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The distribution of adverbials in the Lozi clause

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Abstract

That syntactic weight and length are fundamental determinants of constituent order is well established. The purpose of this paper is to assess the extent to which these factors apply to data from Lozi texts. In particular, we want to examine the behaviour of adverbial clauses with respect to their positions with the main clause and establish whether weight principles have a role to play.

1 Introduction

This paper discusses the distribution of adverbials (As) in the Lozi clause. The main aim of the discussion is to assess the extent to which the theory of end weight and the Language Independent Preferred Order of Constituents (LIPOC) applies to the behaviour of As. By A we shall refer

> to any category with a distribution and function similar to that of a lexical adverb...regardless of its surface syntactic realization, which may be that of a lexical adverb, an adverb phrase, a prepositional phrase, an adverbial clause or a non-finite VP. (Trask 1993:10)

Specifically, I want to call attention to the behaviour of As with respect to their position with the main clause. The discussion is divided into four main parts. The first part deals with end weight (EW) principles and the basic tenets of LIPOC. The second deals with a provisional sketch of the distribution of constituents and the third deals with the distribution of As in the clauses. In the fourth part, I will attempt to provide explanations for the placement of the As.

Before engaging in the full discussion, it might be useful to say a word about Lozi. Lozi is sometimes called Silozi or Siluyana. It is a Bantu language spoken in the Western and Southern provinces of the central African country of Zambia.

2 Weight principles and LIPOC

I would like to consider the views held by different scholars in this field. According to Hawkins (1994) there seems to be general agreement in the literature that syntactic weight or length is relevant for the ordering of elements. Weight is a far more fundamental determinant of order than is currently appreciated. The factor of complexity was formulated by Behagel (1932) as the *Gesetz der wach senden Glieder* ("law of increasing parts"). Although this was originally formulated for German (with its basic claim that a shorter element precedes a longer one wherever possible), Behagel proposed that this principle applies to other languages as well.

Quirk *et al.* state that 'in fact it is a dominant tendency of syntactic structure that the greatest of subordination or embedding is reached in the final part of the sentence' (1985:1039). Allan (1987) classifies linearization hierarchies into three groups. One of these, the Formal Hierarchies, deals with matters of length and internal syntactic complexity and are presented as follows:

- structurally simpler > structurally complex
- short > long

Items to the left of > are understood as showing a preference to precede those to the right. Siewierska (1988), making her observations which are based on Dryer's (1980) comments on the location of subordinate clauses and placement of sentential subjects and objects, asserts that languages exhibit a predilection for locating such constructions finally.

Behagel's principle has found expression in a more recent and more explicit form in Dik's (1978, 1989) *Functional Grammar* as LIPOC which he formulates as follows:

> other things being equal, constituents prefer to be placed in an order of increasing complexity, where complexity of constituents is defined as follows:-
> (i) clitic < pronoun < noun phrase < adpositional phrase < subordinate clause.
> (1989:315)

According to this, Pronouns tend to be placed relatively early. Other noun phrases tend to occur later while adpositional phrases tend to be placed later still. Finally, subordinate clauses, the most complex of the items on the scale, gravitate towards the end of the superordinate structure. Other tenets of LIPOC include:

a. For any category X, X < PX

b. For any categories X and Y, X < X & Y

c. For any categories X and Y, X < X (Y)

These state that (a) adding a preposition or postposition to a constituent will make it more likely to occur later than it otherwise would have been; (b) conjoining two constituents will make them likely to appear later than either singly; and (c) a constituent X will be likely to occur later if it contains an embedded constituent, Y, than it would have otherwise. LIPOC, then, is a principle of increasing weight.

3 Preliminary constituent orders

In terms of linearization patterning of contituents, two main orders are observable from the data. These have been tentatively distinguished on the basis of whether the (**S**)ubject or the (**A**)dverbial is the first element. The first consists of a pattern in which the (**S**)ubject is the first element and then it is followed by the (**V**)erb which is then followed by any other material (X). In this case the S is an independent element. We present this as S + V + X. An example of such a pattern is given in (1). I will use the abbreviations SC (subject concordial marker) and OC (object concordial marker) to gloss the obligatory affixes of the predicate structure.

