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 logi-
cal relations are assumed to underlie all languages, which, in turn,
"syntacticize" 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 benefac-
tive 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]

   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 pre-
sented, 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. mùrúmé á-kà-fámbá né ìmbwá 'the man walked with the dog'
   man he-pst-walk with dog

  b. mùrúmé né ìmbwá vá-kà-fámbá '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

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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)   mùrúmé   +   mwànà   →   vá...
   class 1 : 'man'   'child'   they (human: plural class 2)

           ìmbwá   +   shìrì   →   dzí...
   class 9 : 'dog'   'bird'   they (animal:plural class 10)

           chìgàrò + chìpó   →   zví...
   class 7 : 'chair'   'present'   they (inanimate:plural class 8)

           bádzá   +   bángá   →   má...
   class 5 : 'hoe'   'knife'   they (class 6, pl. of cl. 5)

           mùrúmé   +   ìmbwá   →   vá...
   cl. 1-9 : 'man'   'dog'   they (class 2)

           ìmbwá   +   chìpó   →   dzí...
   cl. 9-7 : 'dog'   'present'   they (class 10)

           chìpó   +   bángá   →   zví...
   cl. 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) *mùrúmé né ìmbwá dzá-kà-fámbá[2]   'the man and the dog walked'
        man and dog they-pst-walk   (with resolution to animal cl. 10)

     *ìmbwá né mùrúmé vá-kà-fámbá   'the dog and the man walked'
        dog and man they-pst-walk   (with 'dog' preceding 'man')

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[2] In glossing our examples we shall not be entirely faithful to the
underlying morphology. Thus, in the first example of (4), a more felici-
tous morphological analysis would be dzì-ákà-fámbá. 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 langauges. 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)   mùrúmé á-kà-nyórá tsámbà   '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 -er-/-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)   mùrúmé á-kà-nyór-ér-á   mwàná tsámbà   'the man wrote a letter
       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 kù 'to':

(7)   mùrúmé á-kà-nyórá tsámbà kù mwàná   'the man wrote a letter to the
       man he-pst-write letter to child   child'

     *mùrúmé á-kà-nyór-ér-á tsámbà kù mwàná
       man he-pst-write-to letter to child

Since it is also possible to postpose the benefactive object with a pre-
position,[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:

(8)   mùrúmé á-kà-nyór-ér-á   mwàná tsàmbà kù mùkàdzí
       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 tsàmbà 'letter', the direct object of the sim-
plex verb nyórá 'write', can be ordered before mwàná 'child', as seen
in (9),

(9)   mùrúmá á-kà-nyór-ér-á   tsàmbà mwàná kù mùkàdzí
       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 sen-
tences where both objects are human:

(10)   mùrúmá á-kà-chéká mwàná   'the man cut the child'
       man he-pst-cut child

       mùrúmá á-kà-chék-ér-á mùkàdzí mwàná   'the man cut the child for
       man he-pst-cut-for woman child   the woman'

       mùrúmá á-kà-chék-ér-á mwàná mùkàdzí   'the man cut the woman for
       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 grammatical direct object

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

    mùrúmá á-kà-nyórá tsàmbà yé mùkàdzí   'the man wrote the letter for
                                            the woman' (lit. the man
    man he-pst-write letter of woman   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
<u>proximate</u> object, as suggested to us by Talmy Givón. Further evidence
for the notion "proximate object" is seen from the fact that the benefac-
tive/dative object is topicalized in the same way as the direct object
of the underived verb stem, as seen in (11):

(11) a.   á-kà-nyórá tsámbà   'he wrote a letter'
           he-pst-write letter

    Topic: tsàmbà, á-kà-yí-nyórá   'the letter, he wrote
            letter he-pst-it-write   it'

    b.   á-kà-nyór-ér-á   mwàná tsàmbà   'he wrote the child
           he-pst-write-to/for child letter   the letter'

    Topic: mwàná, á-kà-mú-nyór-ér-á   tsàmbà 'the child, he wrote
            child he-pst-him-write-to/for letter   him the letter'

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

(12) *tsàmbà, á-kà-yí-nyór-ér-á   mwàná   'the letter, he wrote it
      letter he-pst-it-write-to/for child   to/for the child'

    In both the simple and prepositional constructions only the under-
lying agent has grammatical access to the subject slot. However, when
such constructions are passivized, the agent is moved out of that posi-
tion 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 posi-
tion. Thus, sentences (5) and (6) are passivized as in (13) and (14):

(13) tsàmbà yá-kà-nyór-w-à   né mùrúmé   'the letter was written by
      letter it-pst-write-pass. by man   the man'

(14) mwàná á-kà-nyór-ér-w-á   tsàmbà né mùrúmé
      child he-pst-write-to/for-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 benefac-
tive (i.e., 'for the child') in the same sentence. If both are present,
the benefactive claims the subject position, just as it claimed proxi-
mate object position in the corresponding active construction:

