HIERARCHIES OF NATURAL TOPIC IN SHONA

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1. Introduction

There has been considerable interest recently in the relationship between universal semantics and language-specific syntax. Certain logical relations are assumed to underlie all languages, which, in turn, "syntactize" to a greater or lesser extent these universals by well-defined means. For example, since the recipient and the benefactor of an action are typically presupposed to be human beings, languages tend to associate their underlying grammatical cases accordingly. Further, since these semantic features usually correlate with dative and benefactive case relations, some languages may exploit this redundancy for syntactic purposes. In this paper, we shall examine the interaction of such redundancies with syntactic considerations in the determination of case relations by speakers of Shona, a Bantu language spoken in Zimbabwe.¹

¹This paper is dedicated to the Shona people. The data upon which this study is based was collected in the winter of 1973-74 by an independent study group in Berkeley consisting of the two authors, Jean-Marie Hombert and Borgade Marasha. The first author was supported by an NDEA Title VI Fellowship; the second author was supported by a Postdoctoral Fellowship from the Miller Institute for Basic Research in Science, and is on leave from the University of Southern California. We are extremely grateful to Dr. Marasha, who spent numerous hours of his precious time discussing the Shona data with us and answering our many questions. Without his patience and insightful comments, this paper would not have been possible. We are in addition grateful to Talmy Givón, who made a special trip to Berkeley to discuss Shona and Bantu syntax with us, and who made a number of important comments on an earlier version of this paper; and to Wallace Chafe, Charles Fillmore, William Foley, Robert Kirsner, George Lakoff and Karl Zimmer, who gave us helpful comments and suggestions.

We should like to emphasize that in discussing the Shona data we shall not be arguing for any particular (competence) model of grammar. We shall limit our discussion to the motivation of the facts to be presented, i.e. why speakers create the sentences they do in Shona, and to the problems listeners have in interpreting these sentences. Since we were able to work with only one speaker of Shona, we found it most effective to focus on how our informant interpreted sentences which
2. **Animacy**

Languages of the Bantu family are characterized grammatically by a number of different noun classes. Although the members of each noun class do not exhibit consistent semantic properties, the fact that animacy may play a role in Bantu grammar is evidence due to the nature of the correlations which do exist:

(1) Classes 1/2 : Human referents only  
6a : Mass/liquid nouns  
7/8 : Inanimate "thing" referents  
9/10 : Animals (also some non-animate referents)

In constructions where a noun of one class is conjoined with a noun from another class, differences in "gender" will have to be (a) resolved in favor of one particular gender or (b) avoided through the use of certain other syntactic constructions. The treatment of conjoined noun phrases provides evidence for how such conflicts are treated in a given language. In Shona, both strategies are possible:

(2) a. mũũmũ amespace-fřmbá né AMESPACE  'the man walked with the dog'  
man he-pst-walk with dog  
b. mũũmũ né AMESPACE  vᵗ-amespace-fřmbá  'the man and the dog walked'  
man and dog they-pst-walk

The difference between these two constructions involves the type of event being described. In (2a) the man and the dog are seen to be walking together (single event); in (2b) the man's walking and the dog's walking are separate events. The first construction avoids any gender conflict; the second sentence involves resolution of the gender difference between 'man' and 'dog' in Shona's noun classification schema.

If two nouns of differing gender are conjoined in Shona, the conflict is resolved in favor of the more animate being: if any member of either we or he himself constructed. Thus, although we shall often speak of interpretation and of assigning nouns to underlying case relations, we are not advocating the interpretivist approach to generative grammar. Quite to the contrary, we shall emphasize the role of semantics and pragmatics in syntax.
the conjunct is human, the difference is resolved in favor of that noun; if not, and if any member is an animal, the difference is resolved in favor of that noun; finally, if all the conjuncts are inanimate and do not belong to the same noun class (there are several inanimate noun classes), the conflict is resolved into class 7/8 (inanimate) as seen below:

(3)

\[
mùrùmè + mwànà → vá...
\]

class 1 : 'man' 'child' they (human: plural class 2)

\[
lmbwà + shìrl → dzf...
\]

class 9 : 'dog' 'bird' they (animal: plural class 10)

\[
chlgàrò + chlpò → zvf...
\]

class 7 : 'chair' 'present' they (inanimate: plural class 8)

\[
bàdzà + bàngà → mà...
\]

class 5 : 'hoe' 'knife' they (class 6, pl. of cl. 5)

\[
mùrùmè + lmbwà → vá...
\]

class 1-9 : 'man' 'dog' they (class 2)

\[
lmbwà + chlpò → dzf...
\]

class 9-7 : 'dog' 'present' they (class 10)

\[
chlpò + bàngà → zvf...
\]

class 7-5 : 'present' 'knife' they (class 8)

Not only is it incorrect to resolve gender differences in favor of a less animate noun; it is equally incorrect to list such a referent before the more animate noun in a conjunct:

(4) *mùrùmè nè lmbwà dzà-kà-fámbà² 'the man and the dog walked' man and dog they-pst-walk (with resolution to animal cl. 10)

*mìmbwà nè mùrùmè vá-kà-fámbà 'the dog and the man walked' dog and man they-pst-walk (with 'dog' preceding 'man')

²In glossing our examples we shall not be entirely faithful to the underlying morphology. Thus, in the first example of (4), a more felicitous morphological analysis would be dzì-ákà-fámbà. The same is true of many of the other cited examples.
The hierarchy of importance according to considerations of "animacy" in Shona is therefore (1) human, (2) animal, (3) inanimate.