(1) *Mubusisi wa tuto naisize pilu ku Sandaula*
Governor of education -sc-take heart to S
'The education governor was concerned about Sandaula'

The second type involves the A as the first element, followed by S and then a verb and X. This can be presented as A + S + V + X. An example of this is:

(2) *Hayo yema fanawezi foo, ngo yahae neiseiluluhile maswe*
When.sc stood where.sc fall there nose his was-swollen badly
'When he rose his nose was (already) badly swollen'

The figures below summarise the frequencies of the orders:

order	**total**	**%**
S + V + X	265	61.5
A + S + V + X	166	38.5

Clearly, there are more clauses in which A is not the first element than those in which it is.

4 Distribution of adverbials

Longacre & Thompson (1985) argue that a characteristic of As in some languages is their position, and cite Mandarin, Ethiopian Semitic and Turkish as languages in which an Adverbial must precede the main clause. In Lozi, however, As can be placed in all the possible positions. They can be placed initially (i.e. preposed) as in (2) above, or medially as in (3) below:

(3) *Ndate Ngenda nihanasweli cwalo munzi wahae natoilwe hahulu*
N N even-if-held such village his hated.sc much
'Ndate Ngenda despite being a good leader was unpopular'

They can also be placed finally (postposed) as in (4):

(4) *Basizana ba mwahae bamutoya hahulu kabakala buikoneli bwahae*
Girls of village sc.oc.hate much because.of abilities her
'The village girls hated her so much because of her abilities'

The figures below summarise the distribution of adverbials in the texts:

text	preposed	medial	postposed
1	61	7	60
2	30	3	39
3	35	6	44
4	33	1	41

5 Discussion

From the figures, a provisional and tentative observation can be made to the effect that there are more postposed As than preposed and medial combined. Although the difference might not appear to be great, it is nevertheless observable. The numerical differences in the distribution of constituents, which are further corroborated by the figures relating to the distribution of As show that preposing of As is non-preferred or may not be the canonical pattern. Another observation to be made is that the preposing of As is non-preferred with respect to both EW and LIPOC as discussed above. A direct consequence of this is a clear mismatch between the functional pattern A + S + V + X and the predictions of the two principles. This is so because in this pattern one would find a "heavier" item, say a subordinate clause, occurring before a "lighter" one thereby violating the principles of increasing complexity. On the other hand, S + V + X may provide support for the predictions incorporated in EW and LIPOC. We would expect constituents to be ordered in terms of increasing complexity in this pattern. We would expect embedding and subordination c occurring towards the end of the clause.

In view of the foregoing, the crucial question that needs to be asked is why As should be preposed, thereby creating a special constituent order. In the next section, I will attempt to provide an answer to this question.

6 Explanations

To explain this phenomenon, one needs to have recourse to other factors which go beyond mere aspects of linearization and positional syntax. Within the literature, there is a mass of evidence to suggest that various discourse, pragmatic and semantic factors are crucial in determining the order of constituents. Longacre & Thompson (1985) argue that sentence margins (which are functional slots filled by As) are of much greater use than simply in reference to their internal structure of sentences.

The factors that dictate the placement of As can really be seen when one examines their discourse functions. Various functions of preposed As can be discerned. Chafe (1984) and Givon (1990) have produced evidence to suggest that preposed As perform different functions than posposed ones. Givon, in fact, argues that all languages allow preposing and postposing of As but when this is allowed the grounding of the clauses turns out to be different. Let me start by looking at the functions of postposed As.

