Nouns*. London: School of Oriental and African Studies.
- _____. 1974. "The Introduction of a national orthography for Somali", *African Language Studies* 15: 199-203.
- _____. 1975. "The rôle of indicator particles in Somali." *Afroasiatic Linguistics* 1(6): 123-191.
- Antinucci, F. 1977. "L'interazione dei sistemi nella competenza linguistica: la pronominalizzazione in italiano." *Rivista di Grammatica Generativa* 2:3-42.
- Antinucci, F. and A. Puglielli 1978. "Relative clause construction in Somali: A comparison between the Northern and Coastal dialects." Paper presented at the Third International Hamito-Semitic Congress, London.
- Hetzron, R. 1965. "The particle *bàa* in Northern Somali." *Journal of African Languages* 4:118-130.
- Keenan, E. and B. Comrie 1977. "Noun phrase accessibility and universal grammar." *Linguistic Inquiry* 8:63-99.
- Kuno, S. 1973. *The Structure of the Japanese Language*. Cambridge, Mass.: The M.I.T. Press
- _____. 1976. "Subject, theme and the speaker's empathy: a reexamination of relativization phenomena." In C.N. Li (ed.), *Subject and Topic*, New York: Academic Press.
- Zholkovsky, A.K. 1966. *Sintaksis Somali*. Moscow: Izdatel'stvo "Nauka."



STUDIES in AFRICAN LINGUISTICS

A journal devoted to descriptive studies on African languages and articles in linguistic theory which rely on data from African languages. Published by the Department of Linguistics and the African Studies Center University of California, Los Angeles

Editor: Russell G. Schuh

Editorial Board: Eyamba G. Bokamba, David J. Dwyer, Baruch Elimelech, John B. Eulenberg, Victoria A. Fromkin, Talmy Givon, Robert Hetzron, Jean-Marie Hombert, Larry M. Hyman, William R. Leben, Carol Lord, Martin Mould, Carol Scotton, Herbert Stahlke, Benji Wald, William E. Welmers

Studies in African Linguistics appears three times yearly. In addition, supplements appear irregularly. Sample articles that have appeared in the journal:

HERBERT STAHLKE, "Segment sequences and segmental fusion"

PATRICK BENNET and JAN STERK, "South Central Niger-Congo: a reclassification"

PAUL NEWMAN, "Chadic extensions and pre-dative verb forms in Hausa"

ROBERT NICOLAI, "Les parlers songhay occidentaux (Tombouctou — Jenné — Ngorku)"

DAVID DWYER, "What sort of tone language is Mende?"

MALILLO MOROLONG and LARRY M. HYMAN, "Animacy, objects and clitics in SeSotho"

LEE TRITHART, "Topicality: an alternative to the relational view of the Bantu passive"

and articles on many other languages and theoretical areas.

The most recent supplements have been *Papers from the 5th Conference on African Linguistics* (Supplement 5), *Papers in African Linguistics in Honor of Wm. E. Welmers* (Supplement 6), and *Papers from the 8th Conference on African Linguistics* (Supplement 7).

Subscriptions for individuals are \$10.00 per year or \$18.00 for two years.
Institutional subscriptions are \$15.00 per year.
Add \$7.00 per year for overseas subscriptions sent airmail.
Send contributions, orders, and requests to:

Studies in African Linguistics
Department of Linguistics
University of California
Los Angeles, CA 90024

AAL includes contributions in linguistics within the vast domain of Afroasiatic (Hamito-Semitic) languages. Articles of general, theoretical interest using Afroasiatic material, descriptive, historical and comparative studies are included.

Editors: Robert Hetzron (698 Zink Ave., Santa Barbara, CA 93111, U.S.A.)
Russell G. Schuh (15337 Hart St., Van Nuys, CA 91406, U.S.A.)

Volume One

Articles by P. Newman, R. G. Schuh, J. L. Malone, R. Hetzron, T. Givón, T. M. Johnstone, B. W. Andrzejewski, and H. Minkoff.