Such considerations are not always used in Bantu languages. In fact, Givón [1970] has noted that the languages which he studied all prefer the construction using the preposition 'with' which avoids principles of gender resolution altogether. Further, if any conjunction was used the gender differences were resolved in favor of the inanimate 7/8 gender regardless of any differences in the animacy status of the nouns involved.

3. Grammar

While there appears to be a bias in favor of animacy which can affect the surface form of sentences in certain instances, there are also grammatical considerations which determine the positioning of elements in sentences. In the simple active sentence the subject precedes the verb and a direct object noun follows it:

(5) mūrūmē ā-kā-nyōrā īsāmbā 'the man wrote a letter'
   man he-pst-write letter

When an indirect object, representing benefactive or dative case relations, is present, an "applied" suffix -ēr/-ir- is added onto the verb to supply the notion of "prepositionality". The object to which the verb is then rendered "in prepositional relation to" directly follows the derived verb:

(6) mūrūmē ā-kā-nyōr-ēr-ā mwānā īsāmbā 'the man wrote a letter to/for the child'
   man he-pst-write-to/for child letter to/for the child

While the applied suffix can reorient the verb either benefactively or datively, the more common reading of (6) is 'for the child' rather than 'to the child'. If the dative case relation is to be unambiguously specified, the dative can be postposed and preceded by the preposition kū 'to':

(7) mūrūmē ā-kā-nyōrā īsāmbā kū mwānā 'the man wrote a letter to the child'
   man he-pst-write letter to child child

*mūrūmē ā-kā-nyōr-ēr-ā īsāmbā kū mwānā
   man he-pst-write-to letter to child
Since it is also possible to postpose the benefactive object with a preposition, \(^3\) it would appear that the benefactive has high priority in claiming the object position in the prepositional construction. This proves to be the case in constructions where both a benefactive and a dative object are present:

\((6)\) mûrûmû \(\acute{a}\)-kà-nyôr-ér-\(\acute{a}\) mwâňâ \(\acute{a}\) sâmbâ ñû mûkâdzì

\(\text{man he-pst-write-for child letter to woman}\)

'the man wrote a letter for the child to the woman'

It should be noted that \(\acute{sâmbâ 'letter', the direct object of the simple-}
plex verb nyôrä 'write', can be ordered before mwâňâ 'child', as seen in (9),

\((9)\) mûrûmû \(\acute{a}\)-kà-nyôr-ér-\(\acute{a}\) sâmbâ mwâňâ ñû mûkâdzì

\(\text{man he-pst-write-for letter child to woman}\)

'the man wrote a letter for the child to the woman'

since the human status of 'child' is sufficient in assigning it to the benefactive case. That the position immediately following the applied verb belongs syntactically to the indirect object is evidenced in sentences where both objects are human:

\((10)\) mûrûmû \(\acute{a}\)-kà-chôkâ mwâňâ

\(\text{man he-pst-cut child}\)

\(\text{mûrûmû \(\acute{a}\)-kà-chêk-èr-\(\acute{a}\) mûkâdzì mwâňâ 'the man cut the child for}

\(\text{man he-pst-cut-for woman child the woman'}\)

\(\text{mûrûmû \(\acute{a}\)-kà-chêk-èr-\(\acute{a}\) mwâňâ mûkâdzì 'the man cut the woman for}

\(\text{man he-pst-cut-for child woman the child'}\)

We should like to suggest that the benefactive object, and the dative ob-ject when no benefactive is specified, is in a \textit{grammatical} direct object

\(^3\)In such situations the preposition used is the "associative" marker (with its concord prefix), which is used to mark possession:

\(\text{mûrûmû \(\acute{a}\)-kà-nyôrá sâmbâ ÿé mûkâdzì 'the man wrote the letter for}

\(\text{man he-pst-write letter of woman the woman'}\) (lit. the man

\(\text{wrote the woman's letter})\)
relation to the applied verb form. In order to avoid confusion, we shall refer to the noun immediately following the active form of a verb as the **proximate** object, as suggested to us by Talmy Givón. Further evidence for the notion "proximate object" is seen from the fact that the benefactive/dative object is topicalized in the same way as the direct object of the underived verb stem, as seen in (11):

