TOPICALITY:
AN ALTERNATIVE TO THE RELATIONAL VIEW OF BANTU PASSIVE

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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

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*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 Fukulani 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\(^1\) [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
   Johni hej past hit indic motherj myj
   'John hit my mother'

   b. m-ái w-ángá a- ná- meny- edw-\(^2\) a ndí Jóni
   motheri myi shei past hit passv indic by John
   'my mother was hit by John'

The second claim is the stratal uniqueness law.\(^3\) 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.

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\(^1\)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 Na that bears the 2-relation [direct object relation] in a stratum in which some nominal Nb bears the 1-relation [subject relation], and (ii) the Na bears the 1-relation [subject relation] in the following stratum [essentially equivalent to a step in a derivation], then Q is a passive clause."

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

\(^3\)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 \(c_k\) be a single arbitrary coordinate, let \(c_x, c_y, \text{ etc.}\) be variables over sequences of coordinates (which may be null) and let a, b, d be variables over nodes. Then, if \([n(a,b) \prec c_xc_kc_y]\) and \([n(d,b) \prec c_wc_kc_z]\) are both arcs in some RN, \(a = d\)."
The third claim, the \textit{chômeur} condition,\footnote{The formal statement of the \textit{chômeur} condition [Postal and Perlmutter 1977] is given below: 

"If an RN, $Q$, contains the distinct arcs $[n(a,b) < c X c_{i}c_{y}>]$

$[n(d,b) < c_{i+l}c_{y}>]$ where $d \neq a$, then $Q$ contains the arc

\textit{chômeur} $(a,b) < c_{i+l}c_{z}$."} defines the status of a NP like John in (1b) and Joni in (2b), after some other NP such as my mother in (1b) and mai wângâ 'my mother' in (2b), has taken over the grammatical relation that it previously occupied. Basically the \textit{chômeur} condition simply assigns such NPs the \textit{chômeur} relation. As a theoretical primitive, the \textit{chômeur} relation is not defined. \textit{Chômeur} is the French word for an unemployed person.

The stratal uniqueness law and \textit{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- pâts- a n-thôchí kwá á-mâî á-ké \footnote{The noun a-mâî is glossed as 'mother' and is singular in reference: it is plural, however, in form. Its singular counterpart is mâî. 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.} 
    Johni heî past give indic bananas to motherj hisj
    'John gave the bananas to his mother'

    b. Jóni a- ná- pâts- a a-mâî á-ké n-thôchí 
    Johni heî past give indic motherj hisj,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 \textit{chômeur}. Similarly, in (4a) nthôchí 'bananas' is a direct object, but in (4b) it is not. Instead in (4b) it is a direct object \textit{chômeur} because amâî 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
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>have pro-nominal</td>
<td>nominal</td>
<td>function (agrees exclusively with NPs in the subject relation; this prefix agreement is obligatory)</td>
<td>agrees with nominal function (appears with locative, subjunctive) and time adverbs; in some sentences this suffix is not obligatory)</td>
<td>(agrees with benefactive, subjunctive) and time adverbs; in some sentences this suffix is not obligatory)</td>
<td></td>
<td></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- ná- kul- a corní ití 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.)
(6) Joni a- ná- (zi-) nyamul- a n-thóchí  
  Johni hei past (themj) carry indic bananasj  
  'John carried the bananas'  

Syntactically, a (Patient) direct object may reflexivize, as in (7).  

(7) Joni a- ná- dzí- pweték- á  
  Johni hei past selfi hurt indic  
  'John hurt himself'  

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.  

(8) n-thóchí zi-mène Joni a- ná- (zi-) nyamû!- a  
  bananasi whichi Johnj hej past (themj) carry indic  
  zi- ná'- lī zó- sá- psyá  
  theyi past be adj not ripe agr  
  'the bananas that John carried were unripe'  

(9) zi- ná'- lī n-thóchí zi-mène Joni a- ná- (zi-) nyamû!- a  
  theyi past be bananasi whichi Johnj hej past (themj) carry indic  
  'it was the bananas that John carried'  

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

The properties which characterize a (Patient) direct object, that is, Ø prepositional case marking, the possibility of object agreement on the verb, immediate postverbal position, reflexivization, and characteristic strategy for relativization and cleft, are also shared to varying degrees by NPs which are not, pretheoretically, direct objects. This will be illustrated in the discussion of indirect object, benefactive, instrumental, and locative NPs.  

