STUDIES in AFRICAN LINGUISTICS

MARCH 1979
Volume 10, Number 1

Published by the Department of Linguistics and the African Studies Center, University of California, Los Angeles

Special Issue on Bantu Syntax
STUDIES IN AFRICAN LINGUISTICS

Published by the Department of Linguistics
and the African Studies Center
The University of California, Los Angeles

Editor
Russell G. Schuh

Executive Board
Peter Ladefoged
Michael Lofchie
Yero Sylla

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

Editorial Assistance
Lorraine Gardner
Alice McGaughey
Ann West

Studies in African Linguistics is published three times a year. Occasional supplements are published subject to availability of funding and are sent free of charge with current subscriptions. Contributors please see "Note to Contributors" inside the back cover. All correspondence and contributions to the journal should be sent to

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

Subscriptions: Individuals: $10.00 per year, $18.00 for two years
Institutions: $15.00 per year
Single issues: $4.00 through Vol. 9; $5.00 from Vol. 10
Supplements: $8.00 (if ordered separately)
(Add $7.00 per year for overseas Air Mail subscriptions)

Make checks payable to The Regents of the University of California.

Volume 10, Number 1, March 1979
Copyright 1979
By the Regents of the University of California
STUDIES IN AFRICAN LINGUISTICS

Volume 10, Number 1
March 1979

TABLE OF CONTENTS

Articles

Lee Trithart, TOPICALITY: AN ALTERNATIVE TO THE RELATIONAL VIEW OF BANTU PASSIVE .................. 1

Alessandro Duranti, OBJECT CLITIC PRONOUNS IN BANTU AND THE TOPICALITY HIERARCHY .................... 31

Gerard M. Dalgish, THE SYNTAX AND SEMANTICS OF THE MORPHEME ni IN KIVUNJO (CHAGA) .................. 47

Sukari Salone, TYPOLOGY OF CONDITIONALS AND CONDITIONALS IN HAYA ...................................... 65

Annie K. Hawkinson, HOMONYMY VERSUS UNITY OF FORM: THE PARTICLE -A IN SWAHILI ................... 81

Conference Report

TENTH ANNUAL CONFERENCE ON AFRICAN LINGUISTICS ................ 111

PUBLICATIONS RECEIVED .................................. 116

Guidelines for Contributors .......................... inside back cover
I'm sure subscribers to *Studies in African Linguistics* and everyone associated with the journal join me in thanking Tom Hinnebusch for his years of service to African language study as editor. He continued the tradition established by his predecessors, Talmy Givón and Larry Hyman, in maintaining the high standard of scholarship for which SAL has come to be known. I will strive to retain this standard. As a new feature of SAL, I would like to invite short notes citing interesting problems which do not merit full articles, data which support or contradict current theoretical issues, short remarks or queries concerning articles which have appeared in the journal, etc. These notes should not exceed 500 words, including examples. In order that these notes remain timely, we guarantee that if accepted they will appear no later than the issue following their receipt.

Russell G. Schuh
Editor
In the past few years the theory of relational grammar and its universal definition of passive have provided a framework for much work on passive in Bantu. After extensive investigation it has become clear that across Bantu the theory and definition fail rather badly in the description of certain kinds of data. In an attempt to draw some positive conclusions from this situation, the present paper (1) presents the relational claim, (2) presents relatively typical data on passive from one Bantu language, Chichewa,* (3) outlines some of the problems relational grammar encounters with such data, and (4) suggests an alternative framework which makes extensive use of the discourse notion of topicality. Selection of this framework is based on (a) the repeating (nonrelational) tendencies which have been incidentally noted across relational descriptions of Bantu passive, and (b) the range of syntactic processes in Chichewa (in addition to passive) which these tendencies influence.

1. The Relational Claim

Relational grammar makes three claims which are relevant to the discussion of Bantu passive. The first is the universal definition of

*Three Malawians have been the primary sources for the Chichewa data in this paper: Mr. Stanley Wako from Mlanje, who was an informal contributor; Mr. Benson Kandoole from Monkey Bay, who assisted in marking tone; and Mrs. Catherine Fukulan from Lilongwe, who provided almost all of the sentences and judgments which appear in Section 2. I wish to thank each of these people for their help. The work upon which this paper is based was partially supported by the University of California at Los Angeles.
passive\textsuperscript{1} [Perlmutter and Postal 1977]. This definition basically states that passive is a rule which places a direct object in the subject relation. Thus (1b) and (2b) below are passive sentences in English and Chichewa respectively, since in each case, a direct object has become a subject.

(1) a. John hit my mother.
   b. My mother was hit by John.

(2) a. Jóni a- ná- meny- a m-ái w-ángá
    John\textsubscript{i} he\textsubscript{j} past hit indic mother\textsubscript{j} my\textsubscript{j}
    'John hit my mother'

   b. m-ái w-ángá a- ná- meny- edw-\textsuperscript{2} a ndí Jóni
    mother\textsubscript{i} my\textsubscript{i} she\textsubscript{j} past hit passv indic by John
    'my mother was hit by John'

The second claim is the stratal uniqueness law.\textsuperscript{3} This law basically says that a clause can have only one subject, one direct object, and one indirect object at a time. Thus, in (1a) John is the subject; in (1b), however, it is not. Similarly, in (2a) Jóni is the subject; in (2b), however, it is not.

---

\textsuperscript{1}The actual definition, as stated in Perlmutter and Postal [1977] is given below:

"If (i) the RN [Relational Network] for a clause Q has a nominal N\textsubscript{a} that bears the 2-relation [direct object relation] in a stratum in which some nominal N\textsubscript{b} bears the 1-relation [subject relation], and (ii) the N\textsubscript{a} bears the 1-relation [subject relation] in the following stratum [essentially equivalent to a step in a derivation], then Q is a passive clause."

\textsuperscript{2}The -dw- affix in Chichewa corresponds to the -w- affix in most other Bantu languages. The development of -d- in this affix is a Chichewa innovation.

\textsuperscript{3}The formal statement of the stratal uniqueness law [Perlmutter and Postal 1977] is given below:

"Let n be a variable ranging over a set of relational signs for term relations, let c\textsubscript{k} be a single arbitrary coordinate, let c\textsubscript{x}, c\textsubscript{y}, etc. be variables over sequences of coordinates (which may be null) and let a, b, d be variables over nodes. Then, if \([n(a,b) < c\textsubscript{x}c\textsubscript{k}c\textsubscript{y}]\) and \([n(d,b) < w\textsubscript{c}c\textsubscript{k}c\textsubscript{y}]\) are both arcs in some RN, a = d."
The third claim, the *chômeur* condition,\(^4\) defines the status of a NP like John in (1b) and Jóni in (2b), after some other NP such as *my mother* in (1b) and mái wângâ 'my mother' in (2b), has taken over the grammatical relation that it previously occupied. Basically the *chômeur* condition simply assigns such NPs the *chômeur* relation. As a theoretical primitive, the *chômeur* relation is not defined. *Chômeur* is the French word for an unemployed person.

The stratal uniqueness law and *chômeur* condition apply to rules other than passive. They also apply to dative sentences, for example, such as those shown in (3) and (4) for English and Chichewa respectively.

(3) a. John gave the bananas to his mother.
   b. John gave his mother the bananas.

(4) a. Jóni a- ná- pats- a n-ðóçi kwá á-máí á-ké\(^5\)
    John\(_i\) he\(_i\) past give indic bananas to mother\(_j\) his\(_j\)
    'John gave the bananas to his mother'

   b. Jóni a- ná- pats- a a-máí á-ké n-ðóçi
    John\(_i\) he\(_i\) past give indic mother\(_j\) his\(_j\),i bananas
    'John gave his mother the bananas'

Thus, in (3a) the *bananas* is a direct object, but in (3b) it is not. Instead, in (3b) his *mother* is the direct object (moved to direct object from indirect object position by dative) and *bananas* is a direct object *chômeur*. Similarly, in (4a) nðóçī 'bananas' is a direct object, but in (4b) it is not. Instead in (4b) it is a direct object *chômeur* because amáí áké 'his mother' has taken over the direct object position.

2. Chichewa Data

Before Chichewa passive data can be given or discussed, a few facts about Chichewa verb morphology and characteristics of NPs in active

\(^4\)The formal statement of the *chômeur* condition [Postal and Perlmutter 1977] is given below:

"If an RN, \(Q\), contains the distinct arcs \([n(a,b) < c_x c_y >]\)
\([n(d,b) < c_{i+1} c_y >]\) where \(d \neq a\), then \(Q\) contains the arc

\(\text{chômeur} (a,b) < c_{i+1} c_z >\) ."

\(^5\)The noun a-máí is glossed as 'mother' and is singular in reference: it is plural, however, in form. Its singular counterpart is mái. It is the usual case for Chichewa speakers to make certain nouns which are kinship terms and titles morphologically plural although they are singular referentially. Additional examples will occur.
sentences must be presented. Like other Bantu languages, Chichewa is SVO with an agglutinative verb morphology: morphemes of a relatively constant shape may be attached to the verb stem to specify syntactic or semantic relationships which hold within the sentence. These markers are added in fixed positions on either side of the basic verb stem. The relative positions of major verb affixes in basic sentences are given below. The structure of the Chichewa verb complex, unlike that in some other Bantu languages, allows only one object agreement marker. Chichewa has the rich system of noun classification and referential agreement characteristic of Bantu languages.

Table 1. The Chichewa verb complex

<table>
<thead>
<tr>
<th>subject agreement</th>
<th>-tense/-aspect</th>
<th>-object agreement</th>
<th>-verb stem</th>
<th>-applied affix</th>
<th>-mood affix</th>
<th>-locative suffix</th>
</tr>
</thead>
<tbody>
<tr>
<td>nominal</td>
<td></td>
<td>(appears)</td>
<td></td>
<td>(indi-)</td>
<td></td>
<td>(nominal)</td>
</tr>
<tr>
<td>function</td>
<td></td>
<td>with (cative)</td>
<td></td>
<td>(agrees)</td>
<td></td>
<td>(subjunctives)</td>
</tr>
<tr>
<td>(agrees)</td>
<td></td>
<td>(agrees)</td>
<td></td>
<td>(benefactive)</td>
<td>(agrees)</td>
<td>(locatives)</td>
</tr>
<tr>
<td>exclusively with NPs in agreement</td>
<td>this</td>
<td>mental, and some</td>
<td></td>
<td></td>
<td></td>
<td>(not)</td>
</tr>
<tr>
<td>the subject</td>
<td></td>
<td>(agrees)</td>
<td></td>
<td></td>
<td></td>
<td>(obligatory)</td>
</tr>
</tbody>
</table>

2.1. NP marking in active sentences.

2.1.1. Subject. In Chichewa, as in other Bantu languages, the subject of a sentence can be easily identified as the NP which triggers obligatory subject agreement on the verb. In addition, as shown in (5), a subject carries no overt case marking and is sentence-initial in unmarked word order.

(5) chi-manga chi- na- kul- a corni iti past grow indic
    'the corn grew'

2.1.2. Direct Object. Unlike a subject, a direct object in Bantu can be hard to identify. However, under the assumption that the Patient in an Agent-V-Patient sentence is a direct object, certain properties can be said to characterize this NP in Chichewa and Bantu generally: (a) no overt case marking, (b) the possibility of object agreement, usually indicating definiteness, on the verb, and (c) in general, immediate post-verbal position. (See the discussion of indirect object and benefactive for the exceptions to this.)
Syntactically, a (Patient) direct object may reflexivize, as in (7).

When a direct object is relativized, as shown in the embedding of (6) in (8), the direct object in the embedded sentence is deleted on identity with a NP in the higher sentence, possibly leaving behind object agreement on the embedded verb. The relative pronoun agrees with the head of the relative clause. Cleft, shown in (9), uses exactly the same strategy.

Because the constraints on the two processes, relativization and cleft, are identical in all cases, hereafter only relativization examples will be given.

2.1.3. Indirect Object. The identification of an indirect object does not pose the problems in Chichewa that it does in some Bantu languages, where its marking is identical with that for benefactive NPs, presented in Section 2.1.4. In Chichewa, an indirect object may appear marked in two ways. In one form, an indirect object is realized as a prepositional phrase, kwá + NP, and cannot trigger verb agreement. It immediately follows a direct object in preferred word order. It cannot be relativized.
In the second form, shown in (11), there is no indirect object pre­
position. Instead the indirect object NP occurs in immediate postverbal
position and can now trigger object agreement on the verb. The verb can
alternatively agree with the basic direct object.

\[(11) \text{Jóni} \ a- \ ná- \ (zi-) \ pãts- \ a \ a-má'í \ á-ké \ n-thóchí \]
\[
\text{Johni past (them) give indic bananas to his mother}\]

'John gave his mother the bananas'

Like a direct object, the indirect object can now be relativized, shown in (12a). The basic direct object also continues to be rela­
tivized in the usual way, shown in (12b).

\[(12) \text{a. m-kázi a-méne Jóni á- ná- (mu-) pãts- a n-thóchí}\]
\[
\text{womani whoi Johnj hej past (heri) give indic bananas}
\]
\[
\text{ndi m-a'í wá-ká}
\]
\[
\text{is motheri hisi, i}
\]

'the woman who John gave the bananas is his mother'

\[\text{b. n-thóchí zi-méne Jóni á- ná- (zi-) pãts- a m-á'í}\]
\[
\text{bananasi whichi Johnj hej past (them) give indic motherk}
\]
\[
\text{wá-ké zi- ná' lí zá- zí- wísi}
\]
\[
\text{hišk, j theyi past be ofi adj green}
\]

'the bananas which John gave his mother were green'

In a sentence like (11), there appear to be, in certain respects,
two direct objects: the basic direct object and the unmarked indirect
object. Both the basic direct object and unmarked indirect object,
for example, have Ø prepositional case marking and optionally trigger
the strategy originally described for a basic direct object for rela­
tivization and cleft.
The two NPs do not always, however, equally share all direct object properties. For example, an indirect object displaces a direct object in governing reference for reflexivization, shown in (13).

(13) Joni a- ná- dzí- pats- a Bili
    Johni heí past selfi give indic Bill
    *'John gave (to) Bill himself'
    'John gave (to) himself Bill'

2.1.4. Benefactive. The syntactic properties of the benefactive relation in Chichewa are basically identical to those throughout most of Bantu. The benefactive relation is characterized structurally by (a) ∅ prepositional case marking (Chichewa, like most Bantu languages, has no benefactive preposition), (b) immediate postverbal position, (c) the possibility of object agreement, usually indicating definiteness, on the verb, and (d) obligatory presence of the applied affix -r- on the verb. 6

The first three of these properties are identical to those which characterize a basic direct object. Thus, direct object and benefactive are very similar structurally, as may be seen from a comparison of (14) and (6).

(14) Joni a- ná- (wá-)7 bvin- ir- a ā-ná
    Johni heí past (themj) dance applied indic childrenj
    'John danced for the children'

When a sentence contains both benefactive and direct object NPs, shown in (15), either may trigger object agreement, and both relations undergo relativization and cleft in the usual way, as shown for relativization in (16).

(15) Joni a- ná- (wá-) ph- er- a ā-ná n-khuku (i-)
    Johni heí past (themj) kill applied indic childrenj chickenk
    'John killed the chicken for the children'

---

6 The applied affix -r- has two realizations: -ir- and -er-. The initial vowel of this affix is conditioned by a vowel assimilation rule which produces ā with verbs whose last stem vowel is high or low, e with verbs whose last stem vowel is mid.

7 In some dialects of Chichewa, object agreement is obligatory with a predicate NP such as āná 'children', which denotes a human being. The Malawians who helped me most with this study, however, did not speak these dialects.
Benefactive

(16) a. ȃ-na a-méne Jóni á- ná- wa- ph- ēr- a
children_i who_i Johnj hej past them_i kill applied indic
n-khûku a- ná- li Angoni
chicken they_i past be Angoni

'the children that John killed the chicken for were Angoni'\(^8\)

Direct Object

b. n-khûku i-mème Joni j- ná- (i-) ph- ēr- a-
chicken_i whichj Johnj hej past (iti) kill applied indic
(*wa_)

*i- ná- li y-á Máluwa
children_k iti past be of_i Maluwa

'the chicken which John killed for the children was Maluwa's'

A benefactive displaces a direct object in governing immediate
post-verbal position, however, as shown above in (15), and references
for reflexivization, shown in (17) below.

(17) Jóni a- ná- dzf- meny- er- a Bilî
John_i hej past self_i hit applied indic Bill

*John hit himself for Bill'
'John hit Bill for himself'

2.1.5. Instrumental. An instrumental NP may appear marked in two ways.
One form, shown in (18a) and (19a) uses the instrumental preposition
ndî .

(18) a. Jóni á- ma- (*ij- ) lim- (ifr-) a ndî khasu
John_i hej habit (*itj) farm (applied) indic with hoej

'John farms with a hoe'

(19) a. Jóni á- ma- (chr-) lim- (ifr-) a čhî-manga
John_i hej habit (itj) farm (applied) indic cornj

(*i^k_)

ndî khasu
with hoej

'John cultivates corn with a hoe'

---

\(^8\)The Chichewa-speaking Angoni inhabit the Ncheu and Dedza districts
of the central regions of Malawi.
The preposition *ndí*, as a marker of an instrumental, may optionally co-occur with the applied affix *-r-* on the verb. The presence of the applied affix basically directs more attention to the fact that an instrumental NP appears in the sentence than would otherwise be the case. Syntactically, however, the affix has no effect. That is, it does not alter the behavior of the sentence for subsequent syntactic operations. In a second form, shown in (18b) and (19b), the instrumental appears marked exclusively with *-r-*. The obligatory presence of *-r-* here contrasts with its optional presence when an instrumental is marked with *ndí*.

(18) b. *Joní á- ma- (lǐ-) lim- ír- a khāsu
ta- ma- (it) farm applied indic hoe
"John farms with a hoe"

(19) b. *Joní á- ma- (chi-) lim- ír- a khāsu chí-manga
(∗lǐ-)
ta- ma- (it) farm applied indic hoe (∗itk)
"John cultivates corn with a hoe"

Marked exclusively with *-r-*, an instrumental NP may be relativized and clefted like a direct object, as seen in the relativized sentence of (20a). The basic direct object may also be relativized in the usual way, shown in (20b).

(20) a. *peni yi-méne Joní á- ná- (yi-) lemb- ér- a dz-í'ňá
(∗lǐ-)

peni which Jonj hej past (it) write applied indic namek
(∗itk)

lā-ke yi- ná- lī y-ā Māluwa
hisj iti past be ofi Maluwa
'
the pen which John wrote his name with was Maluwa's'

b. *dz-ĩna li-méne Joní á- ná- (lǐ-) lemb- ér- a
(∗yi-)

namei which Jonj hej past (it) write applied indic
(∗itk)

pēni li- ná- lī lā-ke
penk iti past be hisj
'
the name which John wrote with a pen was his own'

An instrumental NP may not reflexivize.

2.1.6. Locative. Chichewa exhibits in particularly complete form facts about the locative relation in Bantu which often appear fragmentarily in other languages. In Chichewa, as in many Bantu languages,
the locative markers pa 'on', ku 'to, at', and mu 'in' structurally stand somewhere between prepositions and noun class prefixes. An explanation of their intermediate status requires a slightly fuller explanation of the morphological structure of nouns in Chichewa and Bantu than has been given so far.

Nouns in Chichewa and throughout Bantu are composed of a noun prefix indicating the class of the noun, plus a noun stem. The noun munthu 'person', for example, is composed of the noun class marker mu- indicating that it belongs to Class 1, plus the stem -nthu meaning roughly 'entity'. All Class 1 nouns are [+singular, +human]. Thus mu + nthu combine to mean 'a single human entity' or 'person'. The plural of munthu, anthu 'people' is composed of the noun class marker a-, indicating that it belongs to Class 2, plus the same stem -nthu meaning 'entity'. Class 2 nouns are [+plural, +human]; hence a + nthu means 'human entities' or 'people'. Similarly, chinthu 'thing' is chi- (Class 7) +nthu. Class 7 nouns are [+singular, -animate], giving 'single, nonanimate entity' or 'thing' and do forth. All agreement markers in Chichewa, such as subject and object agreement on the verb, are now, or were historically a variant of the class marker on the referent noun. In (21), for example, the subject agreement marker a- on the verb -bwer- 'come' refers to the noun class marker a- on the subject anthu 'people'.

(21) a- nthu a- ku- bwer- a
    Class 2 entity Class 2 pres come indic
    people they
    'people are coming'

In (22), the object agreement prefix -chi- , affixed to the verb -on- 'see', refers to the noun class marker chi- on the direct object chinthu 'thing'.

On some nouns the noun class prefix has been eliminated by phonological erosion. A word borrowed from a non-Bantu language does not usually have a noun class prefix.

Not all of the semantic correspondences between nouns and their noun classes are as clear or as regular as those in these examples, but a basic semantic structure to the system is discernible along the lines just described.

The noun class prefixes and concord markers which appear in (21) and (22) provide particularly clear examples of phonological relationship. That is, the relationship here is one of identity. Although such a direct correspondence is rather exceptional, the phonological similarity between the prefix(es) for a noun class and its concord markers is, nevertheless, usually easily identified.
To return to the original statement, the locative markers pa 'on', ku 'to, at' and mu 'in' (along with their variants mwa 'among' and kwa 'at the house of') stand structurally somewhere between prepositions and noun class prefixes. For example, the markers are like noun class prefixes in that they can trigger agreement on the verb. Compare, for example, the object agreement in (23), referring to the locative marker, with that in (22), referring to the noun class prefix.

(23) Jóni a- ná- (pa-) khal- a pa- m-phásá
    Johni hei past (onj) sit indic onj mat
    'John sat on the mat'

When a locative occurs with a [+human being] NP in the predicate, its ability to trigger object agreement is blocked, as shown in (24). Otherwise, however, it is general, as shown in (25). In sentences such as (25), if the locative triggers object agreement on the verb, it may more easily appear in immediate postverbal position.

(24) Jóni a- ná- (mú-) ph- á (-po) Bíli pa- khonde
    (*pa-)
    Johni hei past (himj) kill indic (thereonk) Bill onk porch
    (*onk)
    'John killed Bill on the porch'

(25) Jóni a- ná- (zi-) ik- á (-po) n-thóchí pa- m-phásá
    (pa-)
    Johni hei past (themj) put indic (thereonk) bananas onk mat
    (onk)
    'John put the bananas on the mat'

The locative markers do not behave completely like noun class markers, however. Instead, in some ways they behave like prepositions. For example, they block verb agreement with a following N, shown in (26).

(26) Jóni a- ná- (*6-) phik- a pa- m-oto
    Johni hei past (*it j ) cook indic on fire
    'John cooked on the fire'

In certain respects the locative markers do not pattern with either noun class markers or with prepositions. An example of this is when they pronminalize via verb-final cliticization, unique to locative NPs.
The intermediate structural position of locative markers, somewhere between prepositions and noun class prefixes, appears in the two different strategies possible for any process which moves a locative in front of its verb. One strategy emphasizes the noun which follows the locative marker; it treats the locative as something like a prepositional phrase. The other emphasizes place, area, or location; it treats the locative as a derived noun. The relativized sentences of (28) show the two possible strategies.

(28) a. m-phásá i-méné Jóni á- ná- (zi-) ik- a (-po)
mati which John he past (themk) put indic (thereon)

*iti
n-thóchí i- ná- 'lí yó- nyówa
bananask iti past be weti

'the mat which John put the bananas (on) was wet'

b. pa- m-phásá pa-méné Jóni á- ná- (pa-) ik- a (po-)

oni mat wherei John hej past (oni) put indic (thereoni)

n-thóchí pa- ná' lí pó-nyówa
bananask oni past be wet

'The mat which John put the bananas (on) was wet'

For a locative derived N, shown in (28b), the syntactic strategy is very similar to that for a basic direct object. With a "phrasal" locative, shown in (28a), the syntactic strategy is different from anything we have seen previously.

2.2. Passive sentences. Chichewa, like most Bantu languages, has a very productive passive. NPs which stand in a number of different grammatical or semantic relations: direct object (Patient), indirect object (Recipient), benefactive, instrumental, and locative, can be made the derived subject of a passive sentence. In Chichewa, as in other Bantu languages, passive cannot apply to a N marked with a preposition. This excludes an indirect object marked with kwá and an instrumental marked with ndí from the domain of the passive rule. This section describes the application of passive to the remaining (prepositionally unmarked) forms.

2.2.1. Direct object. When a direct object (Patient) is passivized, shown in (29), (a) the basic direct object (Patient) is placed in sentence-initial subject position; (b) it takes obligatory subject agreement and may also continue to trigger object agreement on the
verb,\(^12\) -dw-, the passive marker, is affixed to the verb;\(^13\) and (d) the basic subject appears optionally, placed in sentence-final position and coded with the agent preposition ndi.

(29) a. Jóni a- ná- (zi-) nyamul- a n-thóchí
   John past (them) carry indic banana
   'John carried the bananas'

   b. n-thóchí zi- ná- (zi-) nyamul- idw- a (ndí Jóni)
      the bananas it past (them) carry passv indic (by John)
      'the bananas were carried (by John)'

2.2.2. Indirect object. Passivization on an indirect object appears to occur primarily in transitive sentences. The strategy, shown in (30b) is comparable to that for a direct object. The only differences are in details of object agreement. In a sentence like (30a), the basic direct object can also be passivized in the usual way, shown in (30c).

(30) a. Jóni a- ná- (zi-) pats- a a-má- á-ké n-thóchí
    John past (them) give indic mother, his bananas
    (wa-)
    'John gave his mother the bananas'

   b. a-má- á-ké a- ná- (zi-) pats- idw- a n-thóchí
      (*wa-)
      mother his, she past (them) give passv indic bananas
      (*heri)
      (ndí Jóni)
      (by John)
      'his mother was given the bananas (by John)'

---

\(^12\)As far as I know, Chichewa is the only Bantu language in which a derived subject can trigger object agreement on the verb. Many examples of such sentences will be presented in this section. In daily speech, this object agreement with a passivized NP is not at all common, and it is, in fact, not accepted by all Chichewa speakers. The situation described for its occurrence was a school exercise in which the speaker or writer is told to put in all of the agreement markers that are possible.