(15) mwàná á-kà-nyór-ér-ẁ-á   tsámbà né mùrúmé kù mùkâdzí
     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[4])

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:

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[4] It is necessary to clarify the notion "specified benefactive". Bene-
factives 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 differ-
ence 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) mwàná á-kà-nyórá tsámbà → mwàná á-kà-yí-nyórá

      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) mwàná á-kà-nyór-ér-á   mùkâdzí → mwàná á-kà-mú-nyór-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) mwàná á-kà-nyórá kwàárí   'the child wrote to her (the woman)'

     child he-pst-write to her

     *mwàná á-kà-nyór-ér-á kwàárí '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 pre-
positionally derived verb behave syntactically as direct objects to the
verb which they follow, it is proposed that traditional notions of sub-
ject, direct object and object of the preposition are inadequate to des-
cribe 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:

(20) mùkâdzî á-kà-chóká zánzè   'the woman cut the fruit'
      woman   she-pst-cut fruit

      mùrúmé á-kà-chék-és-á mùkâdzì zànzè   'the man made the woman cut
      man   he-pst-cut-cause woman fruit the fruit' (*the man made
                                            the fruit cut the woman)

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

(21) mùrúmé á-kà-róv-és-á mwàná mùtí   'the man made the <u>child</u> hit the
      man   he-pst-hit-cause child tree   tree'

      mùrúmé á-kà-róv-és-á mùtí mwàná   'the man made the <u>child</u> hit the
      man   he-pst-hit-cause tree child   tree'

Neither of these can be interpreted as *the man made the tree hit the
child. If, on the other hand, the two objects are of equal animacy their
order is fixed entirely by grammatical considerations, as seen in (22):

(22) mùrúmé á-kà-róv-és-á mùkâdzí mwàná 'the man made the <u>woman</u> hit
      man   he-pst-hit-cause woman child   the child'

      mùrúmé á-kà-róv-és-á mwàná mùkâdzí 'the man made the <u>child</u> hit
      man   he-pst-hit-cause child woman   the woman'

It should be noted that when the ordering between the two object nouns in
this construction is reversed, the agent noun may be preceded by the pre-
position né 'by' and, in fact, it must be when two objects of equal
animacy are reversed:

(23) mùrúmé á-kà-róv-és-á mùtí (né) mwàná 'the man made the child
      man   he-pst-hit-cause tree by child   hit the tree'

      mùrúmé á-kà-róv-és-á mwàná né mùkâdzí 'the man made the woman
      man   he-pst-hit-cause child by woman   hit the child'

When the embedded agent is pronominalized, it also is found in the slot
directly preceding the verb:

(24)   mùrúmá á-kà-mú-róv-és-á   mùtí   'the man made him (the child) hit
       man he-pst-him-hit-cause tree   the tree'

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

(25)   mwàná á-kà-róv-és-w-à   mùtí né mùrúmá '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 <u>accusative</u> can appear as subject
of a passivized verb with the applied suffix, as seen in (26):

(26)   tsàmbà yá-kà-nyór-ér-w-á   mwàná   '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 sub-
ject 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 kù 'to', as follows:

       tsàmbà yá-kà-nyór-w-à   kù mwàná   'the letter was written to the
       letter it-pst-write-pass. to child   child'

change the meaning of the original sentence:

(27)

a. mùrúmé á-kà-róv-ér-á mùkàdzí mwàná   'the man hit the child for the
   man he-pst-hit-for woman child   woman'

b. mùkàdzí á-kà-róv-ér-ẁ-á   mwàná né mùrúmé   'the child was hit for
   woman she-pst-hit-for-pass. child by man   the woman by the man'

c. mwàná á-kà-róv-ér-ẁ-á   mùkàdzí né mùrúmé   '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 rela-
tionships 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. mùdzídzísì á-kà-nyór-ér-á mùkàdzí   'the teacher wrote for the woman'
   teacher he-pst-write-for woman

b. mùdzídzísì á-kà-nyór-és-á mùrúmé   'the teacher made the man write'
   teacher he-pst-write-cause man

c. mùdzídzísì á-kà-nyór-ér-és-á   mùrúmé yé mùkàdzí
   teacher he-pst-write-for-cause man 'for' woman
   'the teacher made the man write for the woman'

When (28a) and (28b) are combined in (28c), the embedded agent has pri-
ority 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. mùrúmó á-kà-chéká zánzè né bángá   'the man cut the fruit with a

       man he-pst-cut fruit with knife knife'

   b. mùrúmó á-kà-chéká mwàná né bángá   '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-és-w-à   zànzè né mùrúmó '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-és-w-à   mwàná né mùrúmó '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 sub-
ject 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 <u>follows</u>
the applied suffix in verbs, e.g., nyór-ér-és-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-és-á
'to sell' (lit. to cause to buy). But we can now have kù-téng-ér-és-á
'to cause to buy for' (the expected order) or kù-téng-és-ér-á 'to sell
for'. The second is possible only because kù-téng-és-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.