(11) a. á-kâ-nyôrá ṭsámbar
    he-pst-write letter
    'he wrote a letter'
    Topic: ṭsámbar, á-kâ-ŋí-nyôrá
    letter he-pst-it-write it'

b. á-kâ-nyôr-ér-á mwàna ṭsámbar
    he-pst-write-to/to child letter
    'he wrote the child letter'
    Topic: mwàna, á-kà-mú-nyôr-ér-á ṭsámbar
    child he-pst-him-write-to/to letter
    him the letter'

Further, once the applied suffix is added, the direct object to the original verb stem cannot be topicalized in this way:

(12) *ṭsámbar, á-kâ-ŋí-nyôr-ér-á mwàna
    he-pst-it-write-to/to child
    'the letter, he wrote it to/to the child'

In both the simple and prepositional constructions only the underlying agent has grammatical access to the subject slot. However, when such constructions are passivized, the agent is moved out of that position and postposed with the preposition né 'by'. Grammatically, the noun which was in proximate object relation to the verb as just defined (i.e., that immediately following the verb), is moved into subject position. Thus, sentences (5) and (6) are passivized as in (13) and (14):

(13) ṭsámbar yá-kâ-nyôr-w-á né mûrûmê
    letter it-pst-write-pass. by man
    'the letter was written by the man'

(14) mwàna á-kâ-nyôr-ér-w-á ṭsámbar né mûrûmê
    child he-pst-write-to/to-pass. letter by man
    'the child was written a letter by the man'
In (14) the letter was written either to the child or for the child. What is important is that an underlying dative (i.e., 'to the child') will move into subject position only if there is no underlying benefactive (i.e., 'for the child') in the same sentence. If both are present, the benefactive claims the subject position, just as it claimed proximate object position in the corresponding active construction:

(15) mwănâ ə-kâ-nyôr-ôr-ô-ô ı̣sâmbâ ne mûrûmâ kû mûkâdzî'

child he-pst-write-for-pass. letter by man to woman
'(for) the child was written a letter, by the man, to the woman'

While such a sentence is not readily translated into good English syntax, in (15) the man has written the letter to the woman on the child's behalf (e.g. the child did not know how to write a letter himself).

The grammatical hierarchy of accessibility to the subject slot is then:

(16) (1) subject in active sentences (both simplex and applied verbs)
(2) accusative object in simplex passive sentences
(3) benefactive object
(4) dative object (if an underlying benefactive is absent or left unspecified)

The same hierarchy also determines which items have access to the object slot for pronominalized elements in the Shona verb complex. In simplex verbs, an accusative object pronoun is prefixed directly in front of the verb stem:

It is necessary to clarify the notion "specified benefactive". Benefactives can be of two types: one being 'on behalf of', the other being 'intended for'. The second type can be said to be "unspecified" to the extent that it may be replaced by a phrase with the preposition 'to': a letter intended for the woman; a letter to the woman. The only difference between this 'for' and 'to' is that the latter implies direction. The specified benefactive is that representing the underlying notion of 'on behalf of' and it is this which preempts the underlying dative in the constructions described. In English, this notion may also be left unspecified: he wrote a letter for me can mean 'intended for me, for my benefit' (e.g. because he wanted to tell me something) or 'on my behalf' (e.g. because I was too tired to write it myself).
(17) mwaná á-ká-nyôrá tsámbá → mwaná á-ká-vf-nyôrá
child he-pst-write letter child he-pst-it-write
'the child wrote it (the letter)'

This is the same position which the pronoun markers occupied when object nouns were topicalized in (11). As was seen there, the object marker of the prepositionally derived verb also moves into that position when a benefactive or dative noun referent is pronominalized:

(18) mwaná á-ká-nyôr-ér-á mukádzí → mwaná á-ká-mû-nyôr-ér-á
child he-pst-write-to/for woman child he-pst-her-write-to/for
'the child wrote to/for the woman' 'the child wrote to/for her'

And as before, the more frequent interpretation of this sentence will be 'for her' (i.e., 'on her behalf'). If the speaker wishes to make clear that the letter was written to someone the pronoun must be postposed and the verb returns to its simple (non-appled) form:

(19) mwaná á-ká-nyôrá kwááří 'the child wrote to her (the woman)'
child he-pst-write to her

*mwaná á-ká-nyôr-ér-á kwááří 'the child wrote to her'
child he-pst-write-to to her

4. Case

Since both the object to the simplex verb and the object to the prepositionally derived verb behave syntactically as direct objects to the verb which they follow, it is proposed that traditional notions of subject, direct object and object of the preposition are inadequate to describe the differential treatment which Shona syntax accords to particular surface objects. In fact, it is only by reference to underlying case relations, rather than to these more superficial grammatical structures, that the acceptability and interpretation of more complex constructions can be accounted for.

