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Relational Grammar and Some Aspects of Swahili Syntax*

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1. Introduction

The theory of relational grammar developed by Postal and Perlmutter (Class Lectures, LSA Summer Institute, 1974) treats grammatical relations rather than constituents as the primitives of clause structure. The relations are Subject (I), Direct Object (II) and Indirect Object (III). They are called terms. Only terms can trigger certain processes, such as verbal agreement, dative movement, and passivization. New terms can be created only by the operation of a cyclic transformation, and the replaced term loses its grammatical relation and becomes a chômeur. The chômeur is a non-term and cannot trigger any of the above mentioned operations. In order for a term to become a chômeur, some NP must assume its former grammatical relation to the verb. For example, the application of the passive transformation is said to convert a II into a I, with the old I becoming a chômeur. An examples of this in English is given in (1):

(1) a. Jane found the book.
I verb II →
b. The book was found by Jane.
I verb chômeur

Postal and Perlmutter make a universal claim that only II's can be passivized and that in order for a III to be passivized, dative movement must apply to change the III into a II. This is shown in (2).

(2) a. Jane told the answer to her.
I II III →
b. Jane told her the answer.
I II chômeur →
c. She was told the answer by Jane.
I chômeur chômeur

The purpose of this paper is to examine some problematic syntactic phenomena in Swahili in the light of this theory. It will be shown that while relational grammar can offer a principled explanation for the behavior of certain constructions, it fails in other respects. The dialect of my informant was Bravanese Swahili, although standard grammars were consulted as well.

2. Phrasal Predicates

The first case I will cover is the phrasal predicate which has been discussed by Harries (1970). This is a construction composed of either a verb + noun, verb + two nouns, verb + verb, or noun + verb which acts as a syntactic unit expressing a single predicative function. That is, the components of the phrasal predicate do not bear any grammatical relation to each other. Thus, in a noun + verb phrasal predicate, the noun will always fail to trigger object agreement with the verb, while a verb + genuine direct object may agree. For example, consider (3) and (4).[1]

(3) Tu---li---vunja jungu mwisho wa Ramadhani.
We--tns.--break big cooking pot end of Ramadhan.
'We had a big celebration at the end of Ramadhan.'

(4) Tu---li---li---vunja jungu mwisho wa
We--tns.-o.m.--break big cooking pot end of
'We broke the big cooking pot at the end of
Ramadhani.
Ramadhan.
Ramadhan.'

These two sentences have totally different meanings, even though the lexical items are virtually the same. Tulivunja jungu in (3) is a phrasal predicate, as evidenced by the fact that it does not trigger object agreement with the verb. The verb in (4), however, does contain the object marker li, which shows that jungu here is considered to be a direct object or a II. A further distinction between (3) and (4) is the fact that jungu in (3) is not passivizable, while it is in (4). This is shown in (5) and (6).

(5) *Jungu-li---li-----vunj---wa na sisi mwisho wa
big -s.m.-tns.---break--pas. by us end of
'A big celebration was had by us at the end of
Ramadhani.
Ramadhan.
Ramadhan.'

(6) Jungu li----li---vunj---wa na sisi mwisho wa
'The big cooking pit was broken by us at the end
Ramadhani.
of Ramadhan.'

In transformational grammar, where the structural description of passive takes into account the position of NP's in the sentence, the failure of jungu to passivize in (5) would be unexplained. But this failure to passivize would follow from the principles of relational grammar, since it claims that only II's bearing a grammatical relation to the verb, as shown here by the agreement, can passivize.

(7) nchi i----me---enea maji.
country s.m.-tns.--cover water.
'The country is covered by water.'

(8) Maji ya----me---enea nchi.
Water s.m.--tns.--cover country.
'Water covers the country.'

In sentence (7), the phrasal predicate is imeenea maji. Nchi is the subject of the sentence, as indicated by the subject marker i on the verb. There is no object marker for maji, since it bears no grammatical relation to the verb. Note that this sentence is not passive in Swahili. In (7), there is also subject agreement, this time between maji and the verb, but there is still no object agreement even though nchi appears to be the notional direct object. This is because nchi is not a II, but a locative, and therefore a non-term. The fact that nchi can occur alternatively with the locative suffix ni, e.g. nchini, or with a preposition in this sentence demonstrates this (Harries 1970).

Another example of a phrasal predicate can be seen in (9) and (10).

(9) a---li---kufa maji.
he-tns.--die water
'He was drowned.'