\(^13\)The i or e vowel preceding -dw- is conditioned by the same vowel assimilation rule as that for the applied marker (cf. fn. 6). The gloss of the -dw- affix as "passive" (passv) is intended to indicate only that the subject of the sentence is "derived" rather than "basic". The gloss is not intended to imply any particular relational history for the derived subject.
c. n-thóchí zi- ná- (zi-) pats- idw- a a-má’ á-ké
(*wa-*)

bananas₁ they₁ past (them₁) give passv indic motherj hisj,k
(*herj*)

(by John)

'Ve给了他的母亲 (by John)'

2.2.3. Benefactive. In an intransitive sentence a benefactive NP is passivized by a strategy, shown in (31b), identical to that for a basic direct object. For a transitive sentence like (32a), the strategy is comparable, shown in (32b). The only difference is in details of object agreement. The direct object can also be passivized in the usual way, shown in (32c).

(31) a. Cátérine a- ná- (wá-) phik- ir- a ā-ná

Catherine₁ she₁ past (them₁) cook for indic childrenj

'Catherine cooked for the children'

b. á-ná a- ná- (wá-) phik- ir- idw- a

children₁ they₁ past (them₁) cook for passv indic

(by Catherine)

'the children were cooked for (by Catherine)'

(32) a. Cátérine a- ná- (wá-) phik- ir- a ā-ná n-síma

(Catherine₁ she₁ past (them₁) cook applied indic childrenj nsimaₖ

(by Catherine)

'Ve cooked the children nsima'

b. á-ná a- ná- (yí-) phik- ir- idw- a n-síma

children₁ they₁ past (itj) cook applied passv indic nsimaₗ

(by Catherine)

'Ve cooked the children nsima (by Catherine)'

c. n-síma yi- ná- (yí-) phik- ir- idw- a ā-ná

nsima₁ it₁ past (itj) cook applied passv indic childrenj

(by Catherine)

'Ve cooked the children nsima (by Catherine)'
2.2.4. **Instrumental.** The strategies for passivization of an instrumental NP in Chichewa are both fragmented and unrepresentative of Bantu as a whole. Therefore, rather than presenting the data in their entirety I simply present two examples of passivized instrumentals, one in an intransitive sentence (33) and the other in a transitive sentence (34). These data are intended to illustrate (a) that passivization of instrumental NPs does, in fact, occur and (b) that, forgetting the details, the basic strategy here is the same as elsewhere: affixation of -dw- to the verb, subject agreement with the new subject in sentence-initial position, and displacement of the old subject which appears optionally and coded with the agent preposition *ndi*.

(33) a. Jóni á- ma- (li-) lim- a khâsu
\[\text{Johni } \text{he}_1 \text{ habit (itj) farm applied indic hoe}_j\]
\['John farms with a hoe'\]

b. khâsu lí- má- (*li-) lim- ir- ídw- a (ndi Jóni)
\[\text{hoe}_1 \text{ iti habit (*iti) farm applied passv indic (by John)}\]
\['the hoe was formed with (by John)'\]

(34) khâsu lí- ma- (*li-) lim- its- ídw- a chî-manga
\[\text{hoe}_1 \text{ iti habit (iti) farm inst passv indic corn}_j\]
\['the hoe is farmed corn with (by John)'\]

2.2.5. **Locative.** The intermediate structural position of locative markers, somewhere between a noun class prefix and a preposition, allows two different strategies for the passivization of locative NPs. One strategy, shown in (35) and (36), assumes a "locative phrase" as input. This strategy, emphasizing the noun that follows the locative marker is different from those we have seen previously in that passive applies to a case-marked NP, removing the case-marking morpheme as one of its effects.

(35) a. Jóni a- ná- (*yi-) khal- á (-po) pa m-phásá
\[\text{Johni } \text{he}_1 \text{ past (iti) sit indic (thereonk) onk mat}_j\]
\['John sat on the mat'\]

b. m-phásá i- ná- (yi-) khal- idw- á (-po) (ndi Jóni)
\[\text{mat}_1 \text{ iti past (iti) sit passv indic (thereon) (by John)}\]
\['the mat was sat on (by John)'\]
The second possibility, which treats the locative NP as a derived N, emphasizes the locative place. This strategy, shown in (37b) and (38b), is identical to that for a basic direct object. If a basic direct object is also present, as in (38a), it may alternatively be passivized in the usual way, shown in (38c).

(36) a. Jóni a- ná- (zí-) ik- á (-po) n-thóchí pa- m-phásá
    (*yi-)
    Johni he1 past (them1) put indic (thereon1) bananas1 on1 matk
    (*itk)
    'John put the bananas on the mat'

b. m-phásá i- ná- (yí-) ik- idw- á (-po) n-thóchí
    (zí-)
    mati it1 past (it1) put passv indic (thereon) bananas1
    (them1)
    (nd1 Jóni)
    (by John)
    'the mat was put bananas (on) (by John)'

(37) a. Jóni a- ná- (pá-) khal- á (-po) pa- m-phásá
    Johni he1 past (onj) sit indic (thereonj) onj mat
    'John sat on the mat'

b. pa- m-phásá pa- ná- (pá-) khal- idw- á (-po)
    on1 mat on1 past (on1) sit passv indic (thereon1)
    (nd1 Jóni)
    (by John)
    'on the mat was sat (by John)'

(38) a. Jóni a- ná- (yí-) phik- á (-po) n-síma pa- m-óto
    (pa-)
    Johni he1 past (itj) cook- indic (thereonk) nsimaj onk fire
    (onj)
    'John cooked the nsima on the fire'

b. pa- m-óto pa- ná- (pá-) phik- idw- á (-po) n-símá
    (yí-)
    on1 fire on1 past (on1) cook passv indic (thereon1) nsimaj
    (itj)
    (nd1 Jóni)
    (by John)
    'on the fire was cooked nsima (by John)'
c. *nsima* yi- ná- (yí-) phik- idw- á (-po) pa- m-ófó (pa-)

\[ \text{nsima}_i \text{ it}_i \text{ past} \{ \text{it}_i \} \text{ cook passv indic} \{ \text{thereon}_{j}\} \text{ on}_j \text{ fire} \{ \text{on}_j \} \]

(by John)

'the nsima was cooked on the fire (by John)

3. Difficult Data for the Relational Claim

Although a number of language-specific arguments against the relational claim can be made on the basis of the Chichewa data, I will here present only those which reflect problems also encountered more widely in Bantu. Recall that within relational grammar, passive is defined as a rule which applies exclusively to direct objects [Perlmutter and Postal 1977]. Such a characterization of passive, held for most Bantu languages including Chichewa, where direct object (Patient), indirect object (Recipient), benefactive, instrumental, and locative NPs can be made the derived subject of a sentence, entails a number of rules, shown in (39)-(42), which make NPs in different grammatical relations into direct objects. Once made into direct objects, the NPs can then be made subjects via the normal passive rule (43).

(39) Indirect Object → Direct Object

(40) Benefactive → Direct Object

(41) Instrumental → Direct Object

(42) Locative → Direct Object

(43) Direct Object → Subject (Passive)

An analysis of this sort encounters a number of difficulties.

3.1. The Benefactive → Direct Object rule. Predication of a Benefactive → Direct Object rule suggests that there must be pairs of related surface forms for underlying structures with a benefactive. One member of each pair would have a *preposition + noun* construction in which the benefactive had not been made a direct object. In the other, the preposition would have been deleted and the benefactive would appear as a direct object. In fact, however, such related pairs of sentences do not occur; all occurring sentences seem to be of the second type. (Because Chichewa, like most Bantu languages, has no benefactive preposition, there exists no formative for constructing sentences of the first type.)

Efforts to argue a nonprepositional source, such as possessives, for the prepositionless benefactive NPs have not proven very convincing
across Bantu. Such an argument would relate a sentence like (44b) to (44a).

(44) a. m-áí a- ná- tem- a ny-ama y-á mw-áná
    womani shei past cut indic meatj ofj child
    'the woman cut the child's meat'

   b. m-áí a- ná- tém- er- a mw-áná ny-ama
    womani shei past cut applied indic child meat
    'the woman cut the meat for the child'

Aside from the obvious differences in meaning between (44a) and (44b), any intransitive sentence with a benefactive, such as (14) in Section 2.1 or (45) below means that in the source sentences, a possessor would have to be posited without any possessed NP.

(45) m-kázi a- ná- wéram- ir- a mw-amúna
    womani shei past bow applied indic man
    'the woman bowed for the man'

These problems with the benefactive relation in Chichewa cover an even wider range of sentences in some Bantu languages where there also is no indirect object preposition.

3.2. The Locative → Direct Object rule. The Locative → Direct Object rule presumably has two parts, one for "phrasal" locatives and the other for locative derived nouns. Although Chichewa does not seem to have a "Phrasal" Locative → Direct Object rule, many Bantu languages apparently do. That is, Chichewa does not allow a sentence like (46b), the presumed intermediate step between (46a) and (46c). However, comparable sentences are grammatical elsewhere in Bantu. Therefore, we will not dwell on this language-specific problem with Chichewa.

(46) a. Jóni a- ná- (zí-) ik- á (-po) n-thóchí 'pá m-phásá
    Johní hei past (themj) put indic (thereonk) bananasj onk mat
    'John put the bananas on the mat'

   b. *Jóni a- ná- ik- á (-po) m-phásá n-thóchí
    Johní hei past put indic (thereon) mat bananas
    'John put the bananas (on) the mat'

   c. m-phásá i- ná- (yr-) ik- ã (-po) n-thóchí
    mati iti past (itj) put passv indic (thereon) bananasj
      (zí-)
    (nd 'Jóni)
    (by John)
    'the mat was put bananas (on) (by John)'
Instead, we move on to consider problems with the Locative Derived N $\rightarrow$ Direct Object rule, which are more characteristic of Bantu as a whole.

The Locative Derived $\rightarrow$ Direct Object rule is highly questionable in that it entails no changes in structure. That is, after this rule applies, sentences may look exactly the same as they did before it applied. Corresponding to this maintenance of surface form, sentences behave the same under subsequent syntactic rules. Thus, although passive is assumed to be acceptable only after the rule, in the absence of passive it is impossible to tell whether any change to direct object has occurred.

To illustrate more clearly, the Locative Derived N $\rightarrow$ Direct Object rule takes a sentence like (47) as input.

(47) John saw Bill at the market.

In the input to the rule, John is the subject, Bill is the direct object, and at the market is a locative. Application of the rule has absolutely no effect on the surface form of the sentence. That is, the surface form of the rule output may be identical with that of the rule input. Only the underlying NP relations have changed. Thus, the output of the rule is also (47). Now, however, John is the subject, Bill is a direct object en chômeur, and at the market is the direct object. In short, the rule is completely vacuous. It functions exclusively for the convenience of the analysis without reflecting any actual difference in the surface forms used by speakers of the language.

3.3. The chômeur condition and/or the stratal uniqueness law. A relational analysis posits five rules which result in derived direct objects. Theoretically, application of any one of these rules in a transitive sentence should put the original direct object en chômeur. Now, since passive is restricted to direct objects, and since in these sentences the basic direct object is no longer in the direct object relation but instead is in the chômeur relation, it should not be subject to passive. In fact, however, this is not the case. On the contrary, in Chichewa and throughout Bantu the direct object en chômeur in such sentences apparently remains subsequently accessible to passive in many cases. Thus (30c), (32c) and (38c) of Section 2.2 are grammatical passive sentences in which a direct object chômeur has been made a derived subject after the application of Indirect Object $\rightarrow$ Direct Object, Benefactive $\rightarrow$ Direct Object, and Locative Derived Noun $\rightarrow$ Direct Object, respectively.14

14 The remaining rules which place NPs in the direct object relation (the rule for the N following a locative marker and also Instrumental $\rightarrow$ Direct Object) do not produce sentences which are analyzable according to the theoretical predictions in any clear
Clearly, if passive were required to apply before X → Direct Object in these sentences, the problem would not arise. However, no constraints on the relative ordering of rules have ever been suggested within the theory of relational grammar. In addition, in a transitive sentence in which X → Direct Object has applied but nothing has been made the derived subject, that is, in which there are two prepositionally unmarked predicate NPs, the original direct object, supposedly now en chômage, still retains most or all of the properties of a basic direct object. This is particularly telling evidence against the chômeur condition and/or stratal uniqueness law in cases where a direct object chômeur is relativized. Because relativization is usually considered to be either postcyclic or operating on a higher cycle, a rule ordering solution is not possible here.

4. An Alternative Framework

Confronted with problematic data, most investigators have proposed some wrinkle in the basic relational approach. Whatever the specific suggestion, formulations proposed for one language have rarely worked in detail for substantial numbers of other Bantu languages. The proliferation of incompatible conclusions drawn within the relational framework is particularly frustrating since certain facts about the application of passive clearly repeat across most of the languages studied. For the most part these repeating facts have not been discussed within relational research since they occur in aspects of language which relational grammar does not address. They do, however, occur.

So far I have argued that the relational approach has failed to provide an adequate framework for the discussion of passive in Chichewa and Bantu generally. I now wish to suggest that a more fruitful approach would be to note the recurring tendencies which actually occur across the languages and to attempt to relate them to each other in a coherent way. I will accordingly first outline the recurring tendencies and relate them to the Chichewa data (Section 4.1). I will then discuss the tendencies and Chichewa data as aspects of a single notion, that of topicality (Section 4.2). Finally I will note areas of overlap and divergence in the predictions which relational grammar and topicality make for Bantu passive. I will relate the correlated areas of success and failure of relational grammar to basic assumptions within the framework (Section 4.3).

way. Thus, as shown in (46b), the output of a rule which places the N following a locative marker in the direct object relation is ungrammatical. Subsequent application of passive to the basic direct object en chômage does not improve acceptability. For Instrumental → Direct Object, the data (not given in this paper) have similar problems of interpretation.
4.1. **Recurring Bantu tendencies.** The recurring tendencies across Bantu fall into two groups: (a) factors which tend to facilitate the application of passive, and (b) those which tend to block it.

Briefly, passive is normally *facilitated* by application to the following:

(i) NPs higher on the following animacy hierarchy:

human $>$ nonhuman

1st pers $>$ 2nd pers $>$ 3rd pers animate $>$ inanimate

(Haya: Duranti and Byarushengo [1977]; Shona: Hawkinson and Hyman [1974]; Sesotho: Morolong and Hyman [1977])

(ii) NPs higher on the following semantic hierarchy:

Recipient, Benefactive $>$ Patient $>$ Instrumental


Passive is normally *blocked* by the following:

(iii) a preposition


(iv) in certain cases, pronominalization or object agreement with another NP in the sentence

(Haya: Duranti and Byarushengo [1977]; Kinyarwanda: Givón [1975]; Kimenyi [1976])

(v) indefiniteness

(Haya: Duranti and Byarushengo [1977]; Kinyarwanda: Kimenyi [1976])

Note: This constraint sometimes occurs even when indefinite basic subject is possible.

The Chichewa data in this paper illustrate the relevance of two of these factors, (iii) and (iv), in the application of passive. More interestingly, the same total group of factors appears to influence the application of other syntactic processes as well: relativization, cleft, reflexivization, object agreement (in a simple sentence without passive), and preference for immediate postverbal
position. The match which appears between conditioning factors and syntactic processes in our Chichewa data is presented in the chart in (48), and elaborated in the paragraphs which follow.

\[\text{(48)}\]

<table>
<thead>
<tr>
<th></th>
<th>Animacy hierarchy (i)</th>
<th>Semantic hierarchy (ii)</th>
<th>Prepositional case marking (iii)</th>
<th>Pronominalization (iv) or object agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relativization</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Cleft</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Passive</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reflexivization</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Object agreement</strong> (in a simple sentence without passive)</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Preference for immediate post-verbal position</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

4.1.1. **Animacy hierarchy (i).** It is object agreement which reflects an animacy hierarchy in Chichewa. In certain cases the presence of a [+human being] direct object, as in (23), disallows object agreement with any other NP in the sentence. If the direct object is [-human being], however, as in (24), either of two NPs may trigger object agreement.

15 No specific ungrammatical examples for indefiniteness (v) have been cited. However, NPs which carry object agreement or which have been relativized, clefted, passivized, or reflexivized are always interpreted as definite. This is true even when the NP may be regarded as indefinite otherwise.
4.1.2. Semantic hierarchy (ii). The data which suggest a \{Benefactive,Recipient\} > Direct Object > Instrumental semantic hierarchy in Chichewa come from reflexivization, preference for immediate postverbal position, and object agreement. The relevant reflexivization data appear in (13) and (17). In these sentences the only possible readings are reflexivization of the direct object, also present. Thus a \{Benefactive,Recipient\} > Direct Object hierarchy must interpret reference for a reflexive pronoun. The data on preference for immediate postverbal position appear in (11) and (15), where indirect object and benefactive NPs displace direct objects in immediate postverbal position. Thus a \{Benefactive,Indirect Object\} > Direct Object hierarchy must also govern preference for immediate postverbal position. The data from object agreement appear in (18b) and (19b). In (18b), which does not contain a direct object, object agreement appears with the instrumental. In (19b), where a direct object appears, object agreement with the instrumental is ungrammatical. However, the direct object may trigger object agreement instead. Thus, a Direct Object > Instrumental hierarchy appears.

4.1.3. Prepositional case marking (iii). As we have seen, prepositional case marking basically blocks passive, reflexivization, and object agreement. It impedes placement in immediate postverbal position when a prepositionally unmarked predicate NP is present.

4.1.4. Pronominalization or object agreement (iv). In most Bantu languages, object agreement markers and clitic pronouns are identical in form and the two also have related constraints on their appearance. Thus, the Chichewa sentences we have seen with object agreements will be used to illustrate cross-Bantu tendencies for pronominalization as well. The object agreements possible in active and passive Chichewa sentences with direct object + benefactive, indirect object, or instrumental NPs are schematized in (49). As a basis for further discussion, note that (a) passive can occur with some, but not all, object agreements possible in the active sentence, and (b) the constraints are different with passivization of different semantic relations.
### Prepositionally unmarked predicate NPs

<table>
<thead>
<tr>
<th>Active sentence</th>
<th>Alternative passive sentences</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>benefactive</strong>, direct object</td>
<td><strong>NP passivized:</strong></td>
</tr>
<tr>
<td>obj agrmnt: Ben-opt</td>
<td>obj agrmnt: Ben-opt**</td>
</tr>
<tr>
<td>DO-opt</td>
<td>DO-ungram</td>
</tr>
</tbody>
</table>

| indirect object, direct object | **NP passivized:** |
| obj agrmnt: TO-opt  | obj agrmnt: IO-opt** |
| DO-opt            | DO-ungram               |

| instrumental, direct object | **NP passivized:** |
| obj agrmnt: Inst-opt*  | obj agrmnt: Inst-opt* |
| DO-ungram            | DO-ungram**             |

* not typical for Bantu; usually agreement would be ungrammatical

** typical for Bantu

### 4.2. Topicality

Topicality occurs at several different levels of discourse. At the most general level it refers to the subjects that human beings in general tend to focus upon in discourse. In general, preferred subjects rank first and second person above third person, humans above nonhumans, animates above inanimates, and agents above nonagents. Thus topicality reflects the general egocentricity of human speech.

A second level of topicality refers to the topic of a specific discourse. At this level topics tend to be background rather than foreground, old rather than new information, definite rather than indefinite, and presupposed rather than asserted. Here topicality relates each new sentence to the whole of the preceding and surrounding contextual information.

A third level of topicality refers to the topic of a sentence. In subject-prominent languages [Li and Thompson 1976] such as English and Bantu, the topic of a sentence and the grammatical subject tend to coincide. Normal sentential word order tends to place topics before nontopical or new information.

The link between a discourse phenomenon such as topicality and a syntactic rule like passive in Bantu is not hard to find. In Bantu, as in English, a subject is a grammaticalized topic. Since passive is a subject-exchange rule and since topic and subject are linked, passive is a natural rule to be linked to topicality in its application. Aside from this intuitive potential for an association, however, two more specific sets of arguments suggest a link. The first
set appears below; it takes each of the tendencies described earlier which recurs across descriptions of Bantu passive and relates it to topicality.

(i) Passive is normally facilitated by application to NPs higher on the following animacy hierarchy:

\[
\text{human} \quad > \quad \text{nonhuman} \\
1\text{st pers} \quad > \quad 2\text{nd pers} \quad > \quad 3\text{rd pers} \quad > \quad \text{animate} \quad > \quad \text{inanimate}
\]

As we just noted, human discourse demonstrates a measure of egocentricity in the topics generally picked for conversation. The people who are conversing, first and second person, receive more coverage than do others. Humans are discussed more than nonhumans and animates more than inanimates. The greater inherent interest in humans, etc. is reflected in their tendency to appear as topics. It is to be expected, therefore, that greater animacy rank would facilitate the application of passive, the rule which makes a NP subject/topic.

(ii) Passive is normally facilitated by application to NPs higher on the following semantic hierarchy:

\[
\text{Recipient, } \quad > \quad \text{Patient} \quad > \quad \text{Instrumental}
\]

This semantic hierarchy is a syntacticization of two aspects of topicality, viz. humanness and definiteness.

\textit{Humanness:} Benefactive and Recipient NPs tend to be human; Patients are less consistently so; Instrumentals tend to be inanimate.

\textit{Definiteness:} When talking about humans, conversation tends to be more specific about the particular human involved than when the discourse covers inanimates.

The frequent correlation between Benefactive/Recipient semantic cases and highly topical (human and definite) NPs has been syntacticized into a greater accessibility to passive for these semantic relations. Conversely, the other relations are progressively less accessible.

(iii) Passive is normally blocked by a preposition

A subject is normally more topical than predicate NPs, and among predicate NPs, those which are not preceded by a preposition are normally more topical than those which are. In short, the object of a preposition is usually new, asserted information. Since it is not topical, it is reasonable that it is not made the subject of a sentence.
(iv) In certain cases, passive is blocked by pronominalization or object agreement with another NP in the sentence.

(v) Passive is blocked by indefiniteness.

Both of these tendencies reflect one aspect of topicality: the amount of knowledge which different referential devices require of the listener. For example, in the three sentences of (50), the indefinite noun a man in (50a) assumes less knowledge on the part of the hearer than does the definite noun the man in (50b), which in turn assumes less information than him in (50c).

(50) a. I saw a man.
    b. I saw the man.
    c. I saw him.

Pronouns, definite nouns, and indefinite nouns thus stand on a continuum of how recently, unambiguously, or strongly their reference must have been established in the discourse; pronouns require the greatest strength or topicality and indefinite nouns require the least.

Now consider (v) above. Since indefinite nouns are comparatively untopical, it is not surprising that passive does not apply to make them the derived subject of a sentence. As for (iv) above, recall that the principal function of object agreement is definitization of its noun. Thus when a predicate noun is pronominalized or carries agreement, the pronominalization or agreement indicates some degree of topicality of the referent noun. This secondary indication of topicality supplements but does not contradict the notion of subject as grammaticization of the principle topic. Now, when one predicate noun is passivized and another carries object agreement, the syntactic indications of topicality in the sentence are divided between the two NPs. This is acceptable as long as the noun functioning as subject is inherently or semantically the more topical of the two. If there is some problem with this, however, that is if the NP still in the predicate has greater inherent topicality than the NP which appears as derived subject, then object agreement with the former becomes ungrammatical. This accounts for a situation such as that schematized in (49) in which a passivized benefactive NP, highly topical, can allow a direct object (Patient) in the predicate, less topical, to carry object agreement. The converse is not true, however. That is, a passivized direct object, less topical, cannot allow object agreement with a benefactive NP in the predicate, potentially more topical.

The second set of arguments will be based on the range of the Chichewa data. Recall that the tendencies which recurred widely across descriptions of Bantu passive were also found to be relevant to description of a broad range of syntactic processes in Chichewa.
In the second set of arguments we will establish the relationship, if any, between each of these syntactic processes and topicality.

*Relativization:* A restrictive relative clause is presupposed or background information and the device of relativization serves to relate the head NP to this information. An established relationship between a NP and assumed information is a primary aspect of topic.

*Cleft:* Cleft, like relative clause, is a strictly presuppositional construction. It relates a NP to a presupposed proposition and often has a contrastive function. Both of these functions serve to relate the clefted NP to preceding context, enhancing its topicality.

*Reflexivization:* Reflexivization has no direct association with topicality. Instead it is independently influenced by aspects of grammar which affect topicality as well. Specifically, reflexivization in Bantu is a property primarily of [+human] agents. The reflexivized NP must be [+human] also, since a basic condition for reflexivization is coreferentiality between the controlling and reflexivized NP. Obviously a syntactic preference may develop for benefactive and indirect object NPs which more frequently carry [+human being] N's.

*Object agreement:* The most common use of object agreement in Chichewa is to indicate definiteness, previously related to topicality.

*Preference for immediate postverbal position:* For predicate NPs, preference for immediate postverbal position is a form of early mention, a primary characteristic of topics.

5. **Summary and Conclusion**

As we have seen, a canonical relational analysis assumes a uniform strategy for placing different NPs in the subject relation. This strategy always requires Direct Object → Subject as the final rule. Because a wide range of NP relations may be made the derived subject of a sentence in Chichewa and Bantu generally, uniform application of this strategy requires a range of rules which take NPs in different relations and make them direct objects. These rules are then assumed to feed Direct Object → Subject.

We have also seen, however, that the intermediate rules making a NP into a direct object repeatedly seem questionable. Sometimes the rules do not really seem to create a new direct object. Sometimes the old direct object is not displaced. Sometimes both difficulties seem to occur at the same time.
Stated differently, the basic problem of relational grammar in Bantu passive is that in many sentences there is no clear basis for identifying a single NP as the direct object to the exclusion of the other prepositionally unmarked predicate NPs. Note now that if the basic contrast in relational grammar is reduced to NPs which are not marked with a preposition vs. those which are, the contrast becomes the same as that which is conjointly predicted by the various aspects of topicality: a major difference between prepositionally marked and unmarked predicate NPs. Thus, phrased in terms of topicality, when a NP carries with it a semantic case marker such as a preposition, its semantic role in the sentence rather than its relation to the previous discourse is highlighted. Similarly, the object of a preposition is much more uniformly new (nontopical) information than is a prepositionally unmarked NP. And finally, prepositionally unmarked NPs precede a NP marked with a preposition in usual word order, thus carrying the greater topicality associated with earlier mention.