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) Jóni a- ná- (zí-) pâts- a a-má’í á-ké n-thóchí
(wa-)

Johni he ji past (themi) give indic motherk hisk,i bananasj
(herk)

'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) a. m-kázi a-méne Jóni á- ná- (mu-) pâts- a n-thóchí
(zí-)

womani whoi Johnj he past (heri) give indic bananask
(themk)

ndi m-á’í wá-ká
is motheri hisi,j

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

b. n-thóchí zi-méne Jóni á- ná- (zi-) pâts- a m-á’í
(*mu-)

bananasi whichi Johnj he past (themi) give indic motherk
(*herk)

wá-ká zi- ná’ lli zá- zí- wísi
hisik,j theyi past be ofi adj green
agri

'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
tivation 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) Jóni a- ná- dzí- pats- a Bi1i
Johni hei 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) Ø 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.

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) Jóni a- ná- (wa-)7 bvin- ir- a ǎ-ná
Johni hei 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) Jóni a- ná- (wa-) ph- er- a ǎ-ná n-khúku (i-)
Johni hei past (themj) kill applied indic childrenj chickenk
'John killed the chicken for the children'

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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 i 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 ǎná 'children', which denotes a human being. The Malawians who helped me most with this study, however, did not speak these dialects.
Benefactive

(16) a. ā-ná a-méne Jóni á- ná- wa- ph- ēr- a
children who John past them kill applied indic
n-khuku a- ná- li Angoni
chicken they past be Angoni
'the children that John killed the chicken for were Angoni' 8

Direct Object

b. n-khuku i-méme Jóni á- ná- (i-) ph- ēr- a-
chicken which John past (iti) kill applied indic
(*wa-)
ä-ná i- ná- li y-á Málua
children iti past be of 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 Bill
John past self 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 ndí.

(18) a. Jóni á- ma- (*i-) lim- (ír-) a ndí khâsu
John habit (*itj) farm (applied) indic with hoe
'John farms with a hoe'

(19) a. Jóni á- ma- (chi-) lim- (ír-) a chi-manga
John habit (itj) farm (applied) indic corn
(*itk)
ndí khâsu
with hoe
'John cultivates corn with a hoe'

8The Chichewa-speaking Angoni inhabit the Ncheu and Dedza districts of the central regions of Malawi.
The preposition ndi, 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 ndi.

(18) b. Jóni á- ma- (īi- ) lim- ěr- a khāsu
Johni hei habit (iti) farm applied indic hoej
'John farms with a hoe'

(19) b. Jóni á- ma- (chi-) lim- ěr- a khāsu chí-manga
(*iī- )
Johni hei habit (iti) farm applied indic hoek cornj
(*iti k)
'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 Jóni á- ná- (yi-) lemb- ěr- a dz-îná
peni whichi Johnj hej past (iti) write applied indic namek
(*iti k)
lá-ké yi- ná- ̃ lī y-á Máluluwa
hisj, j iti past be ofi Maluluwa
'the pen which John wrote his name with was Maluluwa's'

b. dz-îna li-méne Jóni á- ná- (yi-) lemb- ěr- a
(namei whichi Johnj hej past (iti) write applied indic
(*iti k)
péni li- ná- ̃ it lá-ke
peni iti past be hisi,j
'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, anhu '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 anhu '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'.

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9 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.

10 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.

11 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.

(22) ndi- (chí-) on- a chi- nthu  
I Class 7 see indic Class 7 entity  
(it₁) thing₁

'I see (the) thing'

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.