Volume Two

Articles by D. R. Cohen, C. D. Johnson, A. Barnea, R. Nir, C. T. Hodge, G. Janssens, S. Segert, J. B. Callender, J. L. Malone, T. Givón, and A. D. Corré.

Volume Three

Articles by R. G. Schuh, G. Buccellati, R. Hetzron, J. Saib, R. Steiner, D. Boyarin, I. Avinery, A. Zaborski, E. Rubinstein, and P. Abboud.

Volume Four

- Issue 1: Neil Skinner, *North Bauchi Chadic Languages: Common Roots*, 49 pp.; and 'Fly' (Noun) and 'Mouth' in Afroasiatic, 12 pp., \$6.40.
Issue 2: Lewis Glinert, *Number Switch: A Singular Feature-change Rule in Modern Hebrew*, 38 pp., \$4.00.
Issue 3: Russell G. Schuh, *Bade/Ngizim Determiner System*, 74 pp., \$7.60.
Issue 4: Joshua Blau, *The Beginnings of the Arabic Diglossia. A Study of the Origins of Neoarabic*, 28 pp., \$3.00.

Volume Five

- Issue 1: Paul Newman, *Chadic Classification and Reconstructions*, 42 pp., \$4.40.
Issue 2: D. L. Appleyard, *A Comparative Approach to the Amharic Lexicon*, 67 pp., \$6.90.
Issue 3: Shmuel Bolozy, *Word Formation Strategies in the Hebrew Verb System: Denominative Verbs*, 26 pp., \$2.80.
Issue 4: J. Rosenhouse, *On the Complexity of Some Types of Complex Sentences in Urban Moroccan Arabic and Some Other Arabic Dialects*, 15 pp., \$1.70.
Issue 5: Janet H. Johnson, *Remarks on Egyptian Verbal Sentences*, 20 pp., \$2.20.
Issue 6: Donald A. Burquest, *Semantic Parameters in Angas Kinship Terminology*, 29 pp., \$3.10.

Volume Six

- Issue 1: Malachi Barkai, *Theoretical Implications of Consonant Sequence Constraints in Israeli Hebrew*, 13 pp.; and Zev Bar-Lev, *The Ordering of Hebrew Morphological Processes*, 8 pp., \$2.40.
Issue 2: Bernd Heine, *The Sam Languages: A History of Rendille, Boni and Somali*, 93 pp., \$7.80.
Issue 3: Ruth Aronson Berman, *Lexical Decomposition and Lexical Unity in the Expression of Derived Verbal Categories in Modern Hebrew*, 26 pp., \$2.80.
Issue 4: *Bibliographic Bulletin*, 17 pp., \$2.00.
Issue 5: Ekkehard Wolff, *Grammatical Categories of Verb Stems and the Marking of Mood, Aktionsart, and Aspect in Chadic*, 48 pp., \$5.00.
Issue 6: A.M.R. Aristar, *The Ilwy Verbs and the Vowel System of Proto-West Semitic*, 17 pp., \$2.00.

Volume Seven

- Issue 1: Hans-Jürgen Sasse, *The Consonant Phonemes of Proto-East-Cushitic (PEC): A First Approximation*, 67 pp., \$7.00.
Issue 2: Zafira Malisford, *Love Through Death in Modern Hebrew. A Syntactic Treatment*, 16 pp., \$1.80.
Issue 3: Francesco Antinucci and Annamaria Puglielli, *The Syntax of Indicator Particles in Somali: Relative Clause Construction*, 18 pp., \$2.00.

Subscriptions to one volume of about 200 pp.: \$17.00. California residents please add 6% tax. Individual issues available separately. Descriptive flyers, with complete list of abstracts and prices for individual issues, are free on request. Write to:

UNDENA PUBLICATIONS, P.O. Box 97, Malibu, California 90265, U.S.A.