The area in which relational grammar and topicality diverge is in description of the differential behavior of prepositionally unmarked predicate NPs. Here the more graded and multifaceted framework provided by topicality clearly proves superior. It can describe both the wealth of material on passive, unmanageable within relational grammar, and also the associated data on relativization, cleft, object marking, and movement to immediate postverbal position, untouched in relational grammar, in a coherent way.

In addition, the instructive implications of the example of Bantu passive may be even broader. The relatively greater success of a framework based on topicality here is not a theoretical accident. Rather it results from basic assumptions which dictate the kinds of data relational grammar and discourse frameworks can respectively consider. Relational grammar assumes that a primary goal of linguistic theory is provision of a formal model for relating syntactic variants of sentences. It does not consider language "use" per se. A discourse approach, on the other hand, relates properties of sentences to the contexts in which they appear. It relates syntax to frequently recurring tendencies in human speech. It is precisely this kind of information, however, not addressed in a relational model, which is required to describe syntactic behavior in the case of Bantu passive.

Thus, the failure of relational grammar here is not accidental. It is, in fact, inevitable, given its basic assumption that a universal definition of passive can be stated separate from discourse considerations.
REFERENCES


Research in Bantu languages has revealed Topicality Hierarchies (TH) for NP arguments which follow certain parameters (person, function, animacy) and which determine relative likelihood that an NP will be available for various syntactic processes. In some Bantu languages, a verb complex may take more than one prefixed Object Marker (OM). Two Bantu languages where this is possible, Shambala and Haya, are investigated to see if the order of the OM's correlates in any way with TH's. It is found for both languages that NP's with "higher TH status" will govern OM's closer to the verb stem than those lower in the hierarchies. In cases where different TH's are in conflict, the languages differ: Shambala simply does not permit conflicting combinations, but Haya weighs the different factors to establish relative strength of TH combinations which will govern order. A Flexibility Principle allows some freedom of order among "low status" NP's.

*This paper was presented at a USC Linguistics Department Colloquium (March 1, 1978) and at the 8th Annual Conference of the California Linguistics Association, held at UC Northridge (May 6, 1978). I wish to thank both the faculties and the students of the USC Linguistics Department for their comments. In particular, I would like to thank Elaine Andersen, Ernest Byarushengo, Jack Hawkins, Larry Hyman, Elinor Ochs, and Masayoshi Shibantani. Larry Hyman, friend and teacher, introduced me to Bantu, found financial support for my work and helped me in analyzing the data, sharing with me many ideas and suggestions. I would also like to thank Benji Wald from UCLA for telling me a lot of things he knows about Bantu languages without worrying that I might write them down in my paper, and Alexander Kimenyi for telling me about the Kinya-Rwanda pronominal system (I wish also to acknowledge here that some of the ideas presented in this paper can be found in Kimenyi's dissertation). Work on comparative Bantu syntax was partially supported by a National Science Foundation Grant no. BNS76-81261.
1. Introduction

The discussion of a so-called "Topicality Hierarchy" (hereafter TH) started a few years ago with a paper by Hawkinson and Hyman [1974] on a Bantu language, Shona. It examined the degrees to which different types of NP arguments were allowed to undergo Passivization. More recently, Morolong and Hyman [1977] have shown that the same hierarchy is at work with respect to other linguistic rules, e.g. Object Agreement in Sesotho. These works show that there are certain grammatical processes in Bantu languages that "favor" certain kinds of NP types (or Referents) over others. That is, given more than one "candidate" to undergo (or trigger) a certain rule, certain types of NP arguments will be "more likely" to do it than others. One version of the TH is here reproduced in (1) below. I have changed some of the names of the features involved in order to achieve more consistency, e.g. I have replaced "Dative" and "Accusative" with "Goal" and "Patient" respectively to be consistent with "Benefactive" and "Instrument", which are usually considered as "semantic cases", whereas "Dative" and "Accusative" are more often used for surface cases:

(1) a. 1st > 2nd > 3rd
b. Benefactive > Goal > Patient > Instrument/Locative
c. Human > Animate > Inanimate

The sign > stands for "more likely to undergo/trigger certain grammatical processes than". I have left the relationship between Instrument and Locative unspecified because I do not think there is enough evidence of either one being "higher" than the other. The TH must be interpreted in a "loose" way so that not every language for which it is at work must draw all the distinctions made in (1). That is, a language may "collapse" any number (probably never more than two) of subsequent features along any branch of the hierarchy. Thus, a language may treat Benefactive and Goal or first and second person, or animate and human in the same way. In such cases the TH would read Benefactive/Goal > Patient ...; 1st/2nd > 3rd; animate > inanimate. However, no language should in any case reverse the features, e.g. no language should behave so that Patient > Benefactive, or 3rd > 1st/2nd, etc.

In this paper I will examine a number of properties of pronominal infixes in two Bantu languages (Shambala and Haya) and show that they follow the TH. More specifically, I will demonstrate that the sequential order and the combinability, i.e. which ones can cooccur, of the pronouns in the verb complex can be predicted on the basis of the ranks defined by the TH. Although I will here examine in detail only two languages, I believe the relevance of the TH with respect to pronominalization phenomena to be a characteristic of Narrow Bantu as a whole.

2. Defining "Object Clitic Pronouns"

It is typical of Narrow Bantu languages, given the appropriate pragmatic conditions, to express certain NP arguments of the verb by means
of pronominal infixes, which appear in the verb complex between the
tense marker and the verb stem, as illustrated in the examples below:

NYAKYUSA (Tanzania)¹

(2) a. Ambwene i- ku- lya inguku he- PR eat chicken
   'Ambwene is eating a/the
    chicken'
   b. Ambwene i- ku- ji- lya he- PR it- eat
      'Ambwene is eating it'

KIMBUNDU (Angola)

(3) a. Ngunza w- a- lambe o kudya
    he- PST cook the food
    'Ngunza has cooked the food'
   b. Ngunza w- a- ku- !ambe
    he- PST it- cook
       'Ngunza has cooked it'

SHONA (Zimbabwe)

(4) a. nda- ka- pa mwana tsamba
    I- PST give child letter
    'I gave the child the letter'
   b. nda- ka- mu- pa tsamba
    I- PST him- give letter
       'I gave him the letter'
   c. nda- ka- i- pa mwana
    I- PST it- give child
       'I gave it to the child'

These pronominal infixes follow the rules of Bantu nominal concord system
(cf. Welmers [1973:ch.6]), that is, they agree in noun class with the
"corresponding" noun.² Thus, ji in (2b) is class 9 like inguku
'chicken', ku in (3b) is class 15 like kudya 'food' (lit. 'to eat'),
mu in (4b) is class 1 like mwana 'child', and i in (4c) is class 9
like tsamba 'letter'. I will refer to these infixes as "object clitic
pronouns" (OC²). The term "object" was primarily chosen to distinguish
these pronominal forms from the Subject agreement prefixes (see examples
above), which very often have the same phonological shape (except for
class 1 and class 9). But I also believe that the types of NP arguments
that can be expressed by such pronouns form a coherent set which has
been identified as the grammatical role of "object" in Bantu (see Hyman,
Duranti and Morolong [in press]).

¹In the interlinear glosses I will use the following abbreviations:
PR = present tense, PST = past tense, FUT = future tense, A = aspect marker
(Bantu "final vowel"), APP = Applicative suffix, INST = Instrumental suffix,
LOC = Locative suffix. I wish to thank Prof. Jan Vorhoeve for pointing
out to me some inadequacies in my transcription of Nyakyusa, Mshihiri Juma
Abukabar for the Shambala examples, and Ernest Byarushengo for the Haya
data. I would also like to thank Annarita Puglielli for having hosted in
her Linguistics Department in Rome my Field Methods Course on Kimbundu in
the academic year 1976-77.

²This is actually an oversimplification. See Wald [1975].
All the above examples show OCP's that express "basic" objects, that is, non-subject arguments whose semantic role and existence is implied by the verb in its "basic" form, i.e. with no "semantic markers". Examples (5) - (7) below show cases of non-basic objects whose semantic role is coded on the verb through semantic markers:

KIMBUNDU

(5) a. o muhatu w - a - lambe o shitu phala o mona
   the woman she- PS1- cook the meat for the child
   'the woman cooked the meat for the child'

   b. *o muhatu w - a - mu- lambe o shitu (phala)
      him
   'the woman cooked the meat for him'

   c. o muhatu w - a - mu- lamb- el- a o shitu
      him- cook- APP-A
   'the woman has cooked (for) him the meat'

SESOTHO [Morolong and Hyman 1977]

(6) a. ke -phehetsa mokete lijo
    I -cooked/APP feast food
    'I cooked-for feast food'

    b. ke -o -phehetsa lijo
    I -it -cooked/APP food
    'I cooked-for it food'

SHONA

(7) nda- ka- ri-chek - es- a nyama
    I -PST- it-cut -INST-A meat
    'I cut-with it the meat'

Notice that when one tries to cliticize a prepositional phrase, keeping the verb unmarked with respect to that particular semantic relation, i.e. with no semantic markers as in (5b), the resulting structure is unacceptable. Cliticization of the object is instead possible if the verb has the Applicative suffix (APP), as in (5c) or (6), or the Instrumental suffix, as in the Shona example (7).

All the examples given so far are taken from languages that can have only one OCP at a time in the verb complex. There are, however, also languages that can have more than one OCP in the same verb form. Thus, Lomongo [Hulstaert 1965], Kirundi [Satukuru/Stevick, n.d.], Umbundu [Valente 1964], and Shambala can have two OCP's, and languages like KinyaRwanda [Kimenyi 1976] and Haya [Duranti and Byarushengo 1977] can have more than two OCP's in the same verb complex. Here are a few examples:

KIRUNDI [Satukuru/Stevick n.d.]

(8) nzoo- ki- kw- iiiza
    I/FUT- it- you -teach
    'I'll teach it to you'
As noticed by some linguists, e.g. Hulstaert [1965], Grégoire [1975], Kimenyi [1976], when a language allows more than one pronoun in the same verb complex, the sequential orders of the OCP's are often constrained and reduced to fewer combinations than the ones theoretically possible. Thus, there is a tendency for the first person singular (usually a nasal consonant) to occur next to the verb stem, regardless of its semantic role. As shown below, this explains why structures like (9) and (11) are ambiguous.

In what follows, I will examine in detail the principles according to which the proper sequences of OCP's are determined in Shambala and in Haya. These two languages allow basically the same sequential orders (although Shambala can have no more than two and Haya up to four OCP's), but they deal quite differently with conflicting cases, e.g. in the case of two pronouns where one should occur in one slot because of its status in one hierarchy and in another slot because of its status in another hierarchy.

3. Shambala

I will now describe the sequential orders found in Shambala when two object clitic pronouns cooccur according to the following categories/ features: (A) Person (first, second, or third); (B) Semantic Role (Patient, Benefactive, Instrument, etc.); (C) Humanness (nonhuman or human); (D) Number (plural or singular).
Further constraints: (i) First and second person pronouns cannot cooccur in the same verb complex; (ii) no other OCP can cooccur with a reflexive OCP; (iii) no sequence of two identical pronouns is allowed, e.g. *wa-wa; *mu-mu; *ji-ji, etc.

General strategy for conflicting cases (strong version):

When a conflict arises among the prescribed preferred orders (A) - (D) in (13), the sequence of clitics is ruled out.

I will now illustrate the way in which (13) and (14) work. Consider the following examples:

(15) a. *a -za -m -ni-et -e -a  
  s/he-PST-him-me-bring-APP-A  
  's/he has brought him to me' 
  's/he has brought me to him'

b. *a -za -ni- mw- et -e -a  
  me- him  
  's/she has brought me to him' 
  's/she has brought him to me'

c. a -za -ni- eta kwa yeye  
  s/he-PST-me- bring to him  
  's/he has brought me to him' 
  's/he has brought him to me'

In (15) we can see both (A) Person and (B) Semantic Role at work. Because of (A), only (15a) is acceptable and because of (Bi) only one interpretation is possible, i.e. in accordance with the general principle stated in (14) the reading in which the first person pronoun (ni) is a Patient is ruled out. The only way for having a third person Goal and first person Patient expressed by pronouns is given in (15c), with an OCP for the first person Patient and an independent pronoun for the third person Goal. (Notice that in this case there is no Applicative suffix on the verb, since the coding of the Goal role is done by means of a preposition.)

The examples below show the relevance of (C) Humanness, and (D) Number for the sequential order of two OCP's:

(16) a. na- i -mw- itang- i -a  
  I - him-call -APP-A  
  'I call it (meeting) for him' 
  *'I call him for it'

b. *na-mw- i- itang- i -a  
  I -him-it-call -APP-A  
  'I call him for it' 
  'I call it for him'

(17) a. a- i- wa- mw -et -e -e  
  s/he-PST-them-him-bring-APP-A  
  's/he brought them to him' 
  *'s/he brought him to them'
b. *a - i - mw- wa- e+ - e - e
   him- them
's/he brought them to him'
's/he brought him to them'

(18) a - i - mw- e+ - i - e kwa wao
    s/ne-PST-him-bring-PST-A to them
's/he brought him to them'

Examples (16a,b) show that nonhuman referent pronouns must occur before human ones according to (C) in (13). The reading of the human pronoun being the Patient and the nonhuman one the Goal is ruled out by (B) in (13). Examples (17a,b) and (18) show that, given a plural and a singular, the order must be the one prescribed in (D), namely Plural - Singular. Here too, violations of the sequence constraints are ruled out, i.e. in (17a) the plural pronoun wa, which comes first, must be the Patient, and the singular mu must be the Goal. Example (17c) shows that if the plural pronoun is the Goal, it must be expressed by a prepositional phrase with an independent pronoun.

A different type of example is provided in (20), which follows the Instrument - Patient order but violates the Plural - Singular prescribed order:

(20) a -a - ji -zi -chinj -i - a
    he-PR-it -them-slaughter-APP-A

Example (20) clearly violates the general principle for dealing with conflicting cases, as it was stated in (14) above. We will have to say that in such cases the Semantic Role order constraint (Bii) is "stronger" than the Number constraint (D) (as I will discuss below, this is also the case for Haya). This means that, unless some other explanation can be found that would justify this exception to (14), we will have to restate that principle in terms of a "preferred" strategy more than an "absolute" one. 3 What is interesting, however, is that

3 Shambale would then turn out to be not completely consistent in dealing with conflicting cases. Given that exceptions can probably be found to any rule or universal of human languages (in fact we know from language typology studies that languages are often inconsistent with respect to alleged ideal "types") the phenomenon discussed here will not be the first nor the last stretching along a continuum of some kind. To
there seems to be some consistency within the exceptions. That is, as will be demonstrated below, violations of the sequential order constraints, when they occur, tend to occur with certain kinds of pronouns more than with others.

Let us go back now to the Topicality Hierarchy. As is apparent from the way the TH and the sequential (linear) order constraints are stated in (1) and (13) respectively, the two are in a "mirror image" relationship. That is, whereas Patient appears to the left of Benefactive in (13), it appears to the right of it in (1), and whereas the persons are listed as third before second and first in (13), third person is the last one in (1).

In what sense then is the actual linear order of the morphemes related to the hierarchical order of their features? I like to think of the slot next to the verb stem (the slot furthest to the right in (13)) as the "high status" place. This means that, given two pronouns, the one that is higher in the TH is the one that will be more likely to be in the slot immediately before of the verb stem. In this way, the ranking given by the TH allows us to predict, between two pronouns, which one is going to be immediately before the verb stem and which one is going to be in the other position. If a language allows more than two pronouns, the higher the status of the pronoun the closer to the verb stem it should get. This means that the Number branch of the TH will have to read

(1) d. Singular > Plural

We can return now to the violations of the sequential order constraints. The cases that do not conform to the prescribed orders tend to involve pronouns whose features are rather "low" in the Topicality Hierarchy. This tendency can be stated in the following principle:

(21) THE FLEXIBILITY PRINCIPLE:

Low status pronouns are looser about rules than high status pronouns.

The violations illustrated in (20), for instance, involve an Instrument and a Patient and third person inanimate referents. They are all quite low status features in the TH given in (1). In KinyaRwanda, Kimenyi [1976] cites the case of the locative clitic pronoun ha, which seems able to wander around in different spots ignoring the prescribed orders. In Haya, as I will discuss below, inanimate referent pronouns are looser with respect to some of the principles, e.g. Semantic Role order, and can appear in different orders."

"There seems to be evidence outside Bantu as well that even the most
4. Haya

As mentioned earlier, Haya allows more than two OCP's at the same time in the verb complex. An example of four OCP's is given in (22):

(22) ya- ga- bi-mu -si-gi -ii -ii -a- mu
he/PST-it- it-them-him-smear -APP-APP-A -LOC
'he smeared it (ga) on them (ba) for him (mu) in it (gi)'

However, since examples like (22) above seem to be quite rare (native speakers seem also to have a hard time decoding them), I will discuss the sequential orders for Haya mainly on the basis of verb forms with two clitic pronouns.

Here are the sequential orders of OCP's for Haya, given according to (A) Person, (B) Semantic Role, (C) Humanness, (D) Number.

<table>
<thead>
<tr>
<th>(A)</th>
<th>(B)</th>
<th>(C)</th>
<th>(D)</th>
<th>VERB STEM</th>
</tr>
</thead>
<tbody>
<tr>
<td>3RD</td>
<td>INSTRUMENTAL/PATIENT</td>
<td>NONHUMAN</td>
<td>PLURAL</td>
<td>GOAL/BENEFACTIVE</td>
</tr>
</tbody>
</table>

Both the features involved and the orders prescribed for Haya are more or less the same as those illustrated above for Shambala, with the following differences: (i) first, second, and third person pronouns can cooccur, though, in the plural, Haya has the same morpheme for 2nd and 3rd person, i.e. ba can mean either 'you(pl.)' or 'them'; (ii) the reflexive pronoun (ye or e, according to the phonological environment) can cooccur with other clitic pronouns (I will discuss its order with respect to the other OCP's in 4.5 below); (iii) sequences of morphologically identical clitic pronouns are allowed, e.g. ba-ba, mu-mu, etc.; (iv) I found no evidence for ranking Instrument and Patient with respect to each other. Furthermore, an important difference between the two languages lies in the way they deal with conflicting cases. Whereas Shambala tends to avoid conflicting cases by simply ruling out such sequences as unacceptable, Haya establishes a rank among the different features (A) - (D) and decides each time which pronoun is going to "win" the higher status slot. This is stated in (24):

(24) GENERAL STRATEGY FOR CONFLICTING CASES:

When a conflict arises among any of the prescribed orders in (23), rank their status according to the features involved.
4.1. Person and Semantic Role. Consider the following examples:

(24) a. a -ka -mu- n- deet- ela  'he brought him to me'
      he-PST-him-me-bring-APP   'he brought me to him'

       b. *a -ka- n- mu- leet - ela  'he brought me to him'
          me-him

(25) a. a -ka -ku- n- deet- ela  'he brought you to me'
       he-PST-you sing-me-bring-APP 'he brought me to you'

       b. *a -ka- n- ku- deet - ela  'he brought me to you'
          me-you

(26) a. a -ka- mu- ku- leet- ela  'he brought him to you'
       him-you 'he brought you to him'

       b. *a -ka -ku -mu -Ieet -ela  'he brought you to him'
           you-him

Examples (24a,b) show that given first and third person singular/human pronouns, it is the first person singular pronoun (n) that gets the slot immediately before the verb stem, and the other order is not acceptable, regardless of Semantic Role. This means that since the reading with the first person pronoun as the Patient is still possible in (24a), Person is stronger than Semantic Role. That is, the order of the pronouns is still \( \text{third} \rightarrow \text{first} \) even if the third person pronoun expresses a Goal and the first person pronoun expresses a Patient. The same thing happens with second (ku) and first person, and with second and third (mu), as illustrated in (25a,b) and in (26a,b). This can be summarized in the statement \( \text{PERSON} > \text{SEMANTIC ROLE} \).

4.2. Semantic Role and Number. Haya assigns to Semantic Role and Number the same ranking, that is, \( \text{SEMANTIC ROLE} = \text{NUMBER} \). This means that given two pronouns, if one should get into the slot next to the verb because it is higher in the Semantic Role Hierarchy (e.g. Goal > Patient) and the other should get in the same spot because of the Number Hierarchy, both possible orders will be acceptable. This is shown in (27):

(27) a. a -ka -ba -mu -leet- ela  'he brought them to him'
      he-PST-them-him-bring-APP 'he brought him to them'

       b. a -ka- mu - ba -leet -ela  'he brought him to them'
           him-them *'he brought them to him'

\[5\] I will use the same verb (okuleeta 'to bring) over and over again simply to help the reader to follow the discussion without having to pay too much attention to the glosses. It is, however, implied that what is said about the examples with that verb should be true for other Haya verbs as well.
Thus, in (27a,h) both orders Singular – Plural (mu-ba) and Plural – Singular (ba-mu) are possible when the plural (ba) is the Goal, but only one order, viz. Plural – Singular (ba-mu), is possible when the plural is Patient and the singular is Goal.

4.3. **Humanness and Semantic Role.** I will now show Humanness and Semantic Role are also ranked in the same way, that is HUMANNESS = SEMANTIC ROLE. That Humanness does play a role in determining the order of the OCP's can be demonstrated by the following examples:

(28) a. a -ka- ki-gu-shaza
   he-PST-it-it-cut+INST
   'he cut it(ki) with it(gu)'

b. a -ka- gu- ki-shaza
   'he cut it(ki) with it(gu)'

(29) a. a -ka- ki-mu- teeza
   he-PST-it-him-hit+INST
   'he hit him(mu) with it(ki)'

b. *a -ka- mu- ki-teeza
   'he hit him(mu) with it(ki)'

Whereas the order of Instrument and Patient is not fixed when the two are expressed by pronouns from nonhuman noun classes, as in (28a,b), only one order is acceptable, viz. non-human – human, if the Patient is a person, expressed by the noun class 1 OCP mu, as shown in (29a,b).

Examples (30a,b) show that Humanness and Semantic Role are given the same rank, so that, other things being equal, two orders are possible when there is a conflict only between those two features:

(30) a. a -ka- bi - ba - leet- ela
   he-PST-them-them-bring+APP
   non-hum-hum.
   'he brought them(bi) to them(ba)'
   'he brought them(ba) to them(bi)'
   (bi = inanimate; ba = human)

b. a - ka- ba - bi - leet- ela
   'he brought them(ba) to them(bi)'
   *he brought them(bi) to them(ba)'

Example (30a) is ambiguous because the pronoun ba (noun class 2, human) can either be in the slot next to the verb stem because of its Semantic Role, Goal, or because of its Humanness. Example (30b), on the other hand, is accepted only in the case in which the human pronoun ba is the Patient and the inanimate pronoun bi (noun class 8) is the Goal. The starred reading ('he brought them (inanimate) to them (human)') would in fact violate both the Semantic Role and the Humanness hierarchies.

4.4. **Person, Semantic Role and Number.** Given the three features Person, Semantic Role and Number at play at the same time, it turns out that Person is the strongest one and can be counterbalanced only by both Semantic Role and Number combined together. This is shown in the following examples:
Sentence (31a) is acceptable only if the third person singular pronoun (mu) is the Goal, whereas (31b) is ambiguous. That is, the third person pronoun needs to be higher both in the Number and in the Semantic Role hierarchies in order to take the "high status" slot (next to the verb stem), whereas the first person pronoun (tu) is allowed to get there no matter what its Semantic Role and Number. Let me try to illustrate this in a different way.

There are theoretically two possible readings for each order (tu-mu and mu-tu). I will illustrate them below, assigning to each pair of features a plus (+) or a minus (-). If they follow the hierarchies they get a plus, if they violate it, they get a minus:

(31a) i. tu - mu (31a) ii. tu - mu
    (A) 1st - 3rd (-) (A) Goal - Pat. (-)
    (B) Pat. - Goal (+) (B) 1st - 3rd (-)
    (D) Pl. - Sg. (+) (D) Pl. - Sg. (+)

(31b) i. mu - tu (31b) ii. mu - tu
    (A) 3rd - 1st (+) (A) 3rd - 1st (+)
    (B) Goal - Pat. (-) (B) Pat. - Goal (+)
    (D) Sg. - Pl. (-) (D) Sg. - Pl. (-)

In (31ai) both the Semantic Role and the Number hierarchies are respected, but the Person hierarchy is violated. Since the sequence is acceptable, we do not know whether this means that Semantic Role and Number are stronger than or equal to Person. But (31bi) clears our doubts. Since the inverse order is also acceptable, it must be that PERSON = SEMANTIC ROLE + NUMBER.

In (31a1i), on the other hand, Semantic Role and Person are violated and Number is respected. The sequence is unacceptable. This means that Number by itself cannot win over Person and Semantic Role together, whereas the latter two can win over Number, as shown in (31bii). We have then evidence for another ranking (which logically follows from the one stated above): PERSON + SEMANTIC ROLE > NUMBER.
The latter two principles hold also for examples (32a,b).

Another logical consequence of Person being counterbalanced only by both Semantic Role and Number together is that Semantic Role should not be able to win out over Person and Number together (this also follows from the principle given in 4.1 above): PERSON + NUMBER > SEMANTIC ROLE. This can be demonstrated by examples like (33a,b) which involve the first person singular pronoun:

(33) a. a -ka - ba-n- deetela  
    he-PST-them-me-bring+APP  
    'he brought them to me'
    
    b. *a -ka - n - ba - leetela  
    me- them  
    'he brought me to them'

In several languages it has been pointed out that there are no other (non-reflexive) pronouns that can occur to the right of the first person singular clitic pronoun (OCP). In Haya (and I suspect the same could be said about those other languages) this fact follows from/is consistent with the principle that in order for a pronoun to win over another pronoun that is "higher" in the Person Hierarchy, it must be higher in both the Semantic Role Hierarchy and the Number Hierarchy. But there is no other pronoun that can be higher than 'me' in Number and Person.

4.5. The reflexive pronoun. As I mentioned above (section 4), the reflexive pronoun (which in Haya can only be a clitic, that is, there is no independent reflexive pronoun) must always occur next to the verb stem, even when it cooccurs with a first person singular pronoun, as in (34) below:

(34) a. ba -ka -nn-e- itila  
    they-PST-me-self-kill+APP  
    'they killed themselves for/because of me'
    'they killed me for/because of themselves'

b. *ba- ka- e- nn- itila  
    self-me

There are several ways in which we could account for this: (1) we could add another branch of the Hierarchy that would say Reflexive > Non-reflexive; (2) we could put Reflexive in the Person Hierarchy, which would read Reflexive > 1st > 2nd > 3rd; (3) we could leave this pronoun outside the Hierarchy and simply say that it has a fixed position no matter what. For the time being, I will leave this question open.