6.1 Functions of postposed As

As noted above, postposed As are not in conflict with the predictions of EW and LIPOC. Because of this I will be brief in the treatment of their discourse functions. Various studies that have been carried out in the behaviour of As suggest that postposed As have localised functions and depend for their interpretation on the immediately preceding clause. They have a very limited scope. For example, a postposed purpose clause will serve to state the purpose for which an action named in the main clause is undertaken. Consider:

(5) *Punga uile kwa Mongu ku yo tela*
P sc.gone to M to go pay
'Punga has gone to Mongu to pay (tax)'

Similarly, a reason clause will serve to state the reason of the state or action named in the main clause as in:

(6) *Libizo la Sandaula limuhulisize kabakala musa ni sishemo sahae*
Name of S sc.oc.grown because.of kindness and generosity his
'He is known as Sandaula because of his good deeds'

We can summarise the discourse functions of postposed As by stating that they are added comments in terms of time, condition or cause or whatever semantic function that is relevant to the main clause. Since they have localised functions and depend for their interpretation on the immediately preceding clause, they have no real contribution in the organisation of discourse.

6.2 Functions of preposed As

An important characteristic of preposed As is that they are thematically associated to the preceding discourse as well as to the main clause. They thus have a broader scope. Because of this they can be used to connect to the previous discourse and maintain a coherent point of view. They are, therefore, useful in the organisation of discourse. In the next section I will look at the various functions performed by preposed As and provide explanations for their behaviour. In other words I will answer the question as to why As are preposed.

6.2.1 Discourse genre

The positioning of As is dictated by the type of genre. Longacre & Thompson (1985) and Siewierska (1988) have long argued that the nature of the text has a crucial effect on constituent order. The texts that constitute the data on which this discussion is based are fictional narratives in which the authors recount sequences of events. It is therefore expected that the selection of the orders of constituents is functional and directly related to the goal of this particular discourse type. As Ramsay (1987:385) puts it, preposed As 'form an integral part of the narrative in that they help to sequence the temporal contour of the main line narrative...' Consequently, we find the occurrence of "when" clauses (introduced by "ha..." in Lozi) in a preposed position since this type of clause is most frequently used for sequencing the temporal events of the narrative. We would also expect spatial As that provide the location of the actions and states embodied in the narrative. For example:

(7) *Kwa upa wa munzi ne kuinzi ndu ya muña munzi*
In east of village there was house of owner.of village
'In the eastern side of the village there was the village headman's house'

6.2.2 Iconicity functions

Adverbials have to be preposed in order to reflect iconicity . In most, though apparently not all languages, it is conventional to interpret the linear order in which matters are presented as representing actual temporal succession (Haiman 1980). In this case the order of clauses will reflect the order of events which they describe. We would, as a result of this factor, expect clauses with the meaning "after X" and temporal clauses more commonly occurring in the initial position (Dik 1989).

(8) *Hatokena mwa sitopa sa Sandaula banana kaufela bayema*
When.sc.enter in class of S children all stood
'When he entered Sandaula's class all the children stood up'

(9) *Haba fita kwatuko ni munzi wa Katekwe baina fafasi*
When.sc reach near to village of K sc.sat down
'When they reached near Katekwe's village they sat down'

6.2.3 Pragmatic information status

In recent studies related to discourse, the notion of "grounding" has been recognised (e.g. Givon 1985; Haiman 1978). Grounding is an aspect of information structure of a sentence in which an act of communication is more important than the other information. Information which is needed for the reader/listener to understand new information is "background " information and information which is new or considered more important is "foregrounded" information. Foregrounded information is contained in the main clause of the sentence which comes after the subordinate clauses containing background information. The placement of As in the first has to do with grounding involving anaphora. According to Givon (1985:180) this is 'grounding of a particular point in discourse vis-à-vis what the speaker can assume about shared knowledge with the hearer'. Here we find our traditional correlation of "background" with information" or "topic".

In the above, preposed As are used as topics with respect to the sentence to which they are orientation for the information in the upcoming main clause. Chafe, in his study of the discourse roles played by initial clauses, concluded that they present a limitation of a path of orientation in terms of which upcoming information is to be understood. He argues that

> preposed adverbials orient the listener or the reader temporally, conditionally, causally, or otherwise to the information in the main clause that is to follow. They serve as frames for the text that is to follow. (1984:144)

Having established that an A whose role is to maintain cohesion within the discourse as a whole is functioning as a topic (see also Brown & Yule 1983), it would be appropriate to consider some of the general characteristics of foregrounded clauses that act as topics. I will be guided by Chafe (1979:50) and Li & Thompson (1976) in postulating these characteristics. These are:

a. they appear in sentence initial position;

b. they are discourse dependent;

c. they need not be arguments of the main predication;

d. they set a 'spatial', 'temporal' or 'individual' framework within which the main predication holds.