Another grammatical strategy relevant to this discussion is the causative suffix -is-/es- which is also attached to the verb. The grammatical relation of the underlying agent of the "embedded" verb
parallels that described for the direct object to the simplex verb and the indirect object to the prepositional verb:

\[
\begin{align*}
(20) \text{múkândzí á-kà-chéká zànzè & 'the woman cut the fruit'} \\
\text{woman she-pst-cut fruit} \\
\text{múrúmé á-kà-chék-és-á múkândzí zànzè & 'the man made the woman cut} \\
\text{man he-pst-cut-cause woman fruit the fruit' (*the man made} \\
\text{the fruit cut the woman)}
\end{align*}
\]

As seen earlier in (9), the object order can be reversed if the animacy status between the objects is sufficient to allow the proper interpretation of the sentence as seen in (21):

\[
\begin{align*}
(21) \text{múrúmé á-kà-róv-és-á mwáná mútìf & 'the man made the child hit the} \\
\text{man he-pst-hit-cause child tree} \\
\text{múrúmé á-kà-róv-és-á mútìf mwáná & 'the man made the child hit the} \\
\text{man he-pst-hit-cause tree child} \\
\text{Neither of these can be interpreted as *the man made the tree hit the} \\
\text{child. If, on the other hand, the two objects are of equal animacy their} \\
\text{order is fixed entirely by grammatical considerations, as seen in (22):}
\end{align*}
\]

\[
\begin{align*}
(22) \text{múrúmé á-kà-róv-és-á múkândzí mwáná & 'the man made the woman hit} \\
\text{man he-pst-hit-cause woman child} \\
\text{múrúmé á-kà-róv-és-á mwáná múkândzí & 'the man made the child hit} \\
\text{man he-pst-hit-cause child woman} \\
\text{It should be noted that when the ordering between the two object nouns in} \\
\text{this construction is reversed, the agent noun may be preceded by the pre-} \\
\text{position né 'by' and, in fact, it must be when two objects of equal} \\
\text{animacy are reversed:}
\end{align*}
\]

\[
\begin{align*}
(23) \text{múrúmé á-kà-róv-és-á mútìf (né) mwáná & 'the man made the child} \\
\text{man he-pst-hit-cause tree by child} \\
\text{múrúmé á-kà-róv-és-á mwáná né múkândzí & 'the man made the woman} \\
\text{man he-pst-hit-cause child by woman} \end{align*}
\]
When the embedded agent is pronominalized, it also is found in the slot directly preceding the verb:

\[(24) \textrm{mûrûmô ã-kâ-mû-rov-ôs-â mûtî} \quad \textrm{'the man made him (the child) hit man he-pst-hit-hit-cause tree the tree'} \]

Since the embedded agent is in proximate object relationship to the causativized verb, when the sentence is passivized, it moves into subject position:

\[(25) \textrm{mwânô ã-kâ-rov-ôs-w-â mûtî né mûrûmô} \quad \textrm{'the child was made to child he-pst-hit-cause-pass. tree by man hit the tree by the man'} \]

We have presented evidence that the accusative object to the simplex verb, the benefactive or dative object to the prepositionally derived verb, and now the agent object to the causative verb all behave syntactically as proximate objects to the verbs which they follow. That the grammar gives these object nouns differential treatment according to their underlying cases becomes particularly clear when we look at sentences in which more than one of these object nouns is present.

It was seen in (14) and (15) that the prepositionally derived verb places the benefactive/dative noun in subject position when passivized. However, in some cases the underlying accusative can appear as subject of a passivized verb with the applied suffix, as seen in (26):

\[(26) \textrm{tsâmûbâ ŋa-kâ-nûûr-ôr-w-â} \quad \textrm{mwânô} \quad \textrm{'the letter was written for letter it-pst-write-for-pass. child the child'}^{5} \]

Although the accusative object is not grammatically favored in the subject position of a passive, this possibility is found when there is an animacy differential between the underlying accusative and benefactive nouns. However, if both the underlying accusative and benefactive are human, passivization cannot occur as just seen in (26), since it would

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^{5}The dative can be unambiguously specified in a passivized construction by the preposition \(kû\) 'to', as follows:

\[\textrm{tsâmûbâ ŋa-kâ-nûûr-w-â} \quad \textrm{kû mwânô} \quad \textrm{'the letter was written to the letter it-pst-write-pass. to child child'}\]
change the meaning of the original sentence:

(27)

a. mùrœué á-kà-röv-ër-á mûkàdzì mwàrá 'the man hit the child for the man he-pst-hit-for woman child woman'

b. mûkàdzì á-kà-röv-ër-ù-á mwàrá ré múrœué 'the child was hit for woman she-pst-hit-for-pass. child by man the woman by the man'

c. mwàrá á-kà-röv-ër-ù-á mûkàdzì ré múrœué 'the woman was hit for child he-pst-hit-for-pass. woman by man the child by the man'

The passive of (27a) is (27b), and not (27c), where the underlying relationships are reversed. This suggests that allowing the accusative to passivize on the prepositionally derived verb, as in (26), is not the normal case; it is permissible only when certain semantic criteria are met. Thus, in terms of access to the subject position of a passivized verb, the following hierarchy is obtained: (1) benefactive, (2) dative, (3) accusative.