4.6. The Flexibility Principle in Haya. Haya also provides evidence for the Flexibility Principle stated in (21) above. Thus, third person nonhuman pronouns can violate sequential constraints such as Semantic Role and Number. In (35) below, for instance, where two nonhuman pronouns are used, Patient and Benefactive can occur in either order (this also demonstrates that Haya tends to group animate nonhuman with inanimate):

(35) a. ba -ka -nn-e- itila  
    they-PST-me-self-kill+APP  
    'they killed themselves for/because of me'
    'they killed me for/because of themselves'

b. *ba- ka- e- nn- itila  
    self-me
(35) a. omukazy' a -ka -ki-gi-cumbila
    woman she-PST-it-it-cook+APP
    'the woman cooked it(ki) for it(gi)'

b. omukazy' a - ka- gi- ki- cumbila
    'the woman cooked it(ki) for it(gi)'

The examples in (36) show that the Number and the Semantic Role Hierarchies can be violated at the same time if two nonhuman pronouns are involved:

(36) a. omukazy' a -ka -cumbil' obugeny' ebyakulya
    woman she-PST-cook APP+party foods(pl.)
    'the woman cooked the foods for the party'

b. omukazy' a ka- bu - bi -cumbila
    it - them
    Goal-Patient
    'the woman cooked them for it'

c. omukazy' a -ka - bi - bu- cumbila
    them- it
    'the woman cooked them for it'

In example (36b) the sequence bu-bi (Singular(Goal) - Plural (Patient)) violates both the Number and the Semantic Role orders.

5. Conclusions

I have shown above that the features and the ranking represented in the Topicality Hierarchy come into play in the linear order constraints of object clitic pronouns in two Bantu languages, Shambala and Haya. I have also speculated that this might hold true for Narrow Bantu as a whole. In particular, with respect to the relationship between the TH in (1) and the actual linear order of OCP's, I have proposed considering the position next to the verb stem as the high status slot, which only high status pronouns can occupy. If more than two pronouns must be expressed, their order will follow the principle the higher the status, the closer to the verb stem. The status of a pronoun is decided according to the ranking of its features in the TH. When a conflict arises among different hierarchies, e.g. when, given two pronouns, one is higher with respect to the Person Hierarchy, but the other is higher with respect to the Semantic Role Hierarchy, different solutions are possible: Shambala, as shown above, tends to rule out such cases treating them as ungrammatical. Haya, on the other hand, weighs the different factors involved and decides on the basis of their respective strength which pronouns can have access to which slots, with Person being the strongest factor, etc.

---

6 The other reading ('the woman cooked it (= the dog) for it') is ruled out by pragmatic reasons.
I have also shown that although there might be exceptions to
the constraints/hierarchies, they will tend to occur only with
certain kinds of pronouns, namely those whose features are lower in
the TH, e.g. inanimate 3rd person pronouns. Stated in different
terms, this means that the higher the status of a pronoun the more
rigid its position (and the lower the status of a pronoun the more
flexible its position).

REFERENCES

Duranti, Alessandro and Ernest R. Byaruhungo. 1977. "On the
notion of 'Direct Object'." In E.R. Byaruhungo, A. Duranti
and L.M. Hyman (eds.), Haya Grammatical Structure, pp. 45-
71. Southern California Occasional Papers in Linguistics
No. 6. Los Angeles University of Southern California, Depart-
ment of Linguistics.

Grégoire, Claire. 1975. "Les Locatifs en bantou." Tervuren:
Musée Royal de l'Afrique Centrale. Annales, Série IN-8°, No.
83.

Hawkinson, Anne and Larry M. Hyman. 1974. "Hierarchies of natural

"Towards a typology of the direct object in Bantu." In
Actes du Colloque "Expansion Bantoue". Paris: C.N.R.S.

Tervuren: Musée Royal de l'Afrique Centrale. Annales,
Série, IN-8°, No. 57.

Doctoral dissertation, University of California, Los Angeles.

Morolong, Malillo and Larry M. Hyman. 1977. "Animacy, objects, and
clitics in Sesotho." Studies in African Linguistics 8:
199-217.


Valente, P. José Francisco. 1964. Gramatica Umbundu. A Lingua do
Centro de Angola. Lisboa.

Vattuone, Bart. 1977. "L'ordine delle particelle clittiche in funzione

linguistic and social implications as a case of grammatical

Los Angeles: University of California Press.
This paper discusses the distribution of the morpheme ni- a pre-subject marker element, in KiVunjo. It is claimed that this morpheme predictably appears in syntactic/semantic constructions involving the speaker's assertion of a proposition, and is absent in non-assertions, or when an assertion cannot be made. This morpheme's similarity to the copula, ni , is also discussed, and syntactic arguments are given to establish a derivational relationship between the two.

1. INTRODUCTION

In KiVunjo, a dialect of KiChaga spoken in northern Tanzania, the morpheme ni- (phonetically n ) appears in certain syntactic/semantic contexts, but not in others, as an element immediately preceding certain verbal subject prefixes. This paper is an attempt to provide a syntactic and semantic characterization of the contexts in which this ni occurs and in which it alternates with ø. I hope to show that the distribution of this element is not idiosyncratic and arbitrary and that the alternation is an instance of a rule-governed phenomenon. The distribution will be shown to depend on such semantic features as the presence or absence of assertion, certainty, and presupposition, as these are found in the semantic representations of sentences. In a later discussion, I will propose an abstract analysis which relates this pre-verbal ni to the phonologically similar copula, also ni , and discuss the evidence in favor of such an analysis.

1.1. Morphology and abbreviations. KiVunjo is a Bantu language and

*This work was supported by a Research Grant from the University of Dar es Salaam, by which I was able to remunerate the Language Assistants Mr. J. Moshi and Sister A. Mosha, first speakers of KiVunjo. They and Miss Y. Mcha, an MA student in the Department of Linguistics, receive my special thanks for their patience and willingness to help. Comments and advice from Mr. E.D. Elderkin, Dr. D. Nurse, Dr. J. Higham, and Mr. Khamisi have greatly improved the content and presentation of this paper. None of the above are responsible for any errors which remain.
has the following features relevant to this discussion: the presence of subject markers (SM's), tense markers (T), negative markers (NEG), and object markers (OM's) which precede the verb root; and the usual system of class markers (CM's) or prefixes preceding the nominal root. Additional notational abbreviations are Q for question, WH for WH questioned elements. When subject markers are listed for person, the usual "1 sg" for "first person singular" will appear, etc. Subjects agree with verbs in class and/or person marking.

2. Alternations of Pre-Verbal ni and Ø

2.1. Introduction and examples. The pre-verbal morpheme ni (henceforth pv ni) is referred to as a "stabiliser" in the discussion by Nurse and Phillipson [1977] in Old Moshi, another dialect of KiChaga. As in Old Moshi, the pv ni appears segmentally as n before vowel-initial verb prefixes in KiVunjo; other verbal prefixes show optional lengthening of the initial consonant and deletion of n. The supra-segmental effects of the morpheme seem to parallel those found in Nurse and Phillipson's study, and so are not dealt with in this work. However, it is not the case that pv ni appears before all vowel-initial verb prefixes. In fact, only second and third person singular subject prefixes u and a respectively appear with pv ni. Compare sentences with these prefixes to forms involving the vowel-initial subject prefixes for classes 3 and 9, u and i respectively:

(1) a. Ndesamburo n-- a- le-soma ki- tapu
   pv ni SM 3sg- T- read CM7- book
   'Ndesamburo read a book'

   b. (iyoo) n- u- le-soma ki- tapu
      (you) pv ni- SM 2sg- T- read CM7- book
      'you read a book'

   c. m- foo u- le- Faa
      CM3- river SM C3--- T-- -smell bad
      'the river smelled bad'

   d. n- jofu i- le- Faa
      CM9 elephant SMC9 T smell bad
      'the elephant smelled bad'

Thus, although the 2nd person singular subject prefix u and the class 3 subject prefix u are segmentally and suprasegmentally similar, only the former is preceded by pv ni. The subject prefixes for classes 3 and 9 never surface with pv ni. The remainder of this paper will therefore treat the cases in which pv ni appears and in which it alternates with Ø; this happens only when 2nd and 3rd singular prefixes are involved.¹

¹There are certain tenses for which the findings of this paper do
2.2. **Assertion contrasts.** Compare now the neutral affirmative examples of (1a–h) with the following negative sentences:

(2) a. Ndesamburo a- le-soma ki- tapu pfo  
    SM 3sg T read CM7 book NEG  
    'Ndesamburo did not read a book'

b. (iyoo) u- le-soma ki- tapu pfo  
    (you) SM 2sg T read CM7 book NEG  
    'you did not read a book'

The above sentences do not appear with pv ni, and would be ungrammatical for the intended reading were they to do so, even though the subject prefixes are the 2nd and 3rd singular markers. We might tentatively propose then that in affirmative sentences, pv ni is present, but in negative sentences it is not.

In the neutral yes/no questions in (3a–b), we find again that no pv ni appears:

(3) a. Ndesamburo a- le-soma ki- tapu  
    SM 3sg T read CM7 book  
    'did Ndesamburo read a book?'

b. (iyoo) u- le-soma ki- tapu  
    (you) SM 2sg T read CM7 book  
    'did you read a book'

Sentences with pv ni in these examples would be ungrammatical for the intended reading.

If we consider our examples so far, we may claim that the appearance of pv ni is determined by the semantic parameter of so-called "assertion vs. non-assertion". Simple affirmative sentences are "assertions", while negatives and questions are "non-assertions", a familiar if not explicit distinction noted by modern traditional grammarians (cf. Quirk, Greenbaum, et al. [1972]). According to this, pv ni appears in assertive contexts whereas Ø occurs in non-assertive contexts.
2.3. Related semantic parameters. The situation is not so simple as that described above. For example, the sentences in (4a-d) are all questions and therefore "non-assertive", but as we see, some contain pv ni and others do not.

   pv 3sg SM T see CM7 book Q
   'Ndesamburo saw the book, didn't he?' 'yes'
   ["You mean it? He saw the book?"]

b. Ndesamburo a- le- iFa na numba pfoee?
   SM 3sg T enter in house Q
   'Ndesamburo didn't enter the house, did he?' 'no'

c. Ndesamburo n- a- enda mcho?
   pv ni SM 3sg go Adverb/Q
   'Ndesamburo has gone, hasn't he?' 'yes'

d. m- ana n- a- keri mesa- ni wai?
   CML child pv ni SMCl(3sg) be table Locative Q
   "So, as we were saying, the child is on the table, right? (Well...)"

It seems that when the force of the yes/no question—by which we mean the speaker's and hearer's expectations as to the truth of the proposition and/or the response to the question—is affirmative, the pv ni appears. When an expectation of negation exists, no pv ni appears. Thus, the words for 'yes' and 'no' appear after sentences (4a-c); these are the natural and expected responses to such questions. Sentence (4d) is an additional case in which the speaker has been previously interrupted, and then decides to return to his narrative. As a lead-in type question, it invites the hearer to listen and is not a "non-assertion".

A similar and perhaps related alternation between pv ni and ø in subordinate clauses seems to correspond to degrees of certainty expressed by the speaker concerning the truth of the proposition of that clause. Consider sentences (5a-d):

(5) a. ni wasi n- u- le- waawa m- du
    is clear pv ni SM 2sg T kill CML person
    'it is (abundantly) clear that you killed a person'

b. ni wasi u- le- waawa ,m- du
    is clear SM 2sg T kill CML person
    'it is (less certainly) clear that you killed a person'

c. kupfa n- u- le- iwa nguo tsi
    reason pv ni SM 2sg T steal clothes those
n- o-² chi- kap- o
pv ni SM2 sg T  beat PSV

'because you stole those clothes, you will be beaten'

d. kupfa u- le- iwa nguo tsi n- o- chi-kap- o
reason SM2 sg T steal ∙ clothes those pv ni SM 2sg T beat PSV

'because you stole those clothes you will be beaten'

Sentences (5a) and (5c) contain pv ni in the subordinate clause, whereas sentences (5b) and (5d) have ¯ before the subject prefix u. These morphosyntactic differences correspond to a somewhat subtle semantic contrast between the speaker's belief in a greater or lesser degree of certainty concerning the validity of the proposition. Thus, sentence (5a) is appropriate when the speaker wishes to declare that "it is clear that you certainly killed a person"; sentence (5b) does not carry such a degree of certainty and is appropriate as a less accusatory statement. In fact, with a slight difference in intonation, (5b) can be uttered as a question, which is, of course, a further weakening in the degree of certainty being expressed. The same or similar results obtain for sentences (5c–d), both fully grammatical but with slightly different shades of meaning. If the speaker is certain that the addressee stole the clothes, he utters (5c), the form with pv ni. On the other hand, if a speaker is more reluctant and less sure of his facts, he might utter (5d), betraying his uncertainty about the facts, without pv ni. Thus, the appearance of pv ni correlates with a greater degree of certainty or a greater intensity as to the firmness of belief in the proposition held by the speaker; the absence of pv ni correlates with less certainty and firmness.

2.4. Summary: assertion, force, and certainty. To summarize, then, the morpho-syntactic alternation involving pv ni and ¯ is matched by a semantic alternation between the parameters of "assertion/non-assertion", "positive/negative force" of yes/no questions, and "greater/lesser certainty" concerning the validity of propositions in subordinate clauses. In each case involving these semantic parameters, the appearance of pv ni corresponds to the more affirmative, assertive pole of the semantic scale, whereas the absence of pv ni is found on the less affirmative, non-assertive pole. In a complete syntactic/semantic characterization of the language, these parameters would be related to the pv ni/¯ alternation, but it is not my intention to provide such a treatment. One could envision the process of mapping semantic features onto the morpho-syntactic of the language by providing rules which relate semantic representations marked, say, [+ASSERTION], to surface structures with pv ni. Semantic representations marked as [-ASSERTION] do not

---

²I am not certain of the underlying representation of this form, and whether or not it should be ultimately derived from /ni---na---u.../ , i.e. pre-verbal ni followed by na, an hypothesized future marker, which coalesces with a u to produce o. These details do not affect the point of the discussion.
trigger the rule producing \( pv \text{ ni } \), etc. It would remain then to relate the additional semantic parameters of "positive/negative force" and "greater/lesser certainty" to the overall morpho-syntactic pattern, but this seems reasonable and attainable. We shall return to these points later.

3. \textbf{Presuppositions, Relative Clauses, and Non-alternating \( pv \text{ ni } \) and \( \emptyset \)}

There are some additional data which provide further evidence for the above proposals, and which also provide the basis for an interesting more abstract analysis relating \( pv \text{ ni } \) to copular \( ni \). These data concern relativization, and it is to this that we turn in the following sections.

3.1. \textbf{Relativization}. Relative clause formation in KiVunjo is straightforward: the head NP is followed by a relative marker (which is identical to a demonstrative element).³

(6) a. \textit{wa- soro w- o wa- i- cha wa- le-kora ky-elya}
\hspace{1cm}CM2 man CM2 REL SMC2 T come SMC2 T cook CM7 food
\hspace{1cm}'the men who are coming cooked food'

b. \textit{n- a- le- ona ki- te ki- Iya ngi- le- ki- kapa}⁴
\hspace{1cm}pv ni SM3 sg T see CM7 dog CM7 REL SM 1sg T OM CM7 beat
\hspace{1cm}'he saw the dog which I beat'

Of particular interest to this discussion are the examples in which embedded relative clauses involve 2nd and 3rd singular subjects. Consider the following:

(7) a. \textit{m- soro u- lya a- i- cha n- a- le- kora ky-elya}
\hspace{1cm}CMl man CMl REL SM3 sg(Cl) T come pv ni SM3 sg T cook CM7 food
\hspace{1cm}'the man who is coming cooked food'

b. \textit{ngi- le- ona ki- te ki- Iya Ndesamburo a- le-kapa}
\hspace{1cm}SM 1 sg T see CM7 dog CM7 REL N. SM 3sg T beat
\hspace{1cm}'I saw the dog which Ndesamburo beat'

³The exact status of this element is not certain. It is undeniably found as a demonstrative element, but whether it is a demonstrative in this case or is in fact a relative marker is far from clear. Preliminary findings concerning multiply-embedded relative clauses suggest that it is probably functioning as a relative marker, but this is being investigated.

⁴The presence of the object marker in this example does not affect the point concerning \( pv \text{ ni } \), but it is another area which is not well understood and is being investigated.
What is crucial in these examples is that pv ni is not present in these affirmative examples of embedded restrictive relative clauses. The pv ni before the verb of the relative clause would render the sentences ungrammatical. The following negative embedded relative clauses also do not and must not appear with pv ni on the verb:

(8) a. m- soro u- lya a- la- le- cha n- a- le-kora  
    SM1 man CM1 REL SM 3sg(CL) NEG T come pv ni SM 3sg T cook
    ky- elya  
    CM7 food

    'the man who did not come cooked food'

b. ngi- le- ona ky- elya ki- lya u- la- le- kora  
    SM 1sg T see CM7 food CM7 REL SM 2sg NEG T cook

    'I saw the food which you did not cook'

Thus, no relative clauses appear with pv ni. These data then falsify a putative hypothesis in which we maintain that all "affirmative" clauses trigger the appearance of pv ni, while non-affirmative clauses do not. Nor can the relevant parameter be "main vs. subordinate clause" (at least in the traditional meanings of these terms), since, as we have seen, complement clauses may have pv ni or Ø (cf. examples 5a-d), but relative clauses have only Ø.

3.2. Presupposition. The data above turn out to be less of a problem than one might at first believe. If we consider the semantic nature of restrictive relative clauses vis-à-vis the relevant semantic features of "assertion", etc., we will note that restrictive relative clauses differ from all earlier examples in that they lack the possibility of an assertion contrast. This is because they presuppose the validity of their propositions. We might expect then that in a context in which no assertion contrast is possible, i.e. when presuppositional content precludes the possibility of an assertion as in restrictive relative clauses, the alternation between pv ni and Ø is not to be found. In other words, where the parameter of assertion has no applicability, the alternation which distinguishes between elements within that parameter disappears correspondingly. This accounts for the data and ties in with our earlier analysis.

This absence of an assertive contrast is not found in non-restrictive relative clauses. There are no presuppositions in such clauses, and so the assertion/non-assertion contrast may be exploited. Interestingly in KiVunjo, we find that to construct a non-restrictive relative clause is impossible and that the language resorts to using two "independent" sentences. Cf. the following examples:
(9) a. *Mwalimu Nyerere, u- ly a (n-) a- le-olosha Pugu, ni rais
   CM1 REL (pv ni) SM3 sg T teach is president
   'Mwalimu Nyerere, who taught at Pugu, is the president'

   With or without pv ni, this sentence is ungrammatical. Instead, speakers find the following appropriate:

   PV ni SM 3sg T teach is president
   'Mwalimu Nyerere taught at Pugu. He is the president.'

   Thus, in KiVunjo, relativization is only restrictive and thus prevents a contrast between assertion and non-assertion. Therefore, no contrast between pv ni and ∅ is found.

4. WH-Questions, Copular ni, and pv ni

4.1. WH-questions. We shall next discuss WH-type questions (henceforth WH-Q). Consider the examples in (10a-d) below:

(10) a. ni nacho/wi a- le- soma ki- tapu
   is WH / WH SM 3sg T read CM7 book
   '(it's) who (that) read a book?'

   b. ni kiki u- le- soma
   is WH SM 2sg T read
   '(it's) what did you read?'

   c. ni nacho/wi a- la- le- soma ki- tapu
   is WH /WH SM 3sg NEG T read CM7 book
   '(it's) who (that) did not read a book?'

   d. ni kiki u- la- le- soma
   is WH SM 2sg NEG T read
   '(it's) what didn't you read?'

   As can be seen, the structure of these WH-Q's resembles a clefted-question in English. In KiVunjo WH-Q's, the similarity to restrictive relative clauses should also be obvious: the head NP—in this case the WH-Q element—is followed by the relative clause. Notice that in all examples pv ni is not present in the embedded verb. But of course this is exactly in keeping with our previous findings, since WH-Q's, like restrictive relative clauses, do not involve the parameter of an assertion.

   5 The language does not seem to mark factive complements any differently from non-factives, although the former should provide an additional case in which propositions are presupposed. I have no explanation for this.
contrast. Instead, the propositions within WH-Q's are presupposed. In the absence of a semantic assertion contrast in the proposition, we would expect that the corresponding morpho-syntactic contrast between pv ni and Ø would also be missing. It is no accident, then, that the WH-Q's should be structurally similar to restrictive relative clauses and also that they are lacking in the pv ni/Ø alternation.

4.2. WH-Q Type B, copular ni and pv ni. There is a second type of WH-Q construction in KiVunjjo which we shall examine presently, but before we do, I would like to present the outlines of an hypothesis which will have important consequences for the analysis of pv ni. This concerns a possible relation between pv ni and the copular element, also ni.

In their pioneering study, Nurse and Phillipson [1977] first hinted at a relation of this sort, stating, p. 55, "There is much to be said as to whether this stabiliser [our pv ni--G.M.D.] ... is the same as the copula ni." They were not concerned with this problem, and so did not go on to develop it, but the similarity of the two elements is both striking and suggestive. I would like to keep this idea in mind as we examine further data, after which I shall attempt to justify and exploit that proposal to present us with a more general account of much of the data herein.

Let us now examine some data involving a second type of WH-Q construction:

(11) a. n- u- le- ona kiki
    pv ni SM 2sg T see WH
    'you saw what?' / 'what did you see?'

b. Ndesamburo n- a- le- soma kiki
    N. pv ni SM 3sg T read WH
    'Ndesamburo read what?' / 'what did Ndesamburo read?'

c. n- u- la- le- ona kiki
    pv ni SM 2sg NEG T see WH
    'you didn't see what?' / 'what didn't you see?'

d. Ndesamburo n- a- la- le- soma kiki
    N. pv ni SM 3sg NEG T read WH
    'Ndesamburo didn't read what?' / 'what didn't Ndesamburo read?'

(The omission of WH-questioned subjects in the above data is no accident. We shall return to this point later.)

These examples are quite clearly not what we would have expected, given the previous data and analysis involving pv ni. Since WH-Q's
do not involve the semantic parameter of assertion (the propositions are presupposed), we would expect the absence of pv ni in these examples. Furthermore, pv ni appears in negative examples of this type of WH-Q; this too is completely unexpected and is not paralleled elsewhere.

The way in which I shall attempt to reconcile these apparently anomalous findings to the previous data and analysis will be to claim that the unexpected pv ni in the above WH-Q's is derived from the copular ni. In other words, the presence of pv ni in these examples is not an exception to the regular pattern involving the semantic features of "assertion" and, crucially, presupposition, but instead is related to an entirely different source, the copular ni.

Before beginning to justify the above claim, one additional fact needs to be pointed out. In the above type of WH-Q, pv ni is present in all examples (affirmative, negative, etc.), which means that the contrast between pv ni and Φ is neutralized in this context. As we have noted, WH-Q's presuppose their propositions; we therefore have again a case in which the parameters of assertion, certainty, etc. are not applicable. In effect, then, we expect that there will be no corresponding morpho-syntactic alternation between pv ni and Φ, because the semantic parameters which we have claimed trigger that alternation are not relevant in the WH-Q context. In short, the absence of a pv ni/Φ alternation in these WH-Q's is expected, and conforms to our earlier analysis; the presence of pv ni --and not Φ-- is what needs to be accounted for. That will be the thrust of the analysis relating copular ni to pv ni, to be discussed below.

Recall now that we have examined two types of WH-Q in KiVunjio (cf. examples (10a-d) and (11a-d)). Let us refer to examples (10a-d) as Type A WH-Q's, and examples (11a-d) as Type B WH-Q's. It seems reasonable to suppose that the two types of WH-Q should be related to each other: they perform the same (or highly similar) function, exploit the same morphological and syntactic elements, etc. Allowing for as yet undiscovered degrees of difference in emphasis between the two types, it seems reasonable to propose that the two types should be derivationally related.6 We might then examine just what the derivational relation could be between the two types.

With respect to this, recall that in the discussion of Type B WH-Q's, I mentioned parenthetically that there were not any examples of WH-Q of subject NP's given. In contrast, the Type A WH-Q's involved examples in which both subject and object NP's were questioned. In fact, further data would show that NP's of all grammatical relations may be questioned in the Type A WH-Q construction. But in contrast, the Type B WH-Q construction does not allow subject NP's to be questioned:

---

6 These differences do not parallel those discussed by Bokamba [1975].
(11) e. *nacho/wi (n-) a- le- soma ki- tapu
WH /WH (pv ni) SM 3sg T read CM7 book

'who read a book?'

(The presence or absence of pv ni does not affect the ungrammaticality of the sentence; hence the use of parentheses surrounding that element.)

We find that it is possible to resort to a pseudo-cleft WH-Q construction for NP's which are subjects and non-subjects alike:

(12) a. m- du u- Iya a- le- soma ki- tapu ni nacho/wi
CM1 person CM1 REL SM 3sg T read CM7 book is WH /WH

'the person (one) who read the book is who?'

b. ki- ndo ki- Iya Ndesamburo a- le- soma ni kiki
CM7 thing CM7 REL 8M 3sg T read is WH

'the thing which Ndesamburo read is what?'

The point is that the processes of WH-Q involving Type A WH-Q's (examples (10a-d)) and the above pseudo-cleft WH-Q's apply freely to WH-NP's of all grammatical relations, whereas the Type B WH-Q construction is restricted to apply to non-subject WH-NP's. I do not at this time have an explanation for this somewhat puzzling fact, but it does suggest something relevant to our discussion. It is fairly common in linguistic analysis to assume that elements or constructions with limited distribution are less likely to be essentially similar to the more basic structures. Rather, such elements or constructions are usually analyzed as being derived by rule while the elements or constructions with greater distribution are considered more basic.