(23) Jóni a- ná- (pá-) khal- a pa- m-phásá  
John₁ hei past (onj) sit indic onj mat  

'John sat on the mat'

(24) Jóni a- ná- (mú-) ph- á (-po) Bíli pa- khonde  
John₁ hei past (himⱼ) kill indic (thereonⱼ) Bill onⱼ porch  
(*onⱼ)

'John killed Bill on the porch'

(25) Jóni a- ná- (zí-) ik- á (-po) n-thóchf pa- m-phásá  
John₁ hei past (themⱼ) put indic (thereonⱼ) bananas onⱼ mat  
(pa-)

'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- (*ó-) phik- a pa- m-ofo  
John₁ hei past (*itⱼ) cook indic on fireⱼ  

'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 pronominalize 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) (*i-)
    mat i which i John j he j past (them k) put indic (thereon) (*it i)

    n-thóch i i- ná- 'i i yó- nyówa
    bananas k it i past be wet i
    'the mat which John put the bananas (on) was wet'

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

    on i mat where i John j he j past (on i) put indic (thereon i)
    (them k)

    n-thóch i pa- ná' i i pó-nyówa
    bananas k on i past be wet i
    '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, the passive marker, is affixed to the verb; and the basic subject appears optionally, placed in sentence-final position and coded with the agent preposition ndí.

(29) a. Jóní a- ná- (zí-) nyamul- a n-thóchí
    Johni he past (them) carry indic bananas
    'John carried the bananas'

    b. n-thóchí zi- ná- (zí-) nyamul- idw- a (ndí Jóní)
    bananas they 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. Jóní a- ná- (zí-) pats- a a-mái á-ké n-thóchí
    (wa-)
    Johni he past (them) give indic mother his bananas
    'John gave his mother the bananas'

    b. a-mái á-ké a- ná- (zí-) pats- idw- a n-thóchí
    (*wa-)
    mother his she past (them) give passv indic bananas
    (ndí Jóní)
    (by John)
    'his mother was given the bananas (by John)'

12As 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.

13The 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-)
bananasi theyi past (themi) give passv indic motherj hisj,k
(*herj)
(ndí Jóni)
(by Johnk)
'the bananas were given his mother (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. Cátherine a- ná- (wá-) phik- ir- a ā-ná
Catherinei shei past (themj) cook for indic childrenj
'Catherine cooked for the children'
b. ā-ná a- ná- (wá-) phik- ir- idw- a childreni theyi past (themi) cook for passv indic
(ndí Cátherine)
(by Catherine)
'the children were cooked for (by Catherine)'

(32) a. Cátherine a- ná- (wá-) phik- ir- a ā-ná n-síma
(yi-)
Catherinei shei past (themj) cook applied indic childrenj nsíma
(*itk)
'Catherine cooked the children nsima'
b. ā-ná a- ná- (yi-) phik- ir- idw- a n-símá
(*wa-)
childreni theyi past (itj) cook applied passv indic nsíma
(*themi)
(ndí Cátherine)
(by Catherine)
'the children were cooked nsima (by Catherine)'
c. n-síma yi- ná- (yi-) phik- ir- idw- a ā-ná
(*wa-)
nsíma iti past (itj) cook applied passv indic childrenj
(*themi)
(ndí Cátherine)
(by Catherine)
'nsíma was cooked for the children (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. Joni á- ma- (itj) lim- a khasu  
Joni hei habit (itj) farm applied indic hoej  
'John farms with a hoe'

b. khasu lí- má- (itj) lim- ir- idw- a (ndi Joni)  
hoej itj habit (itj) farm applied passv indic (by John)  
'the hoe was formed with (by John)'

(34)  
khasu lí- ma- (itj) lim- its- ídw- a chí-manga  
(*)chí-  
hoej itj habit (itj) farm inst passv indic cornj  
(nda Joni)  
(by John)  
'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. Joni a- ná- (*yí-) khal- á (-po) pa m-phásá  
Joni hei past (*itj) sit indic (thereonk) onk matj  
'John sat on the mat'

b. m-phásá i- ná- (yí-) khal- idw- á (-po) (ndi Joni)  
matj itj past (itj) sit passv indic (thereon) (by John)  
'the mat was sat on (by John)'