When both a causative and an applied suffix are present on one verb, the embedded agent takes the position of proximate object to the verb, and the benefactive is postponed with a preposition (cf. footnote 3):

(28)

a. mùdzfìdzìsì á-kà-nyòr-ër-á mûkàdzì 'the teacher wrote for the woman'
   teacher he-pst-write-for woman

b. mùdzfìdzìsì á-kà-nyòr-ër-às-á múrœué 'the teacher made the man write'
   teacher he-pst-write-cause man

c. múdzfìdzìsì á-kà-nyòr-ër-às-á múrœué yà mûkàdzì 'the teacher made the man write for the woman'
   teacher he-pst-write-cause man 'for' woman

When (28a) and (28b) are combined in (28c), the embedded agent has priority to the first object position over the benefactive, and can
therefore be placed higher in the case hierarchy. 6

The last step of this case hierarchy can be defined with reference to the causative constructions in (29):

(29)
   a. mürümé á-kà-chéká zànzé né bángá \( \rightarrow \) 'the man cut the fruit with a
man he-pst-cut fruit with knife knife'
   b. mürümé á-kà-chéká mwaná né bángá \( \rightarrow \) 'the man cut the child with a
man he-pst-cut child with knife knife'

As seen in (30a), the instrumental né banga 'with a knife' can become the subject of the passivized causative construction corresponding to (29a):

(30)
   a. bángá rá-kà-chék-ës-w-á zànzé né mürümé \( \rightarrow \) 'the knife was caused to
knife it-pst-cut-cause-pass. fruit by man cut the fruit by the man'
   b. *bángá rá-kà-chék-ës-w-á mwaná né mürümé \( \rightarrow \) 'the knife was caused to
knife it-pst-cut-cause-pass. child by man cut the child by the man'

As seen in (30b), however, the instrumental cannot become the subject in this construction if the underlying accusative is more animate than it. What this means is that the instrumental and the accusative vie for subject position. The accusative has priority, especially if it is animate. The total case hierarchy defined with reference to accessibility to the subject slot is therefore as in (31):

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6 Consistent with the observation that the embedded agent has priority over the benefactive is the observation that the causative suffix follows the applied suffix in verbs, e.g., nyór-ër-ës-á 'cause to write for'. It is interesting to note that a minimal pair exists where the suffixes can be reversed. From kù-téngá 'to buy' we can form kù-téng-ës-á 'to sell' (lit. to cause to buy). But we can now have kù-téng-ër-ës-á 'to cause to buy for' (the expected order) or kù-téng-ës-ër-á 'to sell for'. The second is possible only because kù-téng-ës-á is lexicalized. Since the suffixes come in the reverse order, we expect that the hierarchy will be affected by this, i.e., that the benefactive or 'to sell for' may have priority over the object of 'cause' in deriving passive sentences. Unfortunately we were not able to look into this problem in sufficient detail.
5. Natural Topic

In section 2 we established a hierarchy of animacy according to distinctions made in the gender classification of nouns in Shona and their behavior in conjoined noun phrase constructions. Throughout the subsequent discussions, a few examples were used which showed that grammatical strategies for case assignment could be dispensed with in instances where the animacy status of the different nouns involved was sufficient to allow the proper interpretation of the construction. Pronominalized constructions in particular give evidence for this kind of phenomena, because the only semantic information provided by the noun class pronoun forms is that concerning differences in animacy. Each noun class in Shona carries a particular pronoun form; therefore, each pronoun form will be associated with the semantic features of animacy which mark the items in a given noun class:

(32)

a. murumë á-kâ-mú-nyôr-ôr-á iyô 'he wrote it (the letter, cl.9)
   man he-pst-him-write-to/for it to/for him (cl. 1)'

b. murumë á-kâ-ýf-nyôr-ôr-á iyê 'he wrote it (the letter, cl.9)
   man he-pst-it-write-to/for him to/for him (cl. 1)'

Although (32a) represents the underlying benefactive mu 'to/for him' and accusative iyo 'it' (cl. 9) pronouns in their expected grammatical positions, when the pronouns are reversed, as in (32b), the same case relations are maintained. What this suggests is a pragmatic strategy by which the benefactive/dative cases are more likely to be filled by human participants than the accusative case. Therefore, the sentence is interpreted unambiguously when the two object nouns or pronouns are of differing animacy (i.e., (32b) should mean by the grammatical positioning
of the pronouns *'he wrote him for it', but it does not.

Such associations of particular cases with certain types of participants account for why the passivized sentences in (33) mean the same thing:

(33)

a. (mûkâdzâ) â-kâ-rû-nyô-r-ér-û-ù 'the woman) for her it was written'

b. (tsâmbâ) ya-kâ-mû-nyô-r-ér-û-ù 'the letter) it was written for her'

Even if one object is animate rather than inanimate, the same variant construction may occur if the selectional restrictions on the verb provide appropriate case relations:

(34)

a. (lmbwâ) ya-kâ-mû-rû-v-ér-û-ù 'the dog) it was hit for her'

b. (mwânâ) â-kâ-yâ-rû-v-ér-û-ù 'the child) for her it was hit'

Similar results are obtained with pronominalized embedded agents and accusatives in causative constructions. The more animate participants are assigned to the agentive case.