If we were to follow the above lines of reasoning concerning the three types of WH-Q constructions in KiVunjjo, we would conclude that the Type A and pseudo-cleft WH-Q constructions are in some sense more basic than the Type B WH-Q construction. This is because the latter shows a more limited distribution in not applying to subject WH NP's. Given the relatedness between the various types of WH-Q constructions, we might even claim that Type B WH-Q's are derivationally related to structures which perhaps at some level are fairly similar to the Type A or pseudo-cleft WH-Q constructions.

Now, if this proposal—that Type A and pseudo-cleft WH-Q constructions are derivationally related to Type B WH-Q constructions—can be maintained, we may at the same time relate copular ni to pv ni. If the above constructions were to be related, copular ni, which is found in both Type A WH-Q's and pseudo-cleft WH-Q's, could be related to the pv ni found in Type B WH-Q's. We shall now turn to some points in favor of these hypotheses.
We have already seen that Type A and pseudo-cleft WH-Q constructions are more general than the more restricted Type B WH-Q constructions. This in turn would correctly imply that pv ni in WH-Q's is also a more restricted element; it appears only in Type B WH-Q's. If the source of the restricted Type B WH-Q construction is something akin to the more general Type A and pseudo-cleft WH-Q constructions, then the source of the anomalous and restricted pv ni in Type B WH-Q constructions could come from something present in Type A or pseudo-cleft WH-Q constructions. As a source for pv ni, what could be more convenient than the phonologically similar copular ni, present in the more general Type A and pseudo-cleft WH-Q's?

A second related point is that pv ni and copular ni are in complementary distribution with each other in these WH-Q constructions. This is typically the classic kind of argument in favor of treating such elements as being derivationally related to each other.

A third consideration in favor of this analysis hinges on the fact that there is no alternation between pv ni and $\emptyset$ in Type B WH-Q's. This we have seen is expected, since WH-Q's involve presupposition, and block the possibility of an assertion/non-assertion contrast, to which the pv ni/$\emptyset$ alternation is tied. As we noted earlier, the question is: why should the lack of the pv ni/$\emptyset$ alternation in Type B WH-Q's result in the (non-alternating) appearance of pv ni? Recall that in other cases involving presupposition, the resulting lack of contrast between pv ni and $\emptyset$ was resolved by the appearance of $\emptyset$ throughout.

If we relate Type A and/or pseudo-cleft WH-Q's to Type B WH-Q's, and through that relate copular ni to pv ni, then the constant, non-alternating appearance of pv ni in Type B WH-Q's can be accounted for. As is clear from the examples of Type A and pseudo-cleft WH-Q constructions, copular ni is always present, and does not alternate with $\emptyset$, regardless of whether the WH element is within an affirmative or negative clause. If copular ni does not alternate with $\emptyset$, and if pv ni were to be derived from copular ni in these WH-Q's, then it would follow that pv ni would also fail to alternate with $\emptyset$ in these construction. These considerations then support a hypothesis in which pv ni and copular ni are derivationally related.

A fourth argument from some fairly complicated relativization data further supports the claim for a relationship between pv ni and copular ni. This argument centers on their similar behavior in relativization. We have already discussed and accounted for the absence of pv ni in the embedded verb of a relative clause. However, this element is obligatorily absent only from the highest verb of the relative clause; more deeply embedded verbs within the relative clause may in fact contain pv ni:
Although such an example seems to violate Ross's complex NP constraint, the sentence in KiVunjo is fully grammatical. For our purposes, it is enough to point out that pv ni must not appear on the highest verb of the relative clause, but may or may not appear in lower clauses.

We shall see that there is apparently a similar constraint concerning copular ni. In sentence (12d) below, we relativize into a sentential complement of which the highest verb is copular ni, and the sentence is ungrammatical (recall that a verb lower in the relative clause may or may not contain pv ni):

(12) d. *ngi- le- ona m- soro ch- o ni loi (n)-
    SM lsg T see CM1 man CM1 REL copular true (pv ni)
    u- le- (m)- kapa
    SM 2sg T (OMC1) beat

'I saw the man whom it's true you beat him'

But if copular ni is not the highest verb of the embedded relative clause, the sentence is grammatical:

(12) e. ngi- le- ona m- du ch- o ki- keer- i ni
    SM lsg T see CM1 man CM1 REL SMC7 is T (is copular)
    loi (n)- u- le- (m)- kapa
    true (pv ni) SM 2sg T (OMC1) beat

'I saw the man whom it's "the case" it's true you beat'

The KiVunjo verb keer- is a verb 'to be' which behaves much like the Spanish estar.

In fact, in simpler cases involving copular ni, it is still impossible to relativize into a clause with ni as the highest verb. To fully appreciate this, consider the three verbs 'to be' in KiVunjo: copular ni, and and keer, as in the following:

(12) f. m- soro ch- u ni m- swahili
    CM1 man CM1 demonstrative copular ni CM1 swahili
    'this man is a Swahili(person)'

(12) g. m- soro ch- u n- a- i m- swahili
    CM1 man CM1 DEM pv ni SM1 be CM1 swahili
    'this man is like a Swahili, behaves like a Swahili'
Besides the meaning differences between the various forms of 'to be' in (12f-g), the ni copula may not appear with a locative complement, whereas i and keerí may do so. But, to return to the point concerning relativization, consider (12h) below, an attempt to embed the copular ni clause:

(12) h. m- soro u- lya ni m- swahili n- a- le- enda
    CML man REL is CML swahili pv ni SMCL T go
    'the man who is a Swahili went'

To get the sense of (12h) above, we must embed i or keerí;

(12) j. m- soro u- lya a- i m- swahili ni- a- le- enda
    CML man CMl REL SMCl be CML swahili pv ni SMCl T go
    'the man who is a Swahili went' or
    'the man who is like a Swahili went'

The evidence is clear then that ni may not be the highest verb of the relative clause; as we have just seen, i is used instead, even though there is resultant ambiguity. We have seen then that the highest clause of a relative construction may not contain either copular ni or pv ni. If these elements are deeply related, we expect such similarities in behavior; otherwise, we are left with unexplainable and "accidental" disparate facts.

4.3. **Summary.** To summarize much of the preceding discussion, we are now able to make the following points:

(1) The alternation of pv ni and Ø is related to the assignment of plus or minus features respectively to the semantic parameters of "assertion", "force", and "certainty"; sentences marked positively for such features appear with pv ni; otherwise, Ø appears.

(2) In semantic constructions containing presupposed propositions, the contrast between the above parameters is neutralized. Consequently, the morpho-syntactic alternation between pv ni and Ø is also neutralized. Thus, in (restrictive) relative clauses, pv ni is absent and Ø appears throughout. Similarly, in all types of WH-Q's, the pv ni/Ø alternation is neutralized in that (a) in Type A and pseudo-cleft WH-Q's, the alternation is similar to restrictive relative clauses (no pv ni appears); (b) in Type B WH-Q's, pv ni is present throughout.

(3) To account for the non-alternating presence of pv ni in Type B WH-Q's, it was suggested that this element be derived from copular ni, which appears in Type A and pseudo-cleft WH-Q's and also does not alternate with Ø in those forms. To support this contention, it was proposed that the more restricted Type B WH-Q be derived from structures more similar to the more general Type A or pseudo-cleft
WH-Q's, both of which contain copular ni. Various distributional arguments were adduced to justify the claim that pv ni and copular were deeply related; such a relationship could then be exploited to account for the pv ni in Type B WH-Q's. In the following section, we shall examine a specific proposal relating these elements.

5. Rules Relating ni to pv ni

In part of the preceding discussion, we have attempted to show that the presence of pv ni in Type B WH-Q's can be accounted for by hypothesizing a derivational relation between the copular ni and the pv ni, the elements appearing in Type A (and pseudo-cleft) WH-Q's and Type B WH-Q's respectively. We might then ask just what are the details of this hypothesized derivational relationship between pv ni and copular ni. This section will be an attempt to provide the beginnings of an answer to that question. But since the proposed relationship is fairly abstract, clear surface evidence for the individual details of this proposed derivational relationship will be difficult to come by.

Consider what must be done. Claiming that copular ni is related to pv ni in WH-Q's has led us to claim that Type A WH-Q's and Type B WH-Q's are to be derivationally related. Thus, from an intermediate structure like (13), closely resembling the structure producing Type A WH-Q's, we might derive a structure like (14), which is close to the form of Type 3 WH-Q's:

\[
\text{(13)}
\]

\[ S \]

\[ ? \]  

\[ V \quad \text{is} \quad \text{WH} \]

\[ \text{ni} \quad \text{ki} \quad \text{ki} \]

\[ \text{NP} \]

\[ \text{Ndesamburo a-le-soma SM3sg T read} \]

\[
\text{(14)}
\]

\[ S \]

\[ \text{Ndesamburo pv ni a-le-soma kiki} \]

\[ \text{SM3sg T read WH} \]

\[ \text{ni kiki Ndesamburo a-le-soma} \implies \text{Ndesamburo n-a-le-soma kiki} \]

\[ \text{'what did Ndesamburo read?'} \]

5.1. Evidence. From the above, we must be able to justify the claim that the higher verb, copular ni, somehow ends up on the lower verb
(a-le-soma), attaching itself as pv ni to produce superficial n-a-le-soma. The WH-element is moved to the right, giving us the final surface form for sentence (14).

It turns out that there is evidence supporting the rightward movement of WH-NP elements, since it is necessary to derive pseudo-cleft WH-Q's like examples (12a-b).

The remaining problem then is to produce evidence in favor of the rule which would move the copular ni from its position as an upper verb to the pre-verbal position before the lower verb a-le-soma.

Recall the earliest examples of this paper, in which pv ni and Ø alternated in assertion/non-assertion sentences. One way to characterize this might be by means of a "higher verb" analysis as in Ross [1967] in which, at a fairly deep representation of meaning, we have a structure like the following (omitting complications):

If the higher verb (of saying) is marked positively for the feature of [ASSERTION], then that verb is spelled as ni; if the representation is marked negatively for [ASSERTION], no ni appears. We then need a rule which will attach the upper verb ni to a position before the lower verb, a-le-soma, to produce superficial n-a-le-soma, a structure with pv ni. But this is exactly the same sort of rule which would be required under the analysis in which copular ni and pv ni are to be related. From structure (13) to structure (14), we need a rule lowering ni, the copula, to become a pv ni; similarly, from a structure like (15), we derive superficial sentences like (1-5) by lowering the upper verb "assertive" ni, to appear as the pv ni where appropriate. In other words, the same or a highly similar process would move a "higher" verb ni to a position before the lower verb as pv ni.7

---

7 One might speculate even further that the copular ni and the pv ni derived from the assertion/non-assertion parameter are even more deeply related than has been suggested here, perhaps that they are reflexes
This then strengthens the case for a relationship between \( pv \text{ ni} \) and copular \( ni \), which in turn treats the \( pv \text{ ni} \) in Type B WH-Q's as derived from copular \( ni \) and therefore not as an exception to the analysis with the "assertion" contrast.

6. Conclusion

We have seen then that the semantic alternations between sentences marked as "assertive" vs. "non-assertive", etc. are matched by morphosyntactic alternations between \( pv \text{ ni} \) and \( \emptyset \). When presuppositional content overrode the assertion/non-assertion contrast, \( pv \text{ ni} \) and \( \emptyset \) did not alternate. In Type B WH-Q's, copular \( ni \) has been considered the source of an otherwise anomalous \( pv \text{ ni} \). Various distributional facts were adduced to justify that proposal. Finally, it was shown that if a "performative" type analysis were to be adopted for the "assertive" \( pv \text{ ni} \), a rule which relates a higher verb \( ni \) to \( pv \text{ ni} \) would be necessary. This rule could then be used to relate the higher copular \( ni \) of the Type A WH-Q to the \( pv \text{ ni} \) in Type B WH-Q's. Thus, a unified and consistent analysis of \( pv \text{ ni} \), and its role in the syntactic and semantic structures of the language, can be maintained.

REFERENCES


of a single very abstract element /TO BE/. Finding evidence in favor of this is even more difficult than justifying the relatively less abstract and more modest proposal espoused here. I think it is very likely that an historical relationship between the elements existed, and there is some slightly similar evidence from another Bantu language, KiKuria, pointing the same way. The whole area needs intensive investigation.
In this article, I discuss my analysis of conditional sentences in Raya. Raya belongs to a subset of Bantu languages in which tense distinctions are made consistently. Every grammatical sentence of Raya will be marked for tense, hence, I have called Raya a "tense-prominent" language. This contrasts with other African languages (including some other Bantu languages) in which aspectual distinctions are made in some sentences where no overt tense markers are present (aspect-prominence). I have shown that, for some languages, there seems to be a connection between the type of tense/aspect system that prevails and the syntactic distinctions made among unreal and real conditional sentences. Many interesting generalizations are made about the nature of unreality in language, which may have consequences for further studies in the area of syntax and semantics.

0. **Conditionals Defined**

Since the terminology used in studies on conditional sentences is so profuse, I will explain the way I use these terms in the following paper. **Conditionals** can be classed semantically into three categories:

1. **Simple Conditionals** state that a proposition results if another proposition holds. Simple conditionals typically allow the same range of tense distinctions that is found in simple declarative sentences.

   (1) If you go to the store, I will cook. (future simple)
   (2) If John agreed, Mary disagreed. (simple past)
   (3) If the sun shines, the birds sing. (simple present)

---

1 I would like to thank those persons who so patiently and generously served as language consultants, including: Mrs. Helen Mariki (Chagga), Mr. Akintole (Yoruba), and Mr. M. Adetoye (Yoruba). A special thanks to Mr. Ernest Byarushingo who while serving as my Raya consultant, contributed invaluable comments and suggestions throughout the duration of this project. Finally, I would like to thank Profs. T. Hinnebusch, P. Schachter and S. Thompson for having read and made comments on an earlier version of this paper.
2. **Hypothetical Conditionals** are conditional sentences in which the antecedent introduces a hypothetical or imaginary proposition (where that proposition is not assumed to be false).

(4) If I saw Sidney Poitier in person, I'd faint.
(5) If the King of Siam were to come to dinner, I wouldn't serve him Chinese noodles.

3. **Counterfactual Conditionals** are conditional sentences in which the antecedent asserts a proposition which is assumed to be false.

(6) If I were you, I wouldn't talk like that.
(7) If he had cooked, I would have eaten.
(8) If he had stolen the money, he wouldn't have turned himself in.

Notice that some sentences which are counterfactual semantically can have the syntactic structure usually associated with hypotheticals, i.e. (6) above. Thus, Schachter [1971] has proposed a syntactic typology which groups (4), (5), and (6) above in contrast to (7) and (8). She calls them present and past subjunctives, respectively.

Conditional sentences have been mostly the concern of philosophers. The main issue which has concerned philosophers has been the verifiability of contrary-to-fact conditionals. What we know thus far is that the truth value of a counterfactual sentence cannot be derived from the truth value of its component parts, at least not in any axiomatic fashion. In any case, my data will have very little, if anything, to offer in solving this.

There are, however, interesting questions regarding the issue of syntax and semantics, which my data can shed some light on. I will be concerned, in particular, with two problems. The first has to do with the notions **Reality** and **Unreality** in language. All languages make some systematic distinction between real and unreal sentences, as the following examples show:

Real: If they bring the food, we bring the wine.
Unreal: If they were to bring the food, we would bring the wine.

In most languages, this contrast is found in conditional sentences. Many languages, in addition, show this contrast in non-conditional sentences:

Real: I will kill him when I see him.
Unreal: I would kill him, but I don't have a gun.

We learn from philosophers, e.g. Goodman [1954], that future simple conditionals are semantically unreal. That is, they share certain assumptions with hypothetical and counterfactual conditional sentences. However, the syntactic facts of neither English nor Haya reflect this situation. That is, future simple conditionals will be shown to show a syntactic affinity with other real conditionals, e.g. simple past or
simple present, rather than with other unreal conditionals, hypotheticals and counterfactuals. We might want to say then that in these languages the syntactic facts do not reflect the semantic reality. In section 2.0 we will discuss this problem in detail, bringing data from languages which show a close syntactic relationship between future simples and other unreal conditional sentences, for contrast. We will conclude that languages differ as to how they segment the semantic contrast between Reality and Unreality. We will see that the syntactic facts of English and Haya support a slightly different analysis of the unreal/real contrast in language than that manifested by Yoruba and Chagga.

The second problem has to do with counterfactuality. Counterfactuals in some languages e.g. English and Haya, may be expressed syntactically as either present or past subjunctive.

Pres subj: If I were you, I would wear this one.

Past subj: If I had gone to the store, I would have bought meat.

Both these sentences have the same kinds of assumptions. They assume the negation of the antecedent. What does this, then, suggest about the nature of counterfactuality? In searching for an answer to this question, some interesting observations are brought forth about types of counterfactual sentences.

1. Simple Conditionals

The antecedent of the Simple Conditional in Haya is introduced by ká 'if'. Ká introduces the antecedents of all Simple Conditionals and most Imaginary ones. In many languages such a conditional clause introducer alone marks the sentence as being conditional. That is, the tense and modal possibilities are pretty much as they are in simple declarative sentences, e.g.

English: If Jack voted for the resolution, Bill voted against it.  
(simple past)  
If today is his birthday, he is out celebrating.  
(simple present)

The Simple Conditional in Haya is unlike the Simple Conditional in English in that Haya indicates the mood of the sentence by way of an affix inside the antecedent clause. This affix la is the future 1 indicator, which takes on a special meaning in conditional sentences. It is used to mark the sentence as a simple conditional sentence rather than, say, a declarative one. La is attached to the auxiliary verb ba 'be', leaving the main verb free to carry the semantic tense marker for that clause.

(9) ká John a-ːa-ba y-á-ikiriza Jack y-á-yânga  
if pro-Future l-aux pro-Past I-agree pro-Past I-disagree

'if John agreed (earlier today), Jack disagreed'
Before going further, let us briefly consider the Haya tense system, which shows more time distinctions than that of English. In Haya, there is a three-way distinction in past time:

- Past 1 (P1) = recent past (earlier today)
- Past 2 (P2) = semi-recent past (yesterday)
- Past 3 (P3) = distant past (anytime before yesterday)

In like manner, Haya distinguishes two future tenses:

- Future 1 (F1) = near future (tomorrow)
- Future 2 (F2) = distant future (after tomorrow)

There are a number of aspectual markers as well (e.g. progressive and perfect). Haya, like English, requires the presence of a tense marker in every sentence. This contrasts with many African languages which can have aspect markers in a sentence without marking the sentence for tense (e.g., Hausa, Yoruba). I refer later to languages with tense systems like Haya and English as being tense prominent. The languages typified by Yoruba and Hausa are what I call aspect prominent.

The following are examples of Simple Conditionals in Haya:

(10) P1 ká John a-la-ba\(^2\) y-á-rikiriza Jack y-á-yângâ
if pro-FI-aux pro-P1-agree pro-P1-disagree

'if John agreed, Jack disagreed' (earlier today)

(11) P2 ká John a-la-ba á-rikiriz-é Jack a-yâng-íle
if pro-FI-aux pro-agree-P2 pro-disagree-P2

'if John agreed, Jack disagreed' (yesterday)

(12) P3 ká john a-la-ba y-a-rikiriz-e Jack a-ka-ângâ
if pro-FI-aux pro-P1-agree-P2 pro-P3-disagree

'if John agreed, Jack disagreed' (a few days ago)

(13) Prog ká ñmushana gu-la-ba ni-gu jwá tu-imûk-e
if sun pro-FI-aux prog-pro-shine we-get up-subjunct.

'if the sun is shining, we should get up'

(14) Pres ká a-la-ba a-li muñambi inyé aho n-di ntälë
if pro-FI-aux pro-cop doctor I then pro-cop lion

'if he's a doctor, I'm a lion'

\(^2\) a Pl

Ernest Byarushingo (personal communication)
I have omitted examples of future simple conditionals, as they are covered in the next section. Remember that the Fl marker in the above examples is being used in a special way, to mark the clause as being "conditional". We shall see subsequently that in all conditional sentences some type of modal is affixed onto the verb, which indicates the mood of the sentence. In Simple Conditionals that marker is la. In Imaginatives that marker is ku (as will be shown subsequently).

Since future conditionals were omitted, the following informal statements for the formation of simple conditionals must be taken as tentative:

- The antecedent of Simple Conditionals is introduced by ka 'if';
- all simple Conditionals require the presence of the future marker la in the antecedent. La is affixed onto the auxiliary ba in the position where tense markers normally occur (between the subject pronoun or subject concord and the verb).

2. Future Simple Conditionals

Semantically, the class of Unreality Conditionals consists of hypotheticals, counterfactuals and future simple conditionals. An interesting fact is that in many languages both hypothetical and counterfactual sentences make use of a syntactic marker of Unreality, e.g. would in English. Future simple conditionals in contrast, lack such an Unreality marker. In fact, future simple conditionals are syntactically like Real Conditionals (other simple conditionals).

In the following, I discuss the Haya data with respect to how closely the syntactic facts of future simple conditionals correspond to the fact of their being unreal semantically. The Haya situation will be shown to parallel that of English, where future simple conditionals are always syntactically distinct from hypotheticals and counterfactuals. This may not prove to be the general case in Bantu, however, as there are languages, e.g. Chagga, which, upon preliminary investigation, contrast with Haya in this respect. These languages show the future marker being used in some imaginative sentences.

The following are examples of future simple conditionals in Haya:

(15) k-a-la-ijá n-da-mu-bóna
    if-he-Fl-comes I-Fl-him-see
    'if he comes, I will see him'
Future simple conditionals are like other Simple Conditionals in that the FL indicator is obligatory. Recall that the future indicator la is being used to show conditionally in simple conditional sentences. In simple conditionals which are not semantically future, la is placed on the auxiliary verb ba 'be', leaving the main verb free to carry the appropriate tense indicator for the sentence. Future simple conditional sentences differ from other simples in that the auxiliary ba is not used to carry the FL indicator. The FL marker is attached directly onto the main verb. The FL marker in future simple conditionals is ambiguous, showing both futurity and conditionality. We can then revise the rule for simple conditionals to read as follows:

All Simple Conditionals require the presence of the future marker la in the antecedent. If the antecedent is semantically future, then the future marker is attached to the main verb.
If the antecedent is semantically non-future, the auxiliary -ba is used to carry the future indicator, leaving the main verb free to carry the semantic tense marker of the sentence.

There is one type of sentence in which the FL marker (la) is not found. In sentences for which the time reference of the antecedent is semantically distant future, the F2 marker li is used in place of la, as the following example shows:

(19) k-åsli-ijá n-di-mu-bóna
    if-he-F2-comes I-F2-him-see
    'if he comes, I will see him' (next week)

This calls for revising our rule to read as follows:

Most simple conditionals are marked as such by the presence of the future marker la in the antecedent. The exception is where the antecedent itself is interpreted as distant future, in which case the F2 marker li is used.

---

3 The variant forms of the future marker can be accounted for by the following rule:

1 → d/n
It seems apparent that the Fl marker ła has achieved a status in simple conditionals beyond its usage as an indicator of future. That is, it is the indicator of *conditionality* in these sentences. I interpret the Fl marker ła as the "conditional" indicator, and li (F2) can be interpreted as such only in certain restricted contexts.

Now to bring the facts of Haya to bear on what we know about the future simple conditionals in other languages, I quote Schachter [1971: 68] on future simple conditionals in English:

"So although the future simple conditional is like the imaginative in indicating unreality, it differs from them in that it is never used to indicate divergence from this world."

Schachter says this after finding that in English, future simple conditionals are syntactically like other simple conditionals. Furthermore, she apparently found no syntactic evidence of their being used to show Unreality. We can conclude from this that the syntactic facts of English show a contrast between Unreality and Reality where Unreality excludes future projections about this world. Unreality is restricted to talking about what might happen in some other world (hypothetical) and what didn't happen in this world (counterfactual).

Haya is like English in this respect. Syntactically, future simple conditionals are always kept distinct from imaginary conditionals. The syntax of Haya then supports, as does English, an Unreality/Reality distinction where "unreal" excludes projections into the future in this world.

There are, interestingly, languages where syntax exhibits a closer relationship between future simple sentences and imaginary ones. In the following data from Yoruba and Chagga, I show that some Niger-Congo languages segment Unreal and Real sentences in an interesting way which contrasts with Haya and English. It will be shown that the syntax of these two languages supports the claim that future simple conditionals are semantically unreal.

Past subjunctive conditionals in Yoruba are relatively easy to identify in that they always contain the preverb `ìbá in their consequent clauses.

(20) a. bí m bá tete dé ni, ìm-bá bá a nínú ílé
  if I INDEF early arrive COPULA I-UNREAL find him at home
  'if I had come early, I would have found him at home'

b. bí ó bá sê pé ó lè sò Yorùbá ni, won ìbá tì
  if it INDEF be that he able speak COP they UNREAL PERF
  gbà á
  accept him
  'if he had been able to speak Yoruba, they would have accepted him'
The antecedent of past subjunctive conditional sentences is usually introduced by the "basic" form of the conditional clause introducer (ti/bi.... ba'). It may be introduced by an expanded form (b) 'if' INDEF which means 'if it be that' or it may be replaced by the unreality marker 'l'ba (c). Since the antecedent clause can have variant forms, we can assume that it is the consequent clause which imparts the notion of "contrary-to-factness" in these sentences. That this is the case will become obvious as we consider the following simple conditionals whose antecedents are identical in form to those in the sentences cited above.

(21) a. bí mo bá lọ sí ilé-awosan, mo máa pàdé ṣòrè mi
   'if I INDEF go to cinema I fut meet friend my' (cf. 20a)
   'if I go to the cinema, I will meet my friend'

   b. bí ó bá jé pé o lè so 'Yorùbá, won l'ba tì gbà
   'if it INDEF be that a lie COP you tell, I(FUT) punish you' (cf. 20b)
   'if its a lie you told, I will punish you'

The fact that the form of the antecedent is not very consistent in Yoruba indicates that it is in the consequent clause that distinctions are marked between types of conditional sentences. We can safely say, for example, that all past subjunctives (counterfactuals) have some form of 'l'ba in their consequent clauses:

(22) a. bí mi bá rí esin t'óní iye, m-bá dákú
   'if I INDEF see horse REL has wings, I-UNR faint
   'if I had seen a winged horse, I would have fainted'

   b. b'ó bá se pé o lè so 'Yorùbá, won l'ba tì gbà
   'it' INDEF be that he able speak Yoruba, they UNREAL PERF accept
   'if he had been able to speak Yoruba, they would have accepted him'

   c. bí mo bá rí i l'áñá m-bá nà á
   'if I INDEF see him yesterday, I-UNR beat him
   'if I had seen him yesterday, I would have beaten him'

   d. m-bá rí i l'áñá m-bá nà á
   'had I seen him yesterday, I would have beaten him'

---

4The ' of l'ba is deleted after a pronoun, e.g. /mo l'ba/ → [m'ba].