Thompson states that this orientation function

> is perhaps the most prominent function of initial adverbial clauses. The reason why they are able to function this way, I suggest, is precisely because a temporally sequenced event is being coded in a marked form, that is, in a form which makes it grammatically dependent on another clause. (1987:448)

From what we have said about the characteristics of preposed as opposed to postposed As, it seems clear that the preposed As act as topics. They seem to have the characteristics of what Hopper (1979:214–6) calls foregrounded clauses in that they carry main line information and reflect an iconic word order, among other things. I will use the following sentences to illustrate conditional orientation (10) and temporal orientation (11) below:

(10) *Haiba ukato fumana butanya bobucwalo hape mwa sikolo utasikwala*
If.sc will find stubornness such again in school sc.oc.close
'If he found such bad behaviour in the school again he would close it'

(11) *Habafita kwa tuko ni simu ya Ndate Mboma baina fafasi*
When.sc.reach to near to garden of N M sc.sat down
'When they reached near Ndate Mboma's garden they sat down'

6.2.4 Discourse cohesion

As stated earlier, because of their wider anaphoric and thematic scope, preposed As can be used to provide cohesion in discourse at various levels.

Whole discourse In this function, As are used to maintain discourse perspective relative to the discourse as a whole. In other words, if a sender wants to produce a narrative, he will constantly use As to maintain this perspective. This is akin to the factor of text type mentioned above. The receiver will be guided through the discourse which should be perceived as a narrative. In the extract below, I present an example of a piece of discourse in which the sender is presenting a series of events that lead to some problems in a village called Nangayula. Adverbials will be bracketed in all the examples.

The first sentence gives the background to the problems:

(12) a. *Mitangana ba munzi wa Nangayula nebatisize mukwa wa kuikezezanga*
Youngmen of village of N had.brought way of doing
milisezo ya likomu
herding of cattle
'The young men of the village of Nangayula had introduced shifts for tending to cattle.'

The second sentence lets us know what happens next through an A:

(12) b. *(Nako yeñwi) neili mulisezo wa Kabisa*
Time one was herding for K
'One day it was Kabisa's turn.'

The third sentence tells us what happens next and this is the thing that is going to spark the problem.

(12) c. *(Zazi layo kala mulisezo wahae kabumai) kwa shituka taba*
Day when.sc. started herding his unfortunately there erupted case
yene batile kutisa butata mwa munzi wa Nangayula
which wanted to.bring problems in village of N
'On the day he stated his shift there errupted a case which almost brought problems in the village of Nangayula.'

d. *(Zazi leo Kabisa hazwa kwa kulisa likomu), linja zahabo zakala*
Day that K when.came from herding cattle dogs his stated
kumatisa-matisa manamani
chase-chase calves
'On that day when he was coming from herding cattle,his dogs started chasing calves.'

Then the sentence that follows (which is not included here) tells us that the dogs brutally attacked the calf until it lay unconscious on the ground. The case is then reported and the owner of the attacked calf goes with Kabisa's father to the kraal. The next sentence then tells us what happened through yet another A:

(12) e. *(Habali kwa mulaka) kwa fumaneha kuli namani neiholofezi maswe*
While at kraal sc.was found that calf was.injured badly
'While at the kraal it was established that the calf was badly injured.'

In between there are some intervening sentences about summoning of all the villagers to discuss the case. And then the discourse closes with:

(12) f. *(Kwa mafelelezo) Kupalelwa afelisa taba*
At end K sc.finised case
'At the end Kupalelwa closed the case.'

What can be seen in this text is the sender's systematic use of preposed As to keep the temporal sequencing of events. Even if there is intervening descriptive material not related to the temporal line, he still goes back to the use of a preposed A to take the reader back to the on going temporal line and so discourse cohesion is achieved, as in Examples 10 & 11, above.