When both the benefactive and agentive cases are pronominalized, the agentive case is still assigned the more animate being:

(35)

a. (mûrûmâ) â-kâ-yâ-rû-v-ér-û-s-w-à 'the man) he was caused to hit the tree for it (the dog)'

b. (lmbwâ) ya-kâ-mû-rû-v-ér-û-s-w-à 'the dog) for it he was caused to hit the tree'

The problem with such sentences is self-evident: they are highly complex and tax the limits of both the grammar and the mind. What is relevant is
that when appropriate situations can be defined, the more animate participant is assigned to the agentive case. This hierarchy, which is defined according to which cases have greater access to the more animate nouns in a sentence, parallels that hierarchy given with respect to grammatical accessibility to the subject slot in passive sentences (31).

Throughout this paper we have assumed that some semantic feature specifying the animacy status of an object may influence the grammatical realization of particular configurations of underlying cases. Although considerations of animacy have been sufficient to adequately account for the data up until this point, certain factors suggest that perhaps more than just a preference for more animate things in certain case relations may be involved. That the language assigns more animate beings to benefactive and agentive cases than to the accusative is not surprising, since accusative objects are usually inanimate. However, that there should be any distinction between benefactive and agentive cases, both in the grammar and in associations with participants of more or less animacy, is significant since both are typically human.

The topic of a sentence is that thing or person which is being talked about. In that sense of the word it consists of "old information". What people usually talk about are other people, and the phenomena which have been described in this paper are understandable in terms of some notion of the kind of things or types of events which people usually discuss with one another. The benefactive case is higher on this hierarchy of "natural topic" than the accusative because it is usually filled by human beings and human beings are talked about more than inanimate things (cf. Givón, forthcoming). That an agentive is higher on this hierarchy than the benefactive is because agents are typically the initiators of events and are therefore more directly involved in the action(s) which are being described than the benefactive or dative. 7

7 The basicness of the agentive over the benefactive case can be seen from the observation (cf. Fillmore [1968]) that there can generally not be a benefactive in a sentence lacking a "deep" agent. Thus, the sentence 'I heard the music for him' seems odd.
The strongest support for this analysis is the fact that the human category of the animacy hierarchy is further differentiated between first and second person referents on the one hand, and third person human referents on the other:

(36)

a. ḥdā-kā-mū-svlpūr-1r-w-ā
   I-pst-him-kiss-for-pass.

   'he was kissed for me'

b. wa-kā-mū-svlpūr-1r-w-ā
   you-pst-him-kiss-for-pass.

   'he was kissed for you'

c. ḥdā-kā-kū-svlpūr-1r-w-ā
   I-pst-you-kiss-for-pass.

   'you were kissed for me'

In (36a, b) the first or second person pronoun is interpreted to be the benefactive, whether it appears in subject position (where it belongs) or in the prefixed object position. In (36c), on the other hand, where a first and a second person pronoun is involved, the case relations are assigned strictly according to grammatical position, showing that first and second person pronouns are of equal "animacy". However, since all of these pronouns represent human referents some criterion other than animacy must be involved in the interpretation of these sentences.

We should like to propose that the notion of "natural topic" can account for this differentiation among the personal pronouns. First and second person pronouns are deictically defined in conversation, e.g., they are defined according to who is speaking at a certain moment in time (I) and to whom (you), while the third person referents are understood by speakers to represent someone or something outside the conversation, which remains constant in relation to it (cf. Benveniste
That a language would differentiate third person pronouns from first and second person pronouns is not an unknown phenomenon; it has been observed elsewhere, e.g., in Tlahuitoltepec Mixe [Lyon 1967], in Algonkian (Jean-Pierre Beland, personal communication), and in French to some extent (cf. Hyman and Zimmer, in preparation). While Shona does not differentiate first and second person pronouns, other languages do. However, since both orders are found (e.g., first person pronouns precede second person pronouns in Italian, as pointed out to us by Francesco Antinucci, while the reverse is the case in Spanish; cf. Perlmutter [1970] for discussion), the only universal distinction appears to be between first and second person versus third person. What is interesting is how these facts fit into a notion of natural topic in discourse. Sentences are normally constructed with reference to earlier utterances; similarly, discourse is constructed with reference to who is actively involved in the discussion. Therefore, it is understandable that first and second person referents would occupy the highest rung of the hierarchy of "natural topic".