5Insertion of the perfect marker is optional here.
In present subjunctive (hypothetical) sentences, the consequent clause usually does not contain ūba. Interestingly, it usually contains one of the future markers in the language. Occasionally, the ūba "unreal" marker is found in present subjunctive sentences, in which case the sentence is ambiguously interpretable as either a hypothetical or a counterfactual. In sentences like these, the distinction between past and present subjunctive is unimportant. That is, the semantically relevant information is that the sentence is unreal, leaving the tense reference to contextual clues. Below are examples of present subjunctive conditional sentences (compare these to the future simple conditionals in (21)):

(23) a. bì ó bá sè pé ó gbo edé-faransé, won ó yà a if it INDEF be that he speak French, they fut hire him
   'if he spoke French, they would hire him'

   b. bì m bá rí èshìn t'ó ni ịyé, mǎ n dá kú
   if I INDEF see horse REL has wings, I(fut) faint
   'if I saw a winged horse, I would faint'

We know that hypotheticals are unreal and we expect them to have a different syntactic structure from that which is found in real conditional sentences. It is claimed that future simple conditionals are unreal as well. However, using English as an example, we find that future simple conditionals are similar structurally to real conditionals not to unreal ones. In Yoruba, the semantic delineation of Unreals is supported because future simple conditionals and hypothetical conditional sentences are identical structurally. Yoruba then is an example of a language for which unreality includes projections about this world. That is, the syntactic expression of unreality is not limited to expressing facts about another world.

Chagga, a Bantu language, behaves in this respect like Yoruba. An imaginary sentence in Chagga can be expressed using either the imaginative marker we or the future indicator in the consequent clause.

(24) John a-wé-icha inú ngí-we-kórá machalári
   pro-IMAG-come today I-IMAG-cook bananas
   'if John were to come today, I would cook bananas'

(25) John k-a-cha inú ngé-kóra machalári
   if-pro-come today I(fut)-cook bananas
   'if John were to come today, I would cook bananas'

---

6 There are three different future indicators in the language. They happen to have come about as a result of dialectal variation, therefore there is no meaning difference. They are as follows: (1) yio (which surfaces as o"), (2) a and maa.
Interestingly, however, the reverse is not true, i.e. a future simple sentence does not have the option of being expressed with the imaginative marker we. Given this, we might say that the future indicator is the general unreality marker, i.e. it can be used to show unreality in this world or of another world. The imaginary marker we, on the other hand is limited to showing unreality outside the domain of this world.

We can conclude that the syntactic facts of Yoruba and Chagga support a slightly different analysis of the unreal-real contrast than do the facts of Haya and English. The Yoruba and Chagga data support an analysis of the unreal-real distinction where Unreality includes future projections. The following diagram shows the way the two types of languages show the real-unreal distinction, syntactically.

<table>
<thead>
<tr>
<th>REALITY</th>
<th>UNREALITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>English SIMPLE conditionals</td>
<td>HYPOTHETICALS - what might happen in some other world, i.e. fiction</td>
</tr>
<tr>
<td>(including future)</td>
<td>COUNTERFACTUALS - what didn't happen in this world, i.e. fact</td>
</tr>
<tr>
<td>Haya SIMPLE conditionals</td>
<td></td>
</tr>
<tr>
<td>(not including future)</td>
<td></td>
</tr>
<tr>
<td>Yoruba SIMPLE conditionals</td>
<td>HYPOTHETICALS</td>
</tr>
<tr>
<td>Chagga</td>
<td>COUNTERFACTUALS</td>
</tr>
<tr>
<td></td>
<td>FUTURE SIMPLE - what will happen in this world, i.e. forecast</td>
</tr>
</tbody>
</table>

3. Imaginary Conditionals

The term imaginary is used to refer to that subset of unreal conditionals which indicates divergence from this world. Semantically, Imaginary Conditionals consist of (1) those conditionals which express an imaginary or hypothetical situation, e.g. 'if the Queen came to dinner, I would prepare her favorite dish', and (2) those conditionals which express imaginary situations, but whose antecedents are interpreted as being false, e.g. 'if the Queen had come to dinner, I would have prepared her favorite dish'. Following the analysis of Schachter [1971], I call the form of the first type present subjunctive and that of the second type past subjunctive. This syntactic terminology is needed because counterfactual sentences are not consistently past subjunctive, as, for example, in a sentence like 'if horses had wings, they could fly'.

Imaginary sentences in general tend to exhibit the following characteristics:

- Their antecedents, like those of simple conditionals, are introduced by a conditional introducer. (In Haya and English the introducer in Imaginary sentences is the same as the introducer of simple conditional sentences.)
They usually include some type of marker of "imaginativeness", e.g. *would* in English.

The tense possibilities are usually very restricted. This is because tense distinctions are superfluous in Imaginary sentences, with the exception of past subjunctives, where past tense is crucial to the interpretation of some counterfactual sentences.

Imaginary conditionals in Haya are typical of those found in languages in general. They are introduced by the conditional clause introducer *ká*; they are distinguished from non-imaginary sentences by the presence of the imaginary marker *ku*; and the tense possibilities are limited to the following:

- **Present subjunctive** = past 1
- **Past subjunctive** = perfect (*past 1 + past 2*)

Before going further, we should consider some examples of Imaginary conditionals:

**Present Subjunctives**

(26) **ká n-a-ku-bona éfarasy' ein' ámabába ti-n-á-ku-amin**
if I-Pl-unr-see horse having wings neg-I-Pl-unr-believe

'if I saw a horse with wings, I wouldn't believe it'

(27) **ká n-a-ku-zíleba n-ka-bona? nti ego farasi kwo zi-n'**
if I-Pl-unr-see I-consec-see that yes horse truly pro-have

ébibába n-a-ku-enda ku-zí-lebarge ku-leba nka zi-emile nka wings I-Pl-unr-go to-them-examine to-see if they-are like
éfarasi ángá nka zi-emile kündi
horses or if they-are different

'if I looked at them and saw that they were truly horses having wings, I would like to examine them to see if they are like horses or if they are different'

**Past Subjunctives**

(28) **ká n-a-ku-g-ile omúká n-a-ku-l-ile ébitooke n-énfulú**
if I-Pl-unr-go-P2 home I-Pl-unr-eat-P2 bananas and-fish

'if I had gone home, I would have eaten bananas and fish'

(29) **ká n-a-ku-g-ile Bushûmábá, n-a-ku-eb-i-Ie Má Êlesi**
if I-Pl-unr-go-P2 I-Pl-unr-see-P2

tu-gánilá; n-a-ku-hig-ile ákanya kó-ku-gyá Omumwani
we-talk I-Pl-unr-look for-P2 time of-to-go to

---

7*Ká* in Haya is used as a consecutive marker much as it is used in Swahili.
ku-leba omwana wa munyanyanzí okwó á-li ku-shomá onu shufúle
to-see child of sister how he-be to-read in school

'if I had gone to Bushumba, I would have seen "Dona" Alizi so that
we could talk; I would have found the time to go to Omumwani to
see my nephew . . . how he is doing is school'

This marker ku which I call a marker of "imaginativeness" probably
derives from the infinitive marker ku, but its usage in these sentences
is strikingly different from its usage as an infinitive marker in several
important ways. Firstly, the infinitive plus verb can never occur with a
subject prefix. Secondly, the verb in its infinitival form never carries
a tense indicator. We saw in the examples given above, however, that both
subject prefixes and tense markers are prefixed to the verbs marked by
ku. For this reason, -ku- is considered an imaginary indicator, which
derived from the infinitival marker and is equivalent to would in English.
Evidence that ku is in some sense equivalent to would is provided when
we consider unreal non-conditional sentences, which share certain semantic
properties with imaginary sentences.

(30) Kató y-a-ku-ku-is-fle kyonká t-á-fna mbúndu
pro-Pl-unr-you-kill-P2 but neg-he-have gun

'Kato would kill you, but he doesn't have a gun'

(31) n-a-ku-chumb-ílé kyonká t-á-li-mú majúta
I-Pl-unr-cook-P2 but neg-loc-be-loc oil

'I would cook but there's no oil'

(32) Kató y-a-ku-chúmbá bwaigolo
pro-Pl-unr-cook tonight

'Kato may cook dinner tonight'

(33) n-a-ku-ku-bona nyenkya
I-pl-unr-you-see tomorrow

'I may see you tomorrow'

(34) n-a-ku-chumb-ílé kyonká y-a-ba t-á-li-mú majúta
I-Pl-unr-cook-P2 but pro-Pl-aux neg-pro-cop-loc oil

'I would have cooked but there was no oil'

The preceding sentences are semantically like imaginative conditional
sentences in the following ways: either they imply the negation of the
clause marked by the presence of ku (30,31,34), or they imply some doubt
as to the actualization or realization of the action expressed by the
verb (32,33). Interestingly, those sentences which I claim imply the
negation of the antecedent (30,31,34) use the tense frame that is used in
counterfactual conditional sentences. We know that counterfactual con­
ditionals imply the negation of their antecedents. Notice also that
(30), (31), and (34) can be paraphrased by conditional sentences. Similarly,
those sentences which I claim imply some doubt as to the actualization of
the action expressed by the verb take the tense frame usually associated with
hypothetical conditional sentences.
Another point worth noting is that only two tense possibilities are allowed in imaginary conditionals. *Haya*, like English, makes a syntactic distinction between present and past subjunctives. Present subjunctives require the Past 1 indicator and past subjunctives require usage of the perfect marker (P1 prefix and P2 suffix). This phenomenon was not included as one of the general characteristics of Imaginary Conditionals because, in fact, many languages lack such a distinction. Chagga and some dialects of Swahili are examples of such languages. In these languages, one imaginary marker is used to express both hypotheticals and counterfactuals. The only indication that the sentence is counterfactual would come from contextual clues (yesterday, last year, etc.). The following examples from Swahili show this:

(35) kama ni-ngc-kwenda nyumba-ni kiangazi ki-ja-cho
    if I-imag-go house-to summer pro-come-rel
    ni-ngc-penda ku-kaa nyumba-ni na wazee wangu kwa
    I-imag-like to-stay home-at with parents my for
    siku chache
days few

    'If I were to go home this coming summer I would like to stay
     at home with my parents for a few days'

(36) kama ni-ngc-kwenda nyumba-ni kiangazi ki-li-cho-pita
    if I-imag-go home-to summer pro-pst-rel-pass
    ni-ngc-penda ku-kaa nyumba-ni na wazee wangu siku chache
    I-imag-like to-stay home-at with parents my for days few

    'If I had gone home last summer I would have like to have stayed
     with my parents for a few days'

(37) ngi-we-henda shule ngi-wei-soma ki-ingeresa
    I-imag-go school I-imag-study English

    'If I went to school, I would study English'

(38) ngi-wei-henda shule mfriri fo kawi ngi-wei-kulosha kiingeresa
    I-imag-go school day of 2nd I-imag-study English

    'If I had gone to school last Tuesday, I would have studied English'

Interestingly, this data contradicts the standard textbook account of the imaginary marker in Swahili, which makes claims like the following from Ashton [1944]:

"When the supposition is possible of realization, the -nge
    tense is used both in the protasis (condition) of a sentence
    and in the apodosis (consequence).

    mti huu u-ngc-anguka, u-ngc-ni-ua
    tree this pro-imag-fall, pro-imag-me-kill

    'If this tree should fall, it would kill me.'
If the supposition is regarded as not having been realized the -ngali- tense is used—both in the protasis and apodosis."

m'ti huu u-ngali-anguka, u-ngali-ni-ua

'If this tree had fallen, it would have killed me.'

The markers nge (Swahili) and we (Chagga) indicate that the sentence is imaginary. Interestingly, these languages which make no syntactic distinction between present and past subjunctives (Yoruba, as well) are what I have called non-tense prominent. That is, in these languages, aspect and mood markers can be used, where no syntactic reference is made to tense. It seems natural that languages in which tense is often subordinate to aspectual distinctions in simple sentences would extend this pattern to conditional sentences. Thus, these languages mark the "imaginariness" of the sentence syntactically, leaving the time reference to be contextually determined.

Haya and English, on the other hand, represent tense prominent languages. These are languages in which aspectual references can only be made with reference to a particular tense marker, e.g. present progressive, past progressive, future progressive. This tense prominence is carried over into conditional sentences, giving a syntactic distinction between present and past subjunctives among Imaginary conditionals.

We say in section 2 that a typology can be drawn among languages also in terms of how they express syntactically the distinction between Unreality and Reality. Those languages for which Unreality includes future projections into this world are the same languages which show no contrast between present and past subjunctives. This seems not accidental. Among Unreal Conditionals, the difference between future simples and imaginaries (hypotheticals and counterfactuals) can be looked at as one of tense (future versus non-future). The languages which include future simples with other Unreals are ignoring this tense distinction. These are the same languages which show no distinction between present and past subjunctives—the aspect prominent languages. Those languages, in contrast, which exclude future simples from the Unreal group, may be doing so because the tense distinction here is important. In like manner, these languages always contrast present from past subjunctives, syntactically.

I have tried to show that the typology drawn on the basis of the Reality-Unreality distinction is not completely separate from that which is drawn on the basis of presence versus absence of a contrast between present and past subjunctive conditional sentences.

Returning now to imaginary sentences in Haya. We saw earlier that imaginary sentences are introduced by kā. There is, however, an optional
clause introducer which can be used to introduce the antecedents of imaginary conditionals. This introducer is kubá. Morphologically, kubá is the infinitival form of the auxiliary verb -ba that we saw in the discussion of simple conditionals (see sections 1 and 2). It has been suggested that "unreal" ku derives from the infinitival marker and has achieved a special meaning in imaginary sentences. Apparently when kubá functions to introduce imaginary conditional sentences, it is not functioning simply as an infinitival. Rather, ku is functioning to show imaginativeness, as the antecedent lacks this marker only in case it is introduced by kubá.

I translate kubá as 'if it were that'.

In summary, Imaginary conditionals in Haya are represented as follows:

- Every imaginative conditional is introduced by a conditional clause introducer, either ká 'if' or kubá 'if it were that'.
- All imaginary sentences contain an affix ku on the verbal in the consequent clause to mark the sentence as being unreal. Sentences which are introduced by the conditional introducer ká take ku in the antecedent. Sentences introduced by unreal kubá don't require ku in the antecedent.
- There are only two tense possibilities in imaginative conditionals:

  Present subjunctives = Past 1
  Past subjunctives = Past 1 + Past 2 (perfect)

In the preceding pages I have given a first look at conditional sentences in Haya. It was shown how various markers in the language have been extended in usage to function in conditional clauses. The Fl marker, for example, is obligatory in all simple conditionals. In imaginative conditionals, the modal marking imaginativeness derives from the infinitival marker ku. This tendency to mark the mood of the sentence on the verb follows from the highly morphological nature of Bantu languages.

This paper is but a first attempt at describing the system of
conditional sentences in one Bantu language. Undoubtedly, there are
many questions left unanswered about conditional sentences, as well as
about the state of affairs in the proto-language. If this paper serves
to motivate research in other aspects of Haya syntax and in other Bantu
languages, its purpose would have been well served.

REFERENCES


Press.

versities Press.


Schachter, Jacquelyn C. 1971. "Presupposition and counterfactual
conditional sentences." Doctoral dissertation, UCLA.

Row.
In this paper, the particle -A in Swahili will be examined in detail. This particle is often described as a "possessive" morpheme although it is used to convey a wide variety of messages, of which "possession" is but one type. Past analyses account for the variety of messages by proposing that -A has two distinct functions, one which is adjectival and one which is possessive. The concern of this paper is to determine whether such an analysis is justified. That is, can the variety of messages expressed by -A be accounted for without appealing to differences in -A, i.e. adjectival versus possessive homonyms? Differences in the message will be shown to be directly related to differences in the context in which -A is used. Therefore, by extracting differences which are determined by context, it becomes possible to see that -A is in fact a unitary form. Additional evidence that -A is best characterized as a single semantic unity, found by comparing -A with other elements in the language which appear to express similar messages, will also be discussed.

1. Introduction

In this paper we will examine the particle -A in Swahili, often referred to as the "nominal possessive", which is used to connect two nouns. Concern will center on the question of homonymy in grammar; that is, does the range of "uses" observed for -A reflect a number of different meanings, which are superficially realized by homonymous

*This paper is based upon data from the Kimvita dialect of Swahili spoken in Mombasa, Kenya. Utterance judgements are those of native speakers with whom I consulted when doing field work in the community in 1975 (January-March). Funding for the project came from a National Defense Foreign Language Study Fellowship (1974-1975). Special thanks are expressed toward the family of Abu Suleiman Mazrui, especially to Huda Mazrui who was my principal consultant, for their hospitality and patient assistance during the research period. I would also like to thank the following people for their comments and encouragement during the writing of the several drafts of this paper which preceded the present version: John Crothers, Erica Garcia, Tom Hinnebusch, Robert Kirsner, and Benji Wald.
forms, or is the variety due to something else? We are especially con­
cerned with whether the different "uses" of -A might not be accounted
for without appealing to a number of grammatically distinct and
homonymous -A's. We will begin by discussing past analyses of -A in
sections 2 and 3. These are based on the assumption that there is
more than one -A, but they disagree as to the actual meanings pro­
posed for the homonyms. The fact alone suggests that there may be
problems with a "homonymous" analysis. We will show then in section
4 how the different environments in which -A occurs influence what -A
"means", thus raising further doubt as to the necessity of positing
homonymous forms to account for -A.

In sections 5 and 6 we will consider the semantics of -A and compare
-A constructions with paraphrastic equivalents. These also suggest
that there may be only one -A since -A and paraphrases of it formed
with the prepositional suffix -i- differ consistently in the same
way, regardless of the acceptability of the resulting constructions.
If -A were really more than one, i.e. if it reflected homonymous forms,
such a consistency would not be obtained. The data in this section
also reveals additional facts about the semantic nature of -A. In sec­
tion 7, a further line of research will be discussed.

2. Previous Analyses

The construction in which we are interested is:

\[
\text{Pronominal Concord} \quad \text{Agreeing with the Gender Class of NOUN}_1 (\text{PC})
\]

Examples are:

(1) \( m\) - \( \text{toto} \) w- \( \text{a} \) \( \text{mw- a} \) \( \text{im} \) \( \text{a} \) \( \text{imu} \) \( \text{CP}_1\)-\( \text{-A} \) \( \text{CP}_2\)-teacher 'teacher's book'
    Prefix \( \text{CP}_1 \) \( \text{N}_1 \) \( \text{N}_2 \)

(2) \( \text{ki-} \) \( \text{tabu} \) ch- \( \text{a} \) \( \text{mw- a} \) \( \text{alimu} \) \( \text{CP}_1\)-book \( \text{CP}_2\)-teacher 'teacher's book'

This construction has been analyzed in past works as conveying a
range of meanings, of which "possession" and "modification" are con­
sidered to be the more basic. Three analyses of -A will be discussed:
Ashton [1944], Polomé [1967] and Gregersen [1967].

In Ashton's pedagogical grammar [1944:55, 145], a basic distinction
is drawn between -A in possessive constructions and all other uses
of the particle; these are treated as adjectival, although Ashton
recognizes that the same -A occurs in both construction types. As a
possessive, -A is considered to be equivalent to the English preposition
'of':
(3) m- toto w- a mw- anamke  'child of woman/woman's child'
    CP₁-child  PC₁-A  CP₂-woman

As an adjectival particle, -A expresses a variety of relationships between the two nouns which it links; several are exemplified below:

(4) m- toto w- a furaha  'happy child' [Modification]
    CP₁-child  PC₁-A  happiness

(5) ki- kombe ch- a kahawa  'coffee cup' [Modification]
    CP₁-cup  PC₁-A  coffee
    OR 'cup containing coffee' [Container/Contents]
    OR 'cuplike container to be used for coffee' [Purpose]

(6) ki- ti ch- a m- ti  'wooden chair' [Modification]
    CP₁-tree  PC₁-A  CP₂-tree
    OR 'chair (made from) tree' [Constituency]
    OR 'chair by tree' [Location]

(7) habari z- a serikali  'news about government'
    news  PC₁-A  government
    OR 'news from government' [Source]
    OR 'news for government' [Goal]

In Polomé's structural account [1967:133], a unity of form is again recognized, with a duality of function implied. Two basic construction types are described: (i) PC + A + POSSESSOR and (ii) PC + A + COMPLEMENT. Although Ashton and Polomé agree in demarcating possession and modification as distinct functions of -A, they differ in how they classify particular constructions as possessive or adjectival. So for example while Ashton would treat the following example as adjectival, Polomé has categorized it as possessive (p. 132):

(8) ki- kapu ch- a ma- tunda  'basket of fruit'
    CP₁-basket  PC₁-A  CP₂-fruit

It is important to note that the possessive relationship conveyed in (8) is intrinsically different from that expressed in other possessive constructions: in (1) and (3) ['child of teacher' and 'child of woman'], N₂ in the -A construction is the possessor while in (8), N₁ is the possessor. Ashton clearly regards only those constructions where N₂ is the possessor as truly "possessive"; Polomé does not draw such a distinction. This reveals then that although they both

---

1 One should note that Polomé does not seem to regard the fact that this example could also be adjectival, i.e. 'fruit basket' as problematic for its classification as a possessive.
postulate a boundary between one kind of -A and another, they do not agree on where that boundary is.

In Gregersen's [1967] transformational account, a deep structure analysis for Ashton's and Polomé's possessive use of -A is provided: the construction is derived transformationally from a sentence where possession is expressed by the preposition na 'with'. So from a sentence of the form 'X is with Y' Gregersen derives 'Y -A X':

(9) \[
\begin{align*}
&\text{mw- alimu} \quad \text{a- na} \quad \text{m- toto} \\
&\text{CP2-teacher} \quad \text{PC2-with} \quad \text{CP1-child} \quad \rightarrow \\
&\text{m- toto} \quad \text{w- a} \quad \text{mw- alimu} \\
&\text{CP1-child} \quad \text{PC1-A} \quad \text{CP2-teacher} \\
&X \quad \text{with} \quad Y \quad \rightarrow \quad Y \quad -A \quad X
\end{align*}
\]

'teacher has child' 'teacher's child'

Although Gregersen is not explicit about other uses of -A, it appears that -A is generated as part of the base in such instances, e.g. a base-generated -A triggers pronoun pleonasm (p.55). However, by testing the applicability of his transformation for various -A constructions three distinct types emerge: (i) a "na" equivalent is possible and the transformation operates as stated, e.g. (9). This appears to coincide with Ashton's possessive construction type; (ii) there is no "na" equivalent:

(10) \[
\begin{align*}
&\ast\text{tano' i- na} \quad \text{ny-umba} \quad \rightarrow \quad \text{ny- umba} \quad \text{y- a} \quad \text{tano} \\
&\text{five} \quad \text{PC-with} \quad \text{CP1-house} \quad \text{PC1-A} \quad \text{five} \\
&\ast\text{'five has house'} \quad \quad \text{'}fifth house'
\end{align*}
\]

A "with" construction parallel to that in (9) would be inadequate for the derivation of the -A construction in (11) because it would not reflect the appropriate semantic relationship between the nouns:

(11) \[
\begin{align*}
&\text{ki- kapu} \quad \text{ki- na} \quad \text{ma- tunda} \quad \rightarrow \quad \text{ki- kapu} \quad \text{ch- a} \quad \text{ma- tunda} \\
&\text{CP1-basket} \quad \text{PC1-with} \quad \text{CP2-fruit} \quad \text{CP1-basket} \quad \text{PC1-A} \quad \text{CP2-fruit} \\
&Y \quad \text{with} \quad X \quad \rightarrow \quad Y \quad -A \quad X
\end{align*}
\]

'basket has fruit', i.e. 'basket of fruit', i.e. 'basket contains fruit'

And (iii) a "na" equivalent is possible, but the transformation deriving -A must apply without noun re-ordering because such would result in a change in meaning. So while 'Y -A X' may be derived from 'Y is with X', it may not be derived from 'X is with Y' (cf. above):

(12) \[
\begin{align*}
&\text{ma- tunda} \quad \text{ya- na} \quad \text{ki- kapu} \\
&\text{fruit} \quad \text{basket} \quad \text{CP1-basket} \quad \text{PC1-A} \quad \text{CP2-fruit}
\end{align*}
\]

'fruit has basket', e.g. which you can put it in if you like....
This structure could be used, however, to derive another semantically parallel (though not quite synonymous) -A phrase:

(13) ma- tunda y- a ki- kapu
    fruit basket

    'fruit from/for/in basket'

It is interesting to observe that Gregersen does not analyze -A as a meaning-bearing entity in the language; rather he describes it as a "carrier" for the pronominal concords. This contrasts certainly with Ashton who regards it as a particle expressing "relationship". Polomé, on the other hand, is not explicit about -A's status as a meaningful element in the language.

3. The Problem

Previous analyses of -A are problematic for several reasons. First of all, the indeterminacy of the boundaries between different -A construction types is problematic for any analysis of the particle in terms of homonymous forms where each conveys a different meaning. If Ashton and Polomé do not agree on how to differentiate "possessive" uses of -A from non-possessive ones, then perhaps "possession" is inappropriate as a distinguishing criterion. Therefore, one question to pose concerns whether a separation is necessary at all.

Related to the problem of category indeterminacy is the fact that none of the analyses proposed provides a definitive criterion for classifying -A constructions. In fact, the categories proposed are described according to different parameters: both Polomé and Ashton distinguish, on the basis of a semantic notion of possession, adjectival and possessive uses of -A. They further differentiate adjectival constructions according to part-of-speech categories. So for example both distinguish -A phrases where N2 is a verb infinitive from those where it is not:

(14) ch- aKula ch- a ny- umba
    food house

    'food from/for/in house'

(15) ch- aKula ch- a ku- tosha
    food to- suffice

    'sufficient food'

The two-fold criterion is necessary presumably because part-of-speech categories are inadequate for distinguishing the two uses which they regard as basic to -A. That is, nouns (as opposed to verb infinitives for example) follow -A in "possessive" as well as "adjectival" phrases.