(31) (1) Agent: subject agent in simple sentences; embedded agent in
        causative sentences

    (2) Benefactive ('on behalf of')

    (3) Dative ('to' of 'intended for')

    (4) Accusative

    (5) Instrumental

5. Natural Topic

In section 2 we established a hierarchy of animacy according to dis-
tinctions made in the gender classification of nouns in Shona and their
behavior in conjoined noun phrase constructions. Throughout the subse-
quent 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 con-
structions 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. mùrúmé á-kà-mú-nyór-ér-á   fyò   'he wrote it (the letter, cl.9)
    man he-pst-him-write-to/for it   to/for him (cl. 1)'

b. mùrúmé á-kà-yí-nyór-ér-á   fyè   '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 inter-
preted unambiguously when the two object nouns or pronouns are of dif-
fering 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 partici-
pants account for why the passivized sentences in (33) mean the same
thing:

(33)

   a. (mùkâdzí) á-kà-yí-nyór-ér-ẁ-á   '(the woman) for her it was
       woman she-pst-it-write-for-pass.   written'

   b. (tsàmbà) yá-kà-mú-nyór-ér-ẁ-á   '(the letter) it was written
       letter it-pst-her-write-for-pass. for her'

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

(34)

   a. (ìmbwá) yá-kà-mú-róv-ér-ẁ-á   '(the dog) it was hit for her'
        dog it-pst-her-hit-for-pass.

   b. (mwàná) á-kà-yí-róv-ér-ẁ-á   '(the child) for her it was hit'
       child she-pst-it-hit-for-pass.

Similar results are obtained with pronominalized embedded agents and ac-
cusatives 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. (mùrúmé) á-kà-yí-róv-ér-és-w-à   mùtí
       man he-pst-it-hit-for-cause-pass. tree
      '(the man) he was caused to hit the tree for it (the dog)'

   b. (ìmbwá) yá-kà-mú-róv-ér-és-w-à   mùtí
       dog it-pst-him-cut-for-cause-pass. tree
      '(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 becuase 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]

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[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. ȵdà-ká-mú-svⸯpúr-ⸯr-ẁ-á   'he was kissed for me'
   I-pst-him-kiss-for-pass.

   á-kà-ȵdⸯ-svⸯpúr-ⸯr-ẁ-á   'he was kissed for me' (grammatically
   he-pst-me-kiss-for-pass.   should be *I was kissed for him)

b. wà-ká-mú-svⸯpúr-ⸯr-ẁ-á   'he was kissed for you'
   you-pst-him-kiss-for-pass.

   á-kà-kú-svⸯpúr-ⸯr-ẁ-á   'he was kissed for you' (grammatically
   he-pst-you-kiss-for-pass.   should be *you were kissed for him)

c. ȵdà-ká-kú-svⸯpúr-ⸯr-ẁ-á   'you were kissed for me'
   I-pst-you-kiss-for-pass.

   wà-ká-ȵdⸯ-svⸯpúr-ⸯr-ẁ-á   'I was kissed for you'
   you-pst-me-kiss-for-pass.

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

[1966]). That a language would differentiate third person pronouns from
first and second person pronouns is not an inknown 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 differen-
tiate 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 dis-
cussion), the only universal distinction appears to be between first and
second person versus third person.[8] 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

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[8] However, as pointed out to us by Bill Foley, this division is incom-
plete. A complete hierarchy would have to include the distinction bet-
ween inclusive and exclusive as well as reflexive pronouns.

The final point to consider concerns what processes in the language pro-
vided 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 it-
self 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 <u>except</u> when distinctions of topic status among senten-
tial 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 un-
likely 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 grammati-
cal 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 every-
day 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 benefac-
tives 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 positonal 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 maintianed 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 <u>a letter</u>   cf. <u>A letter</u> was sent me
                  new   new

      I was sent <u>the letter</u>   cf. <u>The letter</u> was sent me
                  old   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

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[9]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 <u>consistent</u> 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-kà-bík-ìr-à mùkâdzí sàdzà   'he cooked (the) porridge for the
        he-pst-cook-for woman porridge   woman'

    b. á-kà-bík-ìr-à   sàdzà mùkâdzí
        he-pst-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 con-
clude 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-kà-svípúr-ír-à mùkâdzí mwàná   'he kissed the child for the woman'
        he-pst-kiss-for   woman child

    b. á-kà-svípúr-ír-à mwàná mùkâdzí   'he kissed the woman for the child'
        he-pst-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 bene-
factive. 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 yì the class 9 animal pronoun,

(44)

   a.   á-kà-mú-svípúr-ír-à ìmbwá   'he kissed the dog for him'
        he-pst-him-kiss-for   dog

   b.   á-kà-yí-svípúr-ír-à mwàná   '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 <u>syntactically</u> 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) á-kà-mú-svípúr-ír-à mwàná   '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 lower 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]

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[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.

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