6. Conclusion

In the preceding sections we have hierarchically defined related sets of phenomena acting in the construction and interpretation of acceptable sentences in Shona, as summarized in (37):

(37) (1) A grammatical hierarchy which assigns particular underlying case relationships to certain syntactic positions in the sentence

(2) A case hierarchy defined according to which case relations are more likely to be filled by certain items from a hierarchically related set of possible topics

(3) A hierarchy ranking nominals according to their specifications of more or less likely to be topic in a discourse, e.g., that which is being discussed

However, as pointed out to us by Bill Foley, this division is incomplete. A complete hierarchy would have to include the distinction between inclusive and exclusive as well as reflexive pronouns.
The final point to consider concerns what processes in the language provided the impetus for the grammatical strategies for the assignment of elements in sentential constructions to be violated and reinterpreted according to case-associated semantic features: (1) the redundancy itself which existed between the cases and the semantic features shared by the elements usually found in those cases, or (2) some other influence which is blocked except when distinctions of topic status among sentential elements allow the proper assignment of underlying case relations to these items without reference to grammatical predictions? Since the grammatical hierarchy predicting accessibility to the subject slot in Shona replicates exactly the case hierarchy defining which cases are likely to carry "topic" (i.e. our former "animate") items, it seems unlikely that the impetus for the change would come from within the system itself. Topic is defined as "that which is being discussed" in the sense of old information, and the unmarked position for topic in Shona, as in many languages, is the subject slot in the sentence. That the grammatical hierarchy correlates with the case hierarchy for topic rights shows that the syntactic and semantic strategies of the language are organized in complementary relation to one another. That is, they reinforce each other.

We therefore propose that pragmatic considerations involved in everyday discourse have provided the impetus for the breakdown of grammatical strategies in certain instances. While in Shona the unmarked position for old information is the subject slot, marked topical information can also be moved to the subject position before the verb. Marked topic is to be understood as that element in a sentence which is being emphasized or highlighted by a speaker; it is usually new information, although all new information is not necessarily marked. The normal position for new information in Shona is following the verb. However, for the purposes of topicalization, the grammatical strategy can be broken. Thus, if the underlying accusative is inanimate, it may be passivized into subject (topic) position, violating the grammatical hierarchy by which benefactives have priority over accusatives (cf. sentences (14) and (26) above).
As seen now in (38), this notion of natural topic also plays an important role in English:

(38) I was sent a present
     a present was sent me

Although the first person singular pronoun and a present can change places, the same reading is obtained for both sentences. Even speakers of English who do not readily accept a present was sent me unambiguously interpret it as a present which I received and not as a present which received me. This is exactly parallel with the Shona constructions where a letter was being written (section 4). Note further the positional change of the two noun objects in English, if both the accusative and dative are human, as in (39):

(39) the man was sent the woman
     the woman was sent the man

It does appear, however, that an English sentence of the surface structure NP passive NP will be grammatically interpreted with the first NP as the underlying dative, although considerations of natural topic may play a role, as just seen in (38).

The process described earlier as topicalization is intimately associated with the process of distinguishing definite and indefinite referents in sentences. Definite referents are usually old information; indefinite referents are usually new information: I received a letter [new] today. The letter [old] came by special delivery. In Shona, there are two forces competing for sentence initial position: one associated with that position as the unmarked position for old information; the other associated with that position as the marked position for topicalized elements. In languages which have definite/indefinite distinctions these differences can be maintained through the use of definite and indefinite articles even if the language has these same two tendencies fighting for a
particular position in the sentence:\(^9\)

\[(40)\] I was sent \textcolor{red}{a letter} \hspace{1cm} \text{cf.} \hspace{1cm} \textcolor{red}{A letter} was sent me
\[\text{new} \hspace{1cm} \text{new}\]

I was sent \textcolor{red}{the letter} \hspace{1cm} \text{cf.} \hspace{1cm} \textcolor{red}{The letter} was sent me
\[\text{old} \hspace{1cm} \text{old}\]

Shona has no such means to differentiate new and old information, since there are no definite or indefinite markers. The fact that topicalized information can push its way into the position normally reserved for old "topical" information has provided the impetus to look elsewhere in the system for a means of establishing "what is being talked about" without reference to the actual occupant in the subject slot of the verb.

In the process of constructing an utterance three factors come into play, as seen in \[(41)\]:

\[(41)\] Grammatical strategy : where does a given noun belong in the sentences (i.e. its position vis-à-vis the syntax)

Semantic strategy : what level in the natural topic hierarchy does the noun occupy by virtue of its intrinsic semantic properties

Pragmatic strategy : what is being discussed/topicalized in the discourse at any given moment

Evidence that there is a separate grammatical or syntactic strategy is seen from the fact that our informant sometimes disregarded the natural topic hierarchies and interpreted sentences solely on the basis of the

\[^9\text{In English, definite and indefinite articles play much more of a role than can possibly be discussed in this paper. Thus, although the following sentence means that the child received a present, \[a present was sent the child\] the sentence \[the present was sent a child\] is interpreted as a child being sent to the present. In other words, the fact that the child is human and a present inanimate is sufficient to allow the underlying accusative to be in the first NP position of this NP passive NP construction. However, when the articles are switched, as in the second sentence, the animacy differential is not sufficient.}\]
syntax. What is crucial is that on any given occasion, when faced with the problem of interpreting sentences, Dr. Marasha was consistent in choosing a strategy—i.e. he did not randomly wander from one to the other. Throughout this paper we have focused on the first strategy. Thus, sentences such as those in (42)

(42)

a. á-ká-bfí-kə-r-á mükádzí sàdzá 'he cooked (the) porridge for the woman'

b. á-ká-bfí-kə-r-á sàdzá mükádzí 'he-post-cook-for porridge woman'

were said to be synonymous. However, when following a strictly syntactic strategy, our informant insisted that (42b) should be interpreted as 'he cooked the woman on behalf of the porridge', and similarly for other sentences where an inanimate underlying accusative has come to be the proximate object of a prepositionally derived verb. Since different interpretations were consistently given on different days, we may conclude that the informant has access to two different strategies.