15
(36) a. Jóni a- ná- (tí-) ik- á (-po) n-þóchí' pá- m-phásá (*yi-*)

\[
\begin{align*}
\text{John}_1 \text{ he}_1 \text{ past (them)} & \text{ put indic (thereon)} \text{ bananas on mat} \\
\end{align*}
\]

'John put the bananas on the mat'

b. m-phásá i- ná- (yí-) ik- idw- á (-po) n-þóchí (zi-)

\[
\begin{align*}
\text{mat}_1 \text{ it}_1 \text{ past (it)} & \text{ put passv indic (thereon) bananas (by John)} \\
\end{align*}
\]

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).

(37) a. Jóni a- ná- (pá-) khal- á (-po) pa- m-phásá

\[
\begin{align*}
\text{John}_1 \text{ he}_1 \text{ past (on) sit indic (thereon) on mat} \\
\end{align*}
\]

'John sat on the mat'

b. pa- m-phásá pa- ná- (pá-) khal- idw- á (-po)

\[
\begin{align*}
\text{mat}_1 \text{ it}_1 \text{ past (on) sit passv indic (thereon)} \\
\end{align*}
\]

(ndf 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-)

\[
\begin{align*}
\text{John}_1 \text{ he}_1 \text{ past (it) cook indic (thereon) nsima on fire} \\
\end{align*}
\]

'John cooked the nsima on the fire'

b. pa- m-óto pa- ná- (pá-) phik- idw- á (-po) n-síma (yí-)

\[
\begin{align*}
\text{fire} \text{ fire} \text{ it}_1 \text{ past (on) cook passv indic (thereon) nsima (by John)} \\
\end{align*}
\]

(ndf Jóni)
(by John)

'on the fire was cooked nsima (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 $\rightarrow$ Direct Object
(40) Benefactive $\rightarrow$ Direct Object
(41) Instrumental $\rightarrow$ Direct Object
(42) Locative $\rightarrow$ Direct Object
(43) Direct Object $\rightarrow$ Subject (Passive)

An analysis of this sort encounters a number of difficulties.

3.1. **The Benefactive $\rightarrow$ Direct Object rule.** Predication of a Benefactive $\rightarrow$ 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-ái a- ná- tem- a ny-ama y-á mw-áná woman she past cut indic meat of child
   'the woman cut the child's meat'

   b. m-ái a- ná- fém- er- a mw-áná ny-ama woman she 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-kází a- ná- wéram- ir- a mw-amúna woman she 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 \rightarrow Direct Object rule. The Locative \rightarrow 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 \rightarrow 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-thóchi'pá m-phásá John he past (them) put indic (thereon) bananas on mat
   'John put the bananas on the mat'

   b. *Jóni a- ná- ík- á (-po) m-phásá n-thóchi John he past put indic (thereon) mat bananas
   'John put the bananas (on) the mat'

   c. m-phásá i- ná- (yí-) ik- idw- á (-po) n-thóchi mat it past (it) put passv indic (thereon) bananas
   'the mat was put bananas (on) (by John)'

   (ndí Jóni) (by John)
Instead, we move on to consider problems with the Locative Derived N → Direct Object rule, which are more characteristic of Bantu as a whole.

The Locative Derived → 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 → 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 chômage, 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 chômage. 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 chômage 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 → Direct Object, Benefactive → Direct Object, and Locative Derived Noun → 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 → 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 \rightarrow 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 \rightarrow 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 chômeage, 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 chômeage does not improve acceptability. For Instrumental \rightarrow 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.
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.

<table>
<thead>
<tr>
<th></th>
<th>Animacy hierarchy</th>
<th>Semantic hierarchy</th>
<th>Prepositional case marking</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></td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Reflexivization</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Object agreement</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>(in a simple sentence without passive)</td>
<td></td>
<td></td>
<td></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.
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:

- human > nonhuman
- 1st pers > 2nd pers > 3rd pers animate > 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:

- Recipient, Benefactive > Patient > Instrumental

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

**Humanness:** Benefactive and Recipient NPs tend to be human; Patients are less consistently so; Instrumentals tend to be inanimate.