Another problem is that Gregersen's analysis allows us to derive two types of -A constructions from sentences formed with a particle reflecting possession even more clearly than -A, i.e. na 'with'. This suggests that the boundary between possession and modification may really be where Polomé suggests and that the category of possession
must further be subdivided, one subsection coinciding with Ashton's possessive type. That is, there are two kinds of "possession", that which exists between a container and its contents, e.g. 'basket of fruit', as opposed to that which exists between an owner and an ownee, e.g. 'book of teacher'.

The fact that absolute categories cannot be identified in past analyses of -A constructions means that it is impossible to classify constructions which are not explicitly discussed in those works. So for example it is not clear what Ashton or Polomé or even Gregersen would do with the -A phrase in (16) below, where N₂ may refer to someone who receives N₁ [Recipient], or who benefits from action upon N₁ [Benefit], or who own N₁ [Ownership, i.e. "possess" in the more narrow sense]:

(16) ni- li- tafuta zawadi y- a m- toto
I- past-seek present child
'I sought present to give to child'
OR 'I sought present on behalf of child'
OR 'I sought child's present', i.e. that he misplaced

None of the analyses thus far proposed for -A tell us how to treat it in this example.

We propose that the inability of analysts in the past to consistently (and categorically) delimit different functions of -A is due to the fact that the separation between possession and modification is artificial, that in fact there is only one -A with only one meaning. The remainder of this paper will be devoted to investigating the possibility that -A is semantically unitary. We will begin by showing how different "uses" of -A depend upon variables independent of -A itself.

4. Environmental Contrast

The one thing which is consistently and patently true of -A in any and all instances where it occurs is that it expresses some kind of relation or association between two things. So although Ashton recognized the relational nature of -A, she did not pay sufficient attention to the fact that its "possessive" use is also relational. She thus made a misleading distinction between -A as a possessive and all other uses of it. However, if we begin only with the assumption that -A expresses some sort of relationship between two things, it is possible to see that the context in which -A is used determines the relationships it conveys. Three types of context will be considered:

(i) the nouns themselves which -A "relates" (4.1);
(ii) the verb co-occurring with an -A phrase in a sentence (4.2);
(iii) the discourse in which the sentence is used (4.3).
4.1. The nouns which -A relates.

4.1.1. N₁ and N₂ differ in animacy. The nature of the entities referred to by -A linked nouns determine to a large extent the kinds of relationships which -A may convey. On a gross level, animacy differences are crucial. For example, we find that the relationships conveyed when -A links two inanimate objects are just those which are impossible when only the noun preceding -A (N₁) is inanimate and the noun following it (N₂) is animate.

When N₁ is inanimate and N₂ is animate several different relationships may be expressed by -A:

(17) ni- i- tafuta zawadi y- a m- toto  
I- past- seek present child
   i. 'I looked for the child's present' [Ownership]
   ii. 'I looked for the present from the child' [Source]
   iii. 'I looked for the present instead of the child doing it' [Lieutenancy]
   iv. 'I looked for the present for the child's sake' [Benefit]
   v. 'I looked for the present to give to the child', e.g. so he could take it to someone else [Receipt]
   vi. 'I looked for a child's present', e.g. as opposed to the kind of present one would give an adult [Modification]

Only different discourse contexts will determine which message specifically is being conveyed by -A constructions in sentences such as (17). However, it is interesting to observe that the relationships which are possible reflect various ways in which animate beings are typically associated with inanimate objects: animate beings usually control inanimate objects, owning them and dictating where they are located, to whom they will be sent, and for whose benefit. Such relationships are not usually found between inanimate objects and, therefore, -A does not express most of the relationships possible above when both nouns in the -A phrase are inanimate:

(18) ni- i- tafuta ki- kombe ch- a kahawa  
I- past- seek cup coffee
   i. 'I looked for a cuplike container for the coffee' [Purpose]
   ii. 'I looked for a cup containing coffee' [Container/Contents]
   iii. 'I looked for a coffee cup' [Modification]
   iv. 'I looked for the cup that had been somehow previously associated with the coffee', e.g. was intended to be used to hold it, or had held it before the coffee spilled, etc. [Previous Association]

Here then we see that the messages possible in (18) differ considerably from those given for (17). But the differences are not due to -A,
rather they reflect to a large extent expectations about the kinds of relations which are more likely to exist between certain kinds of entities in the world. So relations of benefit and receipt for example are impossible when N2 in an -A phrase is not an entity which can plausibly be viewed as a beneficiary or recipient in the real world, i.e. when it is not animate.

4.1.2. N₁ and N₂ are inanimate. When both nouns in an -A phrase are inanimate a wide range of messages is possible. In addition to those noted in (18), we also find -A expressing direction and/or location, the material an item is made of [constituency], and part/whole relations. However, they are not all possible for every -A construction; possible messages are severely limited by the nature of the entities which the -A linked nouns designate in the world. So for example, direction and/or location can only be expressed when N₂ can plausibly be viewed as the location and/or destination of N₁:

(19) safari y- a Afrika journey OR 'African journey' [Modification]
    'journey to/in/from Africa'

If N₂ refers to something which cannot be a location, direction and/or location are unlikely messages:

(20) safari y- a m- vua rain journey OR 'rain journey' [Modification]
    ??'journey to rain'

Similarly, if N₁ refers to something which cannot be located in what N₂ designates, -A cannot convey direction or location:

(21) umbo l- a Afrika shape 'shape of Africa', i.e. of the African continent' [Modification]
    *'shape to/in/from Africa'

Container and contents may be related by -A but only when N₁ can plausibly be viewed as a container for N₂. Hence such a relationship is only expressed in (22) and not (23):

(22) ki- kombe ch- a kahawa cup containing coffee OR 'coffee cup'
    OR 'cuplike container for coffee'

(23) ?m- lango w- a kahawa ?'door to (the place where) the coffee (is kept)'
    *'door containing coffee'

Similarly, such a relation cannot be conveyed if N is not something which can be contained:

(24) ki- kombe ch- a ny- umba cup in/from/for house
    *'cup containing house'
Obviously if we were talking about a miniature toy house, the second reading of (24) would also be possible.

Parallel examples can be found for part-whole relations. These can be conveyed by -A only when N₁ can be realistically viewed as part of N₂:

(25) m- kono w- a koti 'coat-sleeve'
    arm coat

(26) m- kono w- a Ali 'Ali's arm'

But part-whole relations are impossible when N₁ cannot be considered part of N₂:

(27) ?m- kono w- a dirisha *'window's arm/sleeve'

N₂ may also be interpreted to provide information about the purpose of N₁. But this only occurs when N₁ can reasonably be seen to be an instrument in an activity involving N₂ or specified by N₂ (as in those instances where N₂ is a verb infinitive). Thus since knives are used to cut bread, -A may convey a purposeful relation in (28):

(28) ki- su ch- a m- kate 'knife to cut bread', but not necessarily one regularly associated with this activity
    OR 'bread-knife', i.e. a knife which is regularly associated with the activity of cutting bread
    [Modification]

```
A relationship between some thing and the material out of which it is made may also be conveyed by -A. Again it depends upon the nature of the nouns themselves: this relationship is only conveyed when N₂ can be plausibly viewed as something out of which N₁ is made, hence the differing messages in (29) and (30) below:
```

\[\text{The relationship between 'arm' and 'Ali' may also be viewed as one of possession, i.e. "inalienable" possession cf. Hyman et al. [1970]. Here then we see that the "part-whole" message fades into a possessive one; hence there can be no absolute boundary between the two.}\]
4.1.3, N₁ and N₂ are animate. The fact that animacy differences initially narrow down the number of relations possible with -A can also be seen when we consider situations where both nouns are animate as opposed to those where both are inanimate (4.1.2) or there is one of each (4.1.1). Again we find that (a) there are a number of messages possible which are not possible elsewhere and (b) the specific identity of the entities linked by -A further delimits this set of possible messages in any situation where -A is used.

When both of the nouns linked by -A are human we find a variety of messages possible: kinship ties, employer-employee associations, marital ties, supervisor-supervisee associations, etc. One message never found is that of modification. It is clear then already that the relations which are possible reflect those usually found between humans in the real world: humans may be married or related to one another, but never is one regarded as a characteristic feature of another.

It is possible to see again that the specific identity of the nouns linked by -A determines which relationship is conveyed by any particular -A phrase when we compare constructions where only one noun is varied:

\[
\begin{align*}
31) \text{m- kubwa w- a m- toto} & \quad \text{'child's older sibling'} \\
\text{big child} \\
32) \text{mw- ongozi w- a m- toto} & \quad \text{'child's governess/guide'} \\
\text{guide} \\
33) \text{m- bwa w- a m- toto} & \quad \text{'child's dog'} \\
\text{dog}
\end{align*}
\]

It is interesting to observe that the relationship between the two nouns changes drastically when N₁ is an animal instead of a human, e.g. (33). So while in (31) and (32) child appears to be somehow dominated by N₁, the reverse is certainly true in (33), i.e. the child owns the dog. This is clearly due to the fact that adults usually dominate children in the real world but dogs do not hence, the difference in the relationship conveyed by -A. This is of course not unique to -A; we get the same feeling from the English so-called "possessive" constructions given as glosses.

By comparing examples where N₁ rather than N₂ above is varied, it is possible to see that neither noun independently dictates which
relationship will be expressed:

(34) m- kubwa w- a m- toto 'child's older sibling'
(35) m- kubwa w- a m- tumishi 'servant's supervisor/employer'
(36) m- kubwa w- a w- enyeji 'leader of the villagers'
    inhabitants

In these examples both nouns contribute something in establishing the nature of the relationship being conveyed, e.g. big person + child → older sibling. In some cases, however, the meaning of only one noun may be determinative. When this occurs there is no adequate label for describing what -A conveys, other than that it establishes a relationship between two nouns:

(37) rafiki y- a m- toto 'child's friend'
    friend

It is clear that the reason -A expresses relations when both nouns are animate which it cannot convey when both are inanimate is because of the way different entities are usually associated with one another in the real world. So because inanimate objects are never related by marriage, or blood, or as employer-employees, etc. these relations are not possible when -A links such entities. Similarly, because animate beings are never parts of one another, or containers for one another, or characteristic features of one another, these relations cannot be expressed when -A connects them. It is important to recognize then that various relationships are not restricted because of anything in the meaning of -A, i.e. whether it is functioning "possessively" or not. Rather, they are limited in certain particular circumstances because of the nature of the entities involved.

4.2 The verb co-occurring with the -A phrase. Although the nature of the nouns linked by -A usually delimits the number of messages possible, it often does not narrow the possibilities down to a single one. Information outside the -A phrase itself is often needed to disambiguate. That information may be in the sentence in which the -A construction is used or in the wider discourse context. We will consider the former.

(38) ni- li- penda kanzu y- a mw- anamume
    I- past-like robe man

'I liked the/a man's robe' NOT
*'I liked the robe for the man'
In fact, the wider range of messages noted in 4.1.1 is only possible when the verb refers to an activity where someone is acting upon something else:

(39) n-li-shona kanzu y-a mw-anamume
    sew
    i. 'I sewed man's robe'
    ii. 'I sewed robe instead of man'
    iii. 'I sewed robe from man'
    iv. 'I sewed robe for man's sake'
    v. 'I sewed robe to give man' (to take somewhere)
    vi. 'I sewed male-robe'

Grammatically, two aspects of the verb appear to be significant: agreement markers and derivational suffixes. We will consider each in turn.

In Swahili the verb agrees with the subject of a sentence by carrying concords agreeing with the noun class to which the subject noun belongs. This marker, often called the "subject marker" (SM), is indicated below:

(40) mw-anamume a-li-kuja
    man SM-past-come
    'the/a man came'

In this situation, object agreement focusses attention upon an object noun, bringing it into prominence as something which is recognizable ("known", cf. Chafe [1976]) and important to the speaker (which is presumably why he is talking about it in the first place, cf. Port [1972]). That this is the case can be seen by examining a sentence where there is no OM; in this case the object noun may still be definite, i.e. "known", or it may be indefinite:

(41) mw-anamume a-li-onaka ki- ti
    man SM-past-OM-see chair
    'the/a man saw the/a chair'

It appears then from this example that although "knownness" is characteristic of situations where object agreement occurs, it is not the reason for its occurrence; some kind of "foregrounding" seems to be more responsible.
The contrast between sentences where object agreement occurs and those where it is absent is obtained only when the object is inanimate. This is because the verb in Swahili almost always agrees with the objects which are animate, regardless of their "knownness". This again suggests that the presence of object markers on the verb is not determined by this feature:

\[(43)\] mw- anumume a- li- mw- ona m- toto  
man SM OM child  
'the/a man saw the/a child'

Now it is interesting to observe that, in those situations where contrast is possible, i.e. when the object is inanimate, that the messages conveyable by an -A construction are restricted when there is an OM on the verb in a sentence which refers to N1 in an -A phrase. That is, the presence of an agreeing OM appears to imply that certain relationships between N1 and N2 are not being expressed. Specifically, relations of "benefit", "receipt", and "lieutenancy" are impossible. So for example only a "possessive" message is possible in (44) where the verb agrees with the noun 'robe':

\[(44)\] ni- li- 1- shona kanzu y- a mw- anumume  
I- past-OM-sew robe man  
'I sewed robe belonging to man', i.e. 'I sewed man's robe'  
NOT *'I sewed robe for sake of/to give to man' cf. (39)

Another situation where the messages conveyable by -A are limited by information in the verb is found when the verb carries the prepositional suffix -i/-e-. This suffix is usually found on the verb when a beneficiary, recipient or lieutenant is involved in the activity described:

\[(45)\] ni- li- m- shon- e- a mw- anumume kanzu  
I- past-OM-sew to/for man robe  
'I sewed robe for man', i.e. to give to him, on his behalf, or instead of him

Presumably because this verbal suffix is more regularly associated with messages of benefit, receipt and lieutenancy than -A we find that it is impossible to convey such messages for N2 in an -A phrase when the verb in the sentence carries the prepositional suffix and agrees with some noun outside of it:

\[(46)\] ni- li- m- shon- e- a Ali kanzu z- a w- anaume  
I- past-OM-sew to/for robe men  
'I sewed men's robes for the sake of/to give to Ali'  
NOT *'I sewed robes for Ali to give to men

4.3. The discourse context. In addition to the nature of the nouns in an -A phrase, and information in the verb co-occurring in the
sentence with it, the wider discourse context will often influence the nature of the message conveyed by -A. To illustrate how this may occur, the following -A construction is contextualized in different discourse contexts:

(47) sanduku 1- a kuni
    box 1 firewood

i. 'box containing firewood'
ii. 'box to be used for carrying/holding firewood'
iii. 'firewood-box', i.e. box designed for holding firewood and nothing else

The following discourses are designed to show how different contexts will make one interpretation of the message conveyed by -A more likely than others:

i. Jana nilikuwa ninapika na sikuweza kumaliza kwa sababu nilikuwa sina kuni. Ndugu yangu aliniletea sanduku la kuni nikamaliza kupika mara moja.

Yesterday I was cooking and I couldn't finish because I didn't have firewood. My brother brought me a box of firewood and I finished cooking right away.

In this example the most likely inference is that the box has firewood in it since the speaker needs firewood before he or she can finish cooking. The box may also be a "firewood-box", or just an ordinary box. It is important to recognize that sometimes it is not crucial for an appropriate understanding of a described event to isolate a single message, i.e. what is important is that the box contained wood, not what kind of box it was. In the next example, the nature of the box is made clear.

ii. Jana mimi na ndugu yangu tulikwenda kutafuta kuni na tulipofika msituni, tulitambua kwamba tulisahau kuleta kitu cha kuleta kuni. Basi ndugu yangu alitoa vitabu vyangu vilivyokuwemo ndani ya sanduku langu la shule na alilitumia kama sanduku la kuni.

Yesterday I and my brother went to look for firewood and when we arrived in the woods we realized that we had forgotten to bring something to carry the firewood. So my brother took out my books which were inside my school-box and used it as a box for the firewood.

In this example there are several -A phrases (underlined); the last is that in (47). In this context it is clear that the box is
not a "firewood-box" but rather, it is some other kind of box
("school-box") being used for firewood. In the last example, how­
ever, the box is a "firewood-box", not just any kind of box.

iii. Jana baba yangu alinunu
sanduku la kuni. Ni zuri
sana, lilitengenezwa
maksudi kwa kuni na baba
anasema hatuwezi kulitumia
kwa kitu chengine.

5. The Semantic Significance of -A

Yesterday my father bought
a firewood-box. It's very
nice, it was made especially
for firewood and father
says that we mustn't use
it for anything else.

Since differences in context do correlate with differences in the
message conveyed by -A in a regular and consistent manner, it is not
necessary to impute the differences in the message to -A itself, i.e.
to postulate homonymous forms. For this reason we propose that -A
is in fact a unitary sign, formally and semantically. In light of
this hypothesis we will now consider the nature of -A's semantic con­
tribution in utterances where it occurs.

It is important to observe initially that if -A specifically desig­
nated "possession" or "modification" or "benefit" (etc.) we would not
expect contextual differences to affect the message conveyed by -A.
Further, if -A did denote any one of these meanings, it would be im­
possible for it to convey the others. It appears then that speakers
are able to express a variety of different messages with -A just because
it does not specify any particular relationship. Here it becomes evi­
dent that we need to distinguish the meaning of -A from the messages
which it is used to convey in speech.\(^3\)

5.1. "Meaning" vs. "message".  The "meaning" of a linguistic sign,
e.g. -A, is its consistent and invariable contribution to the messages
conveyed in any utterance in which it is used.\(^4\) The "message" is what
is conveyed by the use of the sign, and its associated meaning, in a
particular context, i.e. on any given occasion when it is used. The
meaning of a linguistic element differs from the messages it conveys
in that the latter is relatively more precise than the former. This

\(^3\)Such a distinction has been drawn more or less explicitly in
many linguistic studies, e.g. Bolinger [1965], Bull [1964], Uhlenbeck
[1965], Jakobson [1936], Garcia [1975], Morava [1976], Kirsner [1975].

\(^4\)I am indebted to R.L. Otheguy for this formulation of the notion
of "meaning".
difference is aptly illustrated by Kirsner [1975] with the following examples:

My wife brought me my slippers. Message: 'brought in her hands'
My dog brought me my slippers. Message: 'brought in its mouth'

These examples show how important context may be for interpreting the message conveyed by a particular linguistic form. That is, the way in which something is "brought" is not specified by the verb "bring" itself; it is something implied by the context in which "bring" is used. Here, the nature of the entities doing the "bringing", i.e. in the real world, dictates how the hearer will view the act of "bringing" described in each instance. Therefore, it is possible to see that the different messages conveyed by one linguistic form, e.g. "bring", are not necessarily proof that the form has different meanings, i.e. that it should be analyzed as a pair of homonyms, one meaning "bring in the "hand" and the other meaning "bring in the mouth". The different messages certainly provide clues as to what the meaning of "bring" may be, but they are not necessarily identical with its meaning.

5.2. -A as a meaningful unit. The data provided in section 4 shows that the context in which -A is used largely determines which message it conveys. This could be taken to imply that -A has no meaning, that the relationship between any two nouns linked by -A derives from their identity alone. This would mean that -A is simply a formal, i.e. meaningless, element in the language [Gregersen 1967:29] used to link nouns. However, there is evidence which suggests that such an analysis would be inadequate.

First of all, there are other particles used to link nouns in Swahili; these contrast with one another and with -A. If -A were to be analyzed as meaningless we would not be able to account for meaningful differences between noun phrases with -A and those formed with other particles, e.g. na 'with' and -enyе 'having':

\begin{align*}
\text{(48)} & \quad -A: \text{ m- toto w- a m- zee} \quad \text{old person's child} \\
& \quad \text{child} \quad \text{old person} \\
\text{(49)} & \quad -enyе: \text{ m- toto w- enye m- zee} \quad \text{'child having old person'}, \\
& \quad \text{e.g. grandmother/grandfather} \\
\text{(50)} & \quad \text{na: m- toto na m- zee} \quad \text{child and old person}
\end{align*}

It is also possible to link nouns without any particle at all. Comparing such constructions with those using -A, differences in the message conveyed are obtained:

\begin{align*}
\text{(51) a. -A: ni- li- m- tafuta ki- jana w- a mw- anamke} \\
& \quad \text{I- past-him-seek teenager woman} \\
& \quad \text{'I looked for woman's teenage child.'}
\end{align*}
b. $\emptyset$: ni- li- m- tafuta ki- jana mw- anamke

'I looked for teenage woman'

It is clear here that -A is not merely a formal element used to relate nouns since (51b) has two nouns related in relationship of modification (and recall that this is given as one of -A's basic functions in past analyses) and yet there is no particle -A. Furthermore, the message conveyed in (51a) where -A occurs is different from that conveyed by the parallel construction without -A (51b). The difference can only be accounted for with reference to a meaningful difference between -A as a linker and nothing, i.e. noun-noun apposition without a linking particle. The contrast in messages suggests that -A does have semantic significance when used to link two nouns. It is therefore important to consider the nature of its semantic contribution.

5.3. -A as a "backgrounding" entity. We should observe first that the relationship established by -A is not a symmetrical one. That is, $N_2$ in an -A phrase is not related to $N_1$ in the same way that $N_1$ is related to $N_2$. This can be illustrated in two ways:

i. The reversal of $N_1$ and $N_2$ in an acceptable -A construction may render the construction less acceptable:

(52) a. ki- su ch- a m- kafe 'bread knife'
    knife bread

b. ?m- kafe w- a ki- su 'knife's bread'

If the relationship between $N_1$ and $N_2$ were symmetrical, the relative ordering of the nouns would not affect the acceptability of the construction. Although (52b) might be acceptable in particular circumstances, e.g. if the speaker wanted to explain that the knife he was talking about had been that which he had used earlier for the bread, it certainly is less likely to be used than (52a). Presumably, this is because the relationship which -A sets up between two nouns is one which is more readily seen when the nouns in (52) are related in the order given in (a).

ii. When reversal does not result in a less acceptable construction, the asymmetry of -A is apparent in the change in message which results from reversing the nouns:

(53) a. m- toto w- a furaha 'happy child'
    child happiness

b. furaha y- a m- toto 'child's happiness'

This is the strongest evidence that -A conveys an asymmetrical relationship: if -A did not relate nouns asymmetrically, noun re-ordering would not change the nature of the relationship conveyed.
In order to understand how -A "relates" two entities it is important now to characterize the nature of its asymmetry more narrowly.

It appears from the examples in (53) that N₂ is related to N₁ in such a way that the latter (N₁) is somehow the reason why the former (N₂) is mentioned at all. So in (53a) it is possible to observe that "happiness" wouldn't have been mentioned at all but for the fact that it tells the hearer something about the child; the reverse is true in (53b): "child" tells the hearer something about the happiness, i.e. whose it is. In syntactic terms, we might say that N₂ is dependent or subordinate to N₁. Semantically, we can say that N₂ provides some sort of "background" information about N₁, i.e. information which provides a more detailed description of N₁ but which is not necessary for an accurate account of the events being described. This means that if we placed (53a) for example in a sentence, the event described would not change if N₂ in the -A phrase were omitted:

(54) a. ni- li- mw- ona m- toto w- a furaha
     I- past-him-see child happiness
     N₁     N₂

     'I saw the/a happy child', i.e. I saw the/a child who was happy

     b. ni- li- mw- ona m- toto
     N₁

     'I saw the/a child'

In (54) both sentences describe the same event; the only difference is that more is known about N₁ in the example where an -A phrase links it to another noun (54a) than is known in the one where it occurs alone (54b). This is however not the case if N₁ is omitted; the two events described are distinct from one another:

(55) a. ni- li- mw- ona m- toto w- a furaha
     child happiness
     N₁     N₂

     'I saw the/a happy child'

     b. ni- li- ona furaha
     N₂

     'I saw happiness'

In (54) the speaker is seeing a child in both examples; in (55), however, this is not the case: in (55a) the speaker sees a child while in (55b) he sees happiness. Thus we can see that N₁ is essential for adequate description of a particular event while N₂ is not. We can therefore conclude the following about -A: it establishes a relationship between two things in the world, as named by the two nouns which it links, in such a way that one (N₂) is interpreted to provide "background" information about the other (N₁). -A might then be characterized...
as a device for "backgrounding" an entity in terms of its relation to another entity.

5.4. "Directionality" of relationships. While past analyses of -A recognize (although sometimes only implicitly) the essentially relational nature of -A, they have not been able to provide any systematic account of the variety of messages which -A conveys. Particularly, they have not dealt with the fact that the direction of the relationships conveyed by -A appears to "change", as well as their specific character. That is, in many instances N₂ appears to be related to N₁ in the same way, even though the specific relationship conveyed is not the same. So in (56) and (57) N₁ is seen to somehow "dominate" or "control" N₂ cf. 4.1.3:

(56) m- kubwa w- a m- toto  'child's older sibling'
    big person    child
    N₁          N₂

(57) mw- ongozi w- a m- toto  'child's governess'
    guide    child
    N₁          N₂

While in (58) N₂ "dominates" N₁:

(58) m- bwa w- a m- toto  'child's dog'
    dog    child
    N₁          N₂

By distinguishing the meaning of a sign from the message which it conveys on a particular occasion of its use, it is possible to characterize different messages without imputing the differences to the sign itself, i.e. without postulating homonymous forms or a polysemous sign. We have shown that different messages correlate consistently with different contexts; therefore we conclude that the context is responsible for those differences, not -A itself. And more importantly perhaps, it is also now possible to see that the apparent variation in -A's directionality is also due to contextual differences. In order to do this, however, it is necessary to recognize the significance of speaker/hearer presuppositions about the kinds of relationships which are likely to exist between certain kinds of entities in the world. So for example in cases such as (56) and (57) N₁ appears to "dominate" N₂, while it does not in examples such as (58). The difference is not because of any difference in -A; rather it is because adults control children in the real world (56-57), while people, regardless of whether they are children or adults, control animals (58). In light of this observation, it is possible to see why N₁ dominates N₂ when it refers to an adult and N₂ does not, while the reverse is true when it refers to an animal (and N₂ refers to a human being).