Following from this, a general statement about the behaviour of preposed As can be made in terms of their semantic classifications and their functions as information guide posts. That is, temporal As serve the function of orienting the reader or listener temporally. If it is a reason clause then it provides a reason orientation, and so on.

Cohesion within the paragraph In this function, As are used to create intersentential connections through backward reference. This is done so that a succeeding sentence is seen as a build up to the one it precedes in the overall development of the paragraph. This process is prevalent in As relating to successive events in a piece of discourse. In the following extract, a sequence paragraph, the author is outlining the events that lead to Kamuyongole committing adultery with a woman called Katekwe. The events occur in the order in which they are numbered. The first sentence sets the scene.

(13) a. *(Kazazi leliñwi fa sipelu bamano nomana ni kunguyana) Kamuyongole*
Day one at party after dancing and to.sing K
aposa linzwi ku Katekwe sipelu hassesi unguzi
sc.threw word to K dance had finished
'One day after dancing and singing Kamuyongole proposed to Katekwe at the end of the party.'

b. *(Mwa liseli la kweli) bubeli bwa bona basiyalela*
In light of moon two of them sc.remained
'Under the moonlight the two remained behind.'

c. *(Habanze bazamaya cwalo) Kamuyongole alakaza kuli lizazi lisike lapazula*
While walking such K sc.wished that sun does.not rise
'While walking Kamuyongole wished the sun could not rise.'

d. *(Habase basutelezi fakaufi ni munzi wa Katekwe) baina fafasi*
When sc.approach near to village of Katekwe sc.sat down
'When they reached near Katekwe's village they sat down.'

e. *(Habayolaezana) likuhu za bubeli ikelele lilila*
When.sc.parted cocks of second sc.had crowed
'When they parted the cock had crowed twice.'

In each sentence there is an initial clause or phrase that is a back reference to the one preceding it. The end of the preceding sentence is linked to the head of the next sentence. This phenomenon is called tail-head linkage.

Cohesion between successive paragraphs Here preposed As are seen to relate successive paragraphs in a text. Longacre & Thompson posit what they call 'tail-head' linkage with reference to this kind of function. Basically, 'what is said in the last sentence of the preceding paragraph is referred to by means of back reference in an adverbial clause in the following paragraph' (1985:209). To illustrate, consider this extract in which sentence (14) is the last sentence of a paragraph and (15) is the beginning of the next paragraph. The two paragraphs are about a man who lives with his teenage son. In the absence of the son, who usually collects water for the home, the man becomes very thirsty and dry. He decides to go to the well to collect water for himself.

(14) *Munna wa batu yena ndatahe muchaha akwaula sikiso sahae ni kuliba*
Man of people him father.of youngman sc.grabbed container his and headed
kwa lisima
to well
'The youngman's father grabbed a container and headed for the well.'

In the first sentence of the following paragraph reference is made to the same man through an A and a link is established between the two paragraphs.

(15) *Hasamizize mikope yemibeli ya tumezi totubata kamitolo...*
After.swallowing cups two of water cold very
'After taking two cups of very cold water.'

Cohesion within a sentence The functions of preposed As at the sentence level are closely related to, if not the same as, those outlined in 6.2.3 above and it would not be necessary to discuss them again.

7 Conclusions

In this paper I have shown that EW and LIPOC are indeed fundamental determinants of constituent order. They are essentially principles of increasing weight and are appropriate for those structures where there is a preference for short-before-long orders. The evidence and the data that we have presented from the Lozi texts, however, show that certain functional constituent orders can not be accounted for by these principles. An example of such a functional pattern is one in which an A is preposed, presented as A + S + V + X in the study. What this suggests is that the other factors considered above may be more appropriate in monitoring constituent ordering than linear principles connected with internal complexity. In particular, discourse functions are determinants of constituent order. Preposing of As can be used to provide cohesion for an entire discourse by assisting to maintain the discourse perspective and by helping to articulate the sections of the discourse.

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