**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.
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OBJECT CLITIC PRONOUNS IN BANTU AND THE TOPICALITY HIERARCHY*

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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)**

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

**KIMBUNDU (Angola)**

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

**SHONA (Zimbabwe)**

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

These pronominal infixes follow the rules of Bantu nominal concord system (cf. Weimers [1973:ch.6]), that is, they agree in noun class with the "corresponding" noun. 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" (OC). 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]).

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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- PST- 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 -phehetse mokete ijo  

I -cooked/APP feast food

'I cooked-for feast food'

b. ke -0 -phehetse ijo  

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 Byarusheng 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.

(14) 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 has brought him to me'
s/he-PST-him-me-bring-APP-A *'s/he has brought me to him'

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


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

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 (ni1) 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 call it (meeting) for him'
    I - it-him-call -APP-A *'I call him for it'

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

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

c. a - i - mw- et - i - e kwa wao
   s/ne-PST-him-bring-PST-A to them
   's/he brought him to them'

(18) a -ya - i - dik -i - a
    she- them- it- cook- APP-A
    'she cooks them for it'

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.

The order Instrument - Patient (Bii) is illustrated in example (10) above, which also follows the Humanness order (cf. (C) in (13)). I reproduce here example (10) as (19):

(19) a - a -ji -m -kom -e -a
    he - PR-it -him-kill -APP-A
    'he kills with it him'

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-zj -chinj -i - a
    he-PR-it- them-slaughter-APP-A
    'he slaughters them with it'

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

3Shambals 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.

us, it will be satisfying to say that the strategy outlined in (14) is adequate enough to deal with the great majority of the possible combinations and therefore should be maintained as a valid generalization until (and if) a better one is found.

"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- gi-ba - mu -siig - i1 - i1 - 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></th>
<th>3RD</th>
<th>2ND</th>
<th>1ST</th>
</tr>
</thead>
<tbody>
<tr>
<td>(A)</td>
<td>3RD</td>
<td>2ND</td>
<td>1ST</td>
</tr>
<tr>
<td>(B)</td>
<td>INSTRUMENTAL/PATIENT</td>
<td>GOAL/BENEFACTIVE</td>
<td>VERB STEM</td>
</tr>
<tr>
<td>(C)</td>
<td>NONHUMAN</td>
<td>HUMAN</td>
<td></td>
</tr>
<tr>
<td>(D)</td>
<td>PLURAL</td>
<td>SINGULAR</td>
<td></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.

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rigid systems must allow some "black sheep" pronouns to wander around. Vattuone [1977], for instance, must posit an optional Accusative Forward rule in his otherwise beautifully worked out system for Zenejze (Genoese). Something similar happens in Shambala, where the pronoun wa 'them', when expressing the Semantic Role Patient, can be switched to a position that should not otherwise assume.
4.1. Person and Semantic Role. Consider the following examples: 5

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

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

(26) a. a -ka- mu- ku- leet- ela
    him-you
    'he brought him to you'
    'he brought you to him'
b. *a -ka -ku -mu -Ieet -ela
    you-him
    you-him
    'he brought him to you'
    'he brought him to 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 third - 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 PERSON > SEMANTIC ROLE.

4.2. Semantic Role and Number. Haya assigns to Semantic Role and Number the same ranking, that is, SEMANTIC ROLE = 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-PST-them-him-bring-APP
    'he brought them to him'
    'he brought him to them'
b. a -ka - ba - leet- ela
    him-them
    'he brought him to them'
    *'he brought them to him'

5I 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,b) 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 l 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)'
   (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. (+)

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

(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 (31b1i). 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 brought them to me'
    he-PST-them-me-bring+APP   'he brought me to them'

b. *a -ka - n - ba - leetela
   me- 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 killed themselves for/because of me'
    they-PST-me-self-kill+APP   '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):
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 -ki- gi- cumbila (gi = embwa 'dog')
    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)'

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.

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6The 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