Differences in the nature of the entities linked by -A can also be shown to account for why N₁ may appear to somehow "possess" N₂ in
one situation, while $N_2$ "possesses" $N_1$ in another:5

(59) a. ki- kombe ch- a kahawa 'cup containing coffee'
   cup coffee ?'cup belonging to coffee'

   b. ki- kombe ch- a Juma 'cup belonging to Juma'
   ?'cup containing Juma'

To the extent that a container can be said to "possess" its contents [Polome 1967:132], $N_1$ (cup) "possesses" $N_2$ (coffee) in (59a). But in (59b) $N_2$ (Juma) "possesses" $N_1$ (cup); and here we can see that it is possession in the more traditional sense [Ashton 1949:55]. Here again, the variation in the direction of "control" between $N_1$ and $N_2$ depends upon the nature of the entities linked by -A and speaker/hearer presuppositions about how such entities may be related to one another: containers control their contents, i.e. contain them, while people control things, i.e. own them. The reverse relationship for either pair of entities seems odd.

It is important to recognize that it is the directionality of the message conveyed by -A in the preceding examples which varies, not the meaning of -A itself: in all examples $N_2$ is backgrounded; that is, its omission would not result in reference to an entity entirely different from that specified by the original -A phrase, e.g. "coffee" or "Juma" instead of "cup". Omission of $N_1$ would however cause such a change in reference. The non-centrality of $N_2$ as opposed to $N_1$ is always expressed by -A.

6. Paraphrase Relations

While we have been able to identify -A's constant and invariable semantic contribution and show how differences in the context are responsible for the variety of messages which it can convey, we are confronted by another problem: to show that context influences the message conveyed by a particular form is not to define it. That is, since the meaning of -A is so vague, i.e. backgrounding one entity by setting up a relationship between it and some other entity, identifying it does not tell us what governs its occurrence, i.e. as opposed to other forms in the language. Recall that we have seen other forms in Swahili which may be used to express some of the relations also expressed by -A, e.g. -i- conveys relations of benefit, receipt and lieutenancy. Only if we can describe -A in terms of how it differs from other forms in the language will it become possible to define it in such a way that we can distinguish it from all other forms in the language. That is, "dans la langue, il n'y que des differences..." [de Saussure 1922:166].

5I am indebted to T. Hinnebusch for pointing this out to me.
6.1. **Paraphrases with -i-**. One way in which we may be able to get closer to an adequate definition of -A is to compare it with forms which appear to coincide semantically. While paraphrases do not constitute definitions, they may help us to describe -A’s semantic contribution more narrowly. An obvious candidate for such a comparison is the prepositional suffix (-i-) because it paraphrases -A in expressing relations of benefit, receipt and lieutenancy. So for example the pairs of sentences in (60) and (61) below are usually given by native speakers as paraphrases of one another:

(60) a. ni- li- andika barua y- a Hasan
    I- past-write letter

    b. ni- li- mu- andik- i- a Hasan bərua
    I- past-him-write- to/for

    'I wrote Hasan a letter', i.e. for his sake (benefit), to give him (receipt), instead of him (lieutenancy)

(61) a. ni- li- pika ch- akula ch- a Hasan
    I- past-cook food

    b. ni- li- pik- i- a Hasan ch- akula
    I- past-cook-to/for food

    'I cooked Hasan food', i.e. for his sake, to give him, instead of him

Neither -i- nor -A specify whether a beneficiary, recipient, or lieutenancy relationship is being expressed; this must be inferred from the wider context. Both are, therefore, equally imprecise in their indication of these relations. However, many uses of -A cannot be paraphrased with -i- . These are of two types:

i. Situations where a mechanical paraphrase is possible, but the message conveyed by one is unlike that conveyed by the other:

(62) a- li- pkteza pesa z- a- ngu
he-past-lose money

'he lost my money', i.e. money which was mine or was to be mine
[Detriment]

While -A in (62) can only convey a message which relates "me" to "money", -i- can convey a message where someone else is related to "money", as well as the message where "I" am so associated:

(63) a- li- ni-potel-e- a mimi pesa
he-past-me-lose- to/for me money

'he lost his money and losing it had an effect on me', i.e. he lost me his money [Ethical Dative]
OR 'he lost money which was for me' [=(62)]
ii. Situations where even a mechanical paraphrase is impossible:

(64) ni- li- leta ki- kombe ch- a kahawa
I- past-bring cup coffee

'I brought cup containing coffee'
OR 'I brought coffee cup'
OR 'I brought cup-like container for the coffee'

While several relationships between "cup" and "coffee" are possible when they are linked by -A, none are possible if (64) is paraphrased with an -i- construction:

(65) *ni- li- lef- e- a kahawa ki- kombe
I- past-bring-to/for coffee cup

If we were to use message categories such as "benefit", "receipt", "detriment", "ethical dative", "container/contents", etc. to distinguish different meanings for -A we would have to do the same thing for each element with which it paraphrases only in certain circumstances. That is, we would have to propose that -A₁ meaning "benefit", "receipt", and "lieutenancy" paraphrases with -i₁-1 having the same meaning, but that it does not paraphrase with -i-2 meaning "ethical dative". In this approach -A₂ would be the form which expresses "container/contents", "ownership", "location", etc.

6.2. The problem of limiting the number of paraphrases. One problem with paraphrastic comparison is that there is no limit to the number of paraphrastic equivalents existing in a language. So for instance, while -A (i.e. -A₁) paraphrases with -i- (i.e. -i₂), one might also say that it paraphrases with a zero morpheme and/or a change in noun ordering after the verb:

(66) a. [-A] ni- li- ki- kata ki- dole ch- a mw- anamume
    I- past-it- cut finger man
    N₁ N₂

b. [∅] ni- li- m- kata mw- anamume ki- dole
    I- past-him-cut N₂ N₁

'I cut the/a man's finger' [Body part]

These sentences differ formally in that -A is used to link "finger" and "man" in (66a) while it is not so used in (66b). Still the inference is made in (66b) that the finger belongs to the man. In fact, it must be attached to him in (66b) while it need not be so attached in (66a).⁶

Although -A and ∅ paraphrase in (66), they do not always do so. Hence (67b) below in impossible:

⁶ This distinction is often characterized as "alienable" versus "in-alienable" possession.
a. ni- li- ki- leta ki- kombe ch- a kahawa  
   I- past-it- bring cup coffee

b. *ni- li- i- leta kahawa ki- kombe  
   I- past-it-bring coffee cup

   'I brought cup containing coffee/coffee cup/container for coffee'

Given these examples, an analytical procedure based upon paraphrastic equivalents would now recognize three -A's:

A_1: "the -A of benefit/receipt/lieutenancy", paraphrasing -i- ;
A_2: "the -A of body parts", paraphrasing İ ;
A_3: "the -A of container/contents, direction, etc.", paraphrasing neither -i- nor İ .

The problem here is that if we were to use paraphrase as the criterion for defining meaning we could continue subdividing indefinitely since some paraphrase is always possible for any message expressed in a language. So in addition to the "-A of benefit/receipt/lieutenancy" and the "-A of body parts" there would be the "-A of container/contents", the "-A of direction", the "-A of modification", etc. All could undoubtedly be given formal status on the basis of paraphrase.

6.3. Situations where -A and -i- are not paraphrases. The failure of paraphrastic comparisons to work definitively and non-arbitrarily suggests that we look more carefully at those situations where paraphrase is possible. We already noted that the sentences where -A paraphrases İ are not exactly equivalent, i.e. that one implies something the other does not. We find that the same is also true of situations where -A paraphrases -i-. While -A may convey messages of benefit, receipt and lieutenancy, it may also convey one of ownership; that is N_2 in the -A construction may be associated with N_1 without any implication that it benefit from the activity expressed by the verb:

(68) ni- li- andika y- a Hasan  
    I- past-write letter

    'I wrote Hasan's letter, not someone else's'

The same cannot be said for -i-. When it occurs on a verb there is always a link between some entity and the activity described. In fact, if a speaker wishes to unambiguously convey a relationship of ownership between two nouns following a verb carrying -i-, he or she must use additional linguistic elements, e.g. -A, because -i- alone does not necessarily imply a relationship between the nouns.

This can be seen by comparing the examples in (69): in (69a) the first noun following the verb is linked to the second one by -A while in (69b)
it is linked to another noun by -A. If -i- necessarily implied a relationship between the two nouns, sentences such as (69b) would be impossible:

(69) a. ni- li- mu- andik- i- a Hasan barua y- a- ke
    I- past- him- write- to/for N1 N2 PC2- A- his1

    'I wrote Hasan's letter for him' [Lieutenancy]

    N1 N2 N1

b. ni- li- mu- andik- i- a Hasan barua y- a Ali
    N1 N2 N3

    'I wrote Ali's letter to/for Hasan' [Benefit/Receipt]

    Ne N2 N1

    NOT *'I wrote Hasan's letter to/for Ali'
    N1 N2 N3

It is now possible to identify how -i- and -A differ, even though they paraphrase in certain circumstances. First of all, -A is less precise than -i-, although they both are somewhat imprecise (cf. 6.1). Secondly, -i- specifically implies that some entity (named by one of the nouns following the verb) is involved in the activity described by the verb while -A does not. -A is neutral regarding any involvement of N2 in the activity expressed by the verb. "Involvement" here is defined in terms of an entity's relative importance (as opposed to other entities) in the bringing about of an event [Port 1972]. This means that an agent, for example, is more involved in (the bringing about of) an event than a beneficiary or recipient. But they are still involved, although secondarily, since the event took place because of them, i.e. presumably it would not have occurred at all had it not been because such a participant needed the agent to bring about the event. In this framework, an uninvolved participant is one which is not responsible for the bringing about of an event; an inanimate "patient" object is a paradigmatic example.

If the difference between -A and -i- is that the latter specifies some entity's involvement in an activity while the other does not, we can expect that the two will paraphrase in just those situations where N2 in the -A construction cannot be viewed as an entity which is somehow responsible for an event's occurrence. And this is indeed what we find. So (70) below is unacceptable because the only message possible is one where "coffee" receives "cup" and "coffee" doesn't usually play such a role in real world events, i.e. recipients are usually human, rarely (if ever) are they inanimate objects:

(70) *ni- li- i- let- e- a kahawa ki- kombe (cf. (65))
    I- past-it- bring- to/for coffee cup

    'I brought cup to/for coffee'
Presumably if "coffee" were anthropomorphized in a story, (70) would be acceptable.

Similarly, we find that a "part/whole" relationship cannot be paraphrased by -i- because the "whole" cannot "benefit" from an action upon a "part" of it, e.g. (71b):

(71) a. ni- li- shona m- kono w- a koti
    I- past-sew    sleeve    coat
    'I sewed sleeve of/to put on coat'

    b. *ni- li- shon- e- a koti m- kono
        I- past-it-sew-    to/for coat    sleeve
        And how often is a "cheek" responsible for the event of "hitting" as would be implied if (72b) were acceptable:

(72) a. a- 1i- ni- piga kofi l- a shavu
    he-past-me- hit    blow    cheek
    'he hit me on the cheek'

    b. *a- 1i- pig- i- a shavu l- a ngu kofi
        he-past-it- hit- to/for cheek1    PC1-A- my    blow
        'he hit blow to my cheek'

The fact that -A and -i- do paraphrase in certain situations may be similarly understood. Although the noun linked by -A, i.e. N2, is not necessarily involved in the activity described by the verb with which it occurs in a sentence, it may be so involved unless some other entity is already involved, i.e. as indicated by the presence of -i-. Hence involvement of N2 in an -A phrase can only be inferred when there is no -i- on the verb specifying that relationship for some other noun. (The identity of the noun to which -i- refers is usually apparent from the object concord marker which the verb carries.) It is important to recognize however that this is an inference made under these circumstances; it is not something specified by -A itself.

It is now possible to see that -i- and -A always contrast in the same way, regardless of whether or not paraphrase is possible. That is, the reason why -i- can paraphrase -A in one situation is the same as the reason why it cannot in another. That is, they paraphrase when N2 in the -A phrase can be viewed as a participant involved in the bringing about of the activity described by the verb; and they cannot paraphrase when it cannot be so viewed. Furthermore, this constant difference between -i- and -A enables us to explain why one construction doesn't paraphrase all the messages possible with the other when they do paraphrase: the reason why -i- cannot be used to paraphrase the "ethical dative" message possible with -i-, e.g. (63), is that first person singular
refers to an entity in the world which is too important (in the world "I" live in) not to be mentioned in the verb (with -i-) if "I" am at all responsible for bringing about the activity described therein. So if "I" am not mentioned in the verb, i.e. if "I" follow a particle used to "background" one entity in terms of another, my non-involvement will be assumed (by speaker and hearer alike).

It is important to recognize here that if -A were not a semantic unity, the observed consistency in paraphrasability would not be obtained. That is, we would not expect to find that the reason why -A could paraphrase in one situation was the same as the reason why it could not in another instance. But we do find such a regularity and the consistent difference enables us to predict when paraphrase is possible, i.e. when N2 in the -A phrase can be viewed as an entity involved in bringing about the activity described in the verb co-occurring with it in a sentence, -i- may be used to paraphrase, and vice versa. The paraphrastic evidence then also suggests that -A is a single form with a single semantic value.

7. Conclusions

In this paper we have suggested that past analyses of the particle -A are misleading because they imply that the different messages which it conveys are due to variation in -A itself, i.e. its meaning. We have demonstrated that such an assumption is not supported by the data in two ways:

i. by illustrating how different messages correlate in a non-arbitrary fashion with differences in the context in which -A occurs; and

ii. by showing that the difference between -A and another form in the language (-i-) remains constant, regardless of whether or not they paraphrase in a particular situation.

The observed consistency in the difference between the two forms plus the non-arbitrary relationship between the message and the context in which -A occurs suggests that -A is in fact a single form with a single meaning, i.e. it is a single sign in the Saussurean sense [de Saussure 1922].

Even though we have been able to show that differences in the messages conveyed by a particular form (-A) are not necessarily proof that it has more than one meaning, we have also found that the form itself is semantically very imprecise. Thus far we know only that -A is used to background an entity (or activity) named by a noun (N2) by setting up a relationship between it and some other entity, also named by a noun (N1). We have also learned that -A does not specify participant involvement in events, that
involvement for an entity may only be inferred in certain circum­stances, viz. when N₂ is an entity which can plausibly be seen to
be somehow involved in an event's occurrence and there is no -i-­suffix on the verb specifying such involvement for some other
entity. The fact that we can describe precisely the circumstances
in which particular messages are possible supports the claim that
it is not variations in the meaning of -A which are responsible
for different messages but rather, differences in the context in
which it is used are determinative.

While comparing -A with paraphrasing forms in Swahili enables
us to describe it in terms of (negative) differences, this de­scription in itself does not constitute a definition. That is,
knowing what -A does not express is not the same as knowing what it
does signify. We can only begin to fully understand how -A
functions in the grammar, i.e. what governs speaker choice of this
particular linguistic form on any given occasion of its use, when
we identify what it grammatically opposes: "dès que l'on compare
entre eux lex signes—termes positifs—... on ne peut plus parler
des differences... Entre eux il n'y a qu'opposition" [de Saussure:
1922:167]. A definitive characterization of -A must therefore re­
lect its oppositional nature.

We have seen in this paper that -A and -i- express different
kinds of semantic information: -i- specifies something about parti­
cipant involvement in an activity while -A does not. It merely
relates entities to one another. Since -A and -i- deal with
different types of semantic substance, they cannot be in semantic
opposition in the grammar. An adequate definition of -i- would
therefore be one which characterizes it in terms of forms in the
language into which it enters into opposition, i.e. other forms
concerned with participant involvement in events. Similarly, in
order to define -A we must describe it in terms of its relation to
other forms in the language which are concerned with the same
semantic substance, i.e. relationships between things. In this way
it will be possible to formulate an oppositional characterization
of -A.

In Port [1972:161-62], a characterization of -i- is provided
which defines it in terms of its relationship to other verbal suf­
fixes, also concerned with participant. Specifically, an opposition
is provided between the prepositional suffix -i- and the causative
suffix -ish/-iz-. They are opposed to each other in that the
prepositional designates a new participant role whose contribution to
the event's occurrence is less than that of the agent himself while
the causative indicates the presence of a participant who is more
responsible for the event than the agent.
Although we cannot ascertain prior to analysis whether or not a given linguistic form is semantically opposed to another, it is possible to suggest one candidate for such analysis. This is the particle NA, defined as a conjunction by Swahilists. Like -A, it is used to link events as well as concrete objects to one another. The difference between -A and NA appears to lie in the nature of the relationship which they (respectively) convey. While -A sets up a relationship which is asymmetrical, NA appears to establish one which is symmetrical. So while -A links two nouns in such a way that one (N₂) is "backgrounded" with respect to the other (N₁), NA relates two nouns in such a way that neither is less relevant than the other for the scene being described. (Recall that N₂ in an -A construction was somehow less prominent in the scene being described by the speaker than N₁, cf. 5.3.) The fact that -A and NA differ in terms of symmetricality can easily be seen by placing both in the same environment, as below:

(73)  ni- li- leta ki- kombe ch- a kahawa  
     I- past-bring cup coffee  
     N₁ -A N₂  
'I brought cup containing coffee'  
'I brought coffee cup'  
'I brought cuplike container for coffee'  

(74)  ni- li- leta ki- kombe na kahawa  
     N₁ NA N₂  
'I brought the/a cup and the/some coffee'  
'I brought the/a cup with the/some coffee'  

In (73) we know that N₂ is backgrounded with respect to N₁ because the event described remains the same regardless of whether or not N₂ is mentioned; the event involves the bringing of one entity (cup) but not necessarily the bringing of the other (unless of course it is in the cup). This is not the case however in (74); the event described involves necessarily the bringing of two entities rather than one. If one is omitted, the activity described is no longer the same, i.e. one entity (not two) is brought. Thus it appears that -A and NA oppose one another in terms of the nature of the relationship which they express; NA establishes a relationship in which the two linked items are equally prominent in the event or situation being described, i.e. no one is more important for an adequate description than the other. -A on the other hand sets up a relationship which is not equal; one entity is more important than the other for an accurate account of the event being described.

Although this brief comparison of -A and NA suggests that they do oppose each other in the Swahili grammatical system, the nature of their opposition cannot be precisely formulated without a more complete understanding of NA, i.e. how it is used to convey
(different) messages, e.g. "with" versus "and" (see (74)). Thus, while we can conclude that -A is semantically unitary, manipulated by speakers to convey a variety of messages according to differences in the context in which it is used, any conclusions about its oppositional nature must be regarded as necessarily preliminary and therefore candidates for further analysis.

REFERENCES


Thursday, April 5

KEYNOTE ADDRESS

Larry M. Hyman, "African linguistics in the 70's: accomplishments and future directions"

SYNTAX/SOCIOLINGUISTICS

Susan Stucky, "Tone and syntax in Makua: the case of focus"

Zygmunt Frajzyngier, "Another look at West Chadic verb classes"

Hounkpati Capo, "Neo-language: an investigation into historically oriented comparative linguistics in Africa"

Tony Obilade, "Linguistic developments within coexistent systems"

SYNTAX

Larry Hutchinson, "Cross reference and agreement"

Christian van Rooyen, "Towards a semantic categorization of the noun classes of Zulu"

Michael Serwatka, "The nouniness of the sentential complements in SeSotho"

Melissa Axelrod, Marjorie Kurtz and Gail Shanta, "The passive in SeSotho"

Katherine Demuth, "Do stative verbs exist in Bantu? Semantic evidence from SeSotho"

PHONOLOGY

Alexandre Kimenyi, "Vowel lengthening in Kinyarwanda: a non-uniqueness problem in phonology"

Michael Onwuemene, "Igbo vowel harmony principle"

Brent Vine, "Remarks on African 'shadow' vowels"

Eyamba Bokamba, "Vowel harmony and assimilation in some Bantu languages"
William R. Leben, "Tone in Mzema and Agni"

Talmy Givon, "Language typology in Africa: a critical review"

Paul Newman, "Grammatical gender in Chadic"

Grover Hudson, "The highland East Cushitic family vine"

Russell G. Schuh, "Using dialect geography to determine history: a Chadic case study"

Walter Edwards, "Complettive aspect in Guyanese creole: some comparisons with Yoruba"

Melvin Rossing, "Fulfulde 'dialects' in West Africa"

Lawrence Breitborde, "Sources and varieties of accommodation in Urban Kru"

Salikoko Mufweni, "Some current grammatical changes in Kikongo-Kituba"

Carol Myers Scotton, "Semantic and syntactic neutralization in Up-country Swahili"

Robert Herbert, "On the origin of morphophonological and phonological rules in Malagasy"

Anthony Vitale, "Phonological analysis of Swahili"

Michael Kenstowicz, "Metrical constraints on Cairene Arabic syncope"

Keith Mountford, "Phonemic downstep in Temne: implications for autosegmental analysis"

Alexis Manaster-Ramer, "On a controversial aspect of Nupe phonology"

John Watters, "Proto-Ekoid and its implications for Guthrie's Bantu"

Martin Mould, "Reconstructing Bantu tense systems"
Thomas Hinnensch and Derek Nurse, "Spirantization in Chaga: a historical reconstruction"

Thakampholo Koali, "Cole's 'Doke Model': issues and implications"

Ian Maddieson, "Language history, number names and cultural contact on the Nigerian plateau"

SYNTAX

Ellen Contini Morava, "Relative tense and time reference in Swahili discourse"

Robert Leonard, "The semantic constants of standard Swahili e, ka, and nge"

A.M. Mazrui, "The perfective marker in Swahili: accounting for variation"

Robert F. Port, "The applied suffix in Swahili: how many homonyms?"

Kenneth Shepardon, "Swahili's principal object defined"

Keith Beaven, "Prominence and cohesion: examples from Konsoime procedural discourse"

Afternoon

SYNTAX

George N. Clements, "An unbounded deletion analysis of Wh-movement in Kikuyu"

Jennifer Yanco, "Formal criteria for the category adjective: the case of Spoken Lingala"

Hilda Koopman, "Some facts about Aux and VP in Dida"

Lynell Marchese, "The incompletive/factive distinction in Proto-Kru?"

Mary Clark, "On the syntactic distribution of the associative morpheme in Igbo"

John Goldsmith, "Igbo question formation: functional vs. automatic rule application?"

TONOLOGY

Chin-Chuan Cheng and Charles Kisseberth, "Shona numeration"

David Odden, "Stem tone assignment in Karanga Shona"

Charles W. Kisseberth and Chin-Chuan Cheng, "Interaction between tone and vowel reduction rules in Makua"
Herbert Stahlke, "Lexical restructuring through tone neutralization in Ewe"
Jonathan Kaye, "Aspects of Dida tone"

Saturday, April 7

SERIAL VERBS IN AFRICAN AND SOUTH ASIAN LANGUAGES: A COLLOQUIUM

Yamuna Kachru and Rajeshwari Pandharipande, "Toward a typology of serial verbs in South Asian languages"

Discussant: Tej K. Bhatia

Hélène van Leynseele, "Verb classes in nuclear serial constructions in Anyi-Baule"

Discussant: Herbert Stahlke

SYNTAX

David Dwyer, "Where do relative clauses come from in Western Mande?"
Mallafé Dramé, "Reflexivization in Mandingo"
Geoffrey Rugege, "Relative pronouns in Kinyarwanda"
Yiwola Awoyale, "On the grammatical reality of the ideophone in Yoruba"
Edith Bedou-Jondoh, "The status of yē in Gēgbē"
Gerard Dalgish, "The range of morpho-syntactic in generative grammar"

Afternoon

GRASSFIELDS BANTU WORKING GROUP REPORT

Larry M. Hyman, "Linguistic issues in the Northwestern Province"
Erhard Voeltz, "Linguistic issues in the Southwestern Province"
Jean-Marie Hombert, "The linguistic prehistory of the Grassfields Bantu"
Stephen C. Anderson, "Tense Aspect in Aghem"
Jan Voorhoeve, "The logophoric pronoun in Ngwo"

NILOTIC LANGUAGES

Beatrice Hall and R.M. Hall, "Mabaan and Jumjum within the framework of Western Nilotic: a preliminary report"
Janice Jake and David Odden, "Cross clausal movement rules in Kipsigis"

Michael Noonan and Edith Bavin-Woock, "Parataxis in Lango"

David Cusic, "Subject and object tone in Kipsigis"

Barbara Wallace, "Maasai nominals"

The Eleventh Conference will be held at Boston University.

A classification of Amharic verb root types, verb derivation, and verb inflection. The morphophonemic aspects are formulated in terms of generative phonology and extensive paradigmatic tables are included. There are appendices of alternative rule formulations, an "Exhaustive List of Amharic Verb Bases" together with lists of exceptional verbs, and a good bibliography. The book is introduced by remarks on Semitic classification and a sketch of Amharic phonology.


Reconstructs the final years of the Asante Kingdom before the British takeover. The book discusses the cultural, economic, and political climate during the period, making use of oral tradition collected in Ghana.

The following are all published by the Institute for the Study of Language and Cultures of Asia and Africa (ILCAA)

Tokyo Gaikoguko Daigaku
4, Nishigahara, Kita-Ku, Tokyo
Japan

No prices are listed.


A bilingual (Fula-English) compilation of Fula tales. The author has produced Fula texts as close as possible to the original recordings. The music of the songs accompanying the tales is provided. Good material for the use of ethno-linguists and ethnologists.

A vocabulary of Mbum, an Adamawa-Eastern language of northern Cameroon, arranged by cultural and other categories. Definitions are in English and French and are frequently accompanied by cultural notes and line drawings. There are also English and French indices to all the Mbum words.


This is a bilingual (Fula-English) collection of Fula tales and songs from Northern Nigeria. It contains interesting and helpful descriptions of Fulani social and cultural life. Clear and easy to read.


Catalogue of German colonial documents found in Cameroonian archives. The listings are by categories such as "Chefs indigènes", "Explorations", etc. and by places and periods of colonial rule.


This volume is the fourth of a series describing the traditional history of the Fulanis of Adamawa. It is a bilingual (French-Fula) study on the four kingdoms of Tibati, Tignere, Sanyo, and Ngaoundere of the Adamawa Plateau. The sources are essentially oral.


An English-G//ana-G/'wi vocabulary, arranged in English alphabetical order with a G//ana index and several classified lists, including flora, fauna, body parts, and kin terms.