A second piece of evidence for recognizing two separate strategies is seen from certain ambiguities which result when both strategies break down. As can be seen from the following two sentences (cf. the examples in (10)),

(43)

a. á-ká-svífprü-r-á mükádzí mwáná 'he kissed the child for the woman'

b. á-ká-svífprü-r-á mwáná mükádzí 'he-post-kiss-for child woman'

when two object nouns are of equal status in the natural topic hierarchy, the syntactic strategy identifies the first noun as the underlying benefactive. In this particular case, the semantic strategy has broken down, since the benefactive cannot be differentiated from the accusative solely on the basis of the inherent properties of the nouns involved.
On the other hand, the syntactic strategy breaks down when one of the objects is a noun and the other a pronoun. As seen in the two sentences in (44), where *mu* is the class 1 human pronoun, and *yi* the class 9 animal pronoun,

(44)

a. ḍ-ka-mú-svjpúr-fr-ä lmbwā 'he kissed the dog for him'
   he-pst-him-kiss-for dog

b. ḍ-ka-yi-svjpúr-fr-ä mwâna 'he kissed it for the child'
   he-pst-it-kiss-for child

a human noun or pronoun will claim the benefactive reading over an animal noun or pronoun. Since there are two noun slots after the verb, it is possible to determine which of the two nouns is the proximate object by its adjacency with the preceding verb. There is, however, only one pronoun object slot directly preceding the verb stem, which, note, either an underlying benefactive or accusative has access to. Thus, in sentences with both a pronoun and a noun object, as in (44), either of these can be potentially interpreted as the proximate object. It is impossible to determine syntactically whether this pronoun is a benefactive (44a) or accusative (44b). Interpretation must therefore be done semantically, i.e. by assigning the more "animate" object to a case which is higher in the hierarchy. Thus, in (44), both 'it' and 'dog' are assigned to the accusative, while 'him' and 'child' are assigned to the benefactive.

Finally, note that in (45), where the noun and pronoun are equally animate and human,

(45) ḍ-ka-mú-svjpúr-fr-ä mwâna 'he kissed him for the child'
   he-pst-him-kiss-for child 'he kissed the child for him'

both the semantic and the syntactic strategies break down, and the result is that (45) is ambiguous between the two interpretations indicated. This is exactly the prediction made in an approach distinguishing the two strategies.

There is of course a third strategy, since we have seen that in the assignment of a syntactic position to a given noun, the potential
topicality of its case relation plays a key role. However, in actual discourse, a noun whose case is lover on the natural topic hierarchy (e.g., accusative as compared to benefactive) can come to occupy a higher position (e.g., subject) by means of topicalization. In conclusion, we need only note that such phenomena as have been described in this paper represent the means by which semantic and pragmatic considerations undermine the absolutive power of a grammar. We might also add that in Shona the scales seem to be tipped in favor of the former, since people are the ones who possess the presuppositions about meaning and control the pragmatics of discourse, and they are still doing the talking...  

10 An earlier version of this paper was presented at the Fourth Annual California Linguistics Association Conference, May 4-5, 1974, University of Southern California. At that meeting, Robert Kirsner pointed out that there are a number of parallels between the Shona data and other languages, in particular, Dutch and Navajo (see Kirsner [1973]). While the "animacy" hierarchy has been noticed in many languages (i.e. 1st/2nd, human-3rd, animal-3rd, inanimate-3rd), the Shona data are particularly instructive in revealing the corresponding case hierarchy. The two hierarchies conspire together to bring into greater "focus" those elements which are higher on each scale. The animacy hierarchy is called one of agentivity by Kirsner, and one of "efficacy" by Matisoff [1973], who notes similar findings in Lahu. Finally, Boyd Michaelovsky has pointed out parallels in Hayu, a language of Nepal. Facts from English, French and Italian suggest that there is another related topic hierarchy, which ranks nouns on the basis of definiteness or specificity (cf. Hyman and Zimmer, in preparation). It thus appears that on the specificity scale, 'the cop' is higher than 'the cops' which is higher than 'all of the cops' which is higher than 'some cops'. In conclusion, then, there are at least four strategies for communicating (and decoding) topical information: 1) word order (topical information comes earlier), 2) case, 3) animacy ("agency" or "efficacy"), and 4) specificity.
REFERENCES