(10) a---li-----vunjika---------mguu
he--tns.--break himself----leg
'He broke his leg.'

In each of these sentences, a verb that doesn't normally take an object does so as a component of the phrasal predicate. But as in the other cases, the verb and object do not agree, since the so-called objects are actually non-terms rather than II's, as is shown by the fact that neither is passivizable.

Sentence (11) is an ambiguous sentence which could be interpreted as either a phrasal predicate, as in (11a) or a I verb II construction, as in (11b).

(11) Juma---a---li---piga----risasi
Juma-s.m.-tns.-v.d.a.---bullet(s).
a. Juma shot
b. Juma shot (a) bullet(s).

When alipiga risasi is interpreted as a phrasal predicate, the sentence is a pseudo-intransitive. As a component of the phrasal predicate, risasi is a non-term which can neither trigger agreement nor be passivized. In the (b) reading, on the other hand, risasi is considered to be a II, and it can both be passivized and trigger agreement when it has a definite reference.

The final example of a phrasal predicate I will mention is a problem for relational grammar. Consider sentences (12) and (13).

(12) a----li----piga--mbio.
he--tns.--v.d.a.-race, fast.
'He ran.'

(13) a----li----zi----piga mbio
he---tns.--o.m.--v.d.a. race, fast.
'He ran very fast.'

Sentence (12) is a typical verb + noun phrasal predicate where mbio fails to trigger agreement. In (13), on the other hand, verbal agreement occurs. Harries claims that the noun part of the phrasal predicate can never trigger agreement. Therefore, mbio is considered to be a direct object in (13), or in relational terms, a II. However, mbio cannot be given a separate meaning without the stems -piga or -enda nor can it be passivized. This behavior provides a counter example to relational grammar, unless one tries to claim that the agreement here denotes something other than a grammatical relation between the noun and verb. It is interesting to note here that according to Maw (1969), although agreement may provide evidence for grammatical relations, it doesn't in itself set up the categories.

3. The interaction between direct and indirect objects

The next problem I will discuss has to do with the interaction of so-called direct and indirect objects. In this section I will use the terms direct and indirect object as they are used in transformational grammar. I will use the terms II and III when referring to relational grammar.

Sentence (14) is an active sentence with a direct object, shati.

(14) Wazee wa---li-----nunua shati.
Parents s.m.--tns.---buy shirt
'The parents bought a shirt.'

In (15), shati has been passivized.

(15) Shati----li----li----nunuliwa na wazee.
shirt---s.m.--tns.---buy pas. by parents
'A shirt was bought by the parents.'

Now consider sentences (16) through (18):

(16) Wazee wa----li---m-----nunulia shati mtoto.
parents-s.m.--tns.-o.m.---buy-applied shirt child.
'The parents bought a shirt for the child.'

(17) Mtoto a----li----nunuliwa shati na wazee.
Child s.m.-tns.---buy--p.a. shirt by parents
'The child was bought a shirt by the parents.'

(18) *Shati----i----li---nunuliwa mtoto na wazee.
Shirt--s.m.--tns.--buy-p.a. child by parents.
'A shirt was bought for the child by the parents.'

As you can see by the grammaticality of (17) and the ungrammaticality of (18), when a sentence contains in traditional terms, both a direct and indirect object, only the indirect object can be passivized. Recall that relational grammar claims that only a

direct object, or II, can be passivized, and that dative movement first applies to change a III into a II, with the old II becoming an unpassivizable chômeur. However, there are several problems with this analysis for Swahili. The first is that Postal and Perlmutter assume that all so-called indirect objects are preceded by the preposition kwa in deep structure, although there is no actual evidence that such is the case since kwa and the applied form illustrated in (16) do not freely alternate on the surface.

Nonetheless it might at first seem reasonable to assume that some kind of rule applies to change deep structure III's into II's causing the old II's to become chômeurs. Otherwise one would be claiming that the occurrences of barua in (19) and (20) bear totally different grammatical relations to the verb in deep structure.

(19) Mwalimu---a----li-----andika barua.
teacher--s.m.--tns.---write letter.
'The teacher wrote a letter.'

(20) Mwalimu----a----li----w----andikia-------wazee
teacher--s.m.--tns.--o.m.--write-applied-parents
'The teacher wrote the parents a letter.'
barua.
letter

Assuming grammatical relations to be semantically based, this would be a very strange claim.

Let us look at some more examples to determine what the constraints are on which NP's may be passivized and also of what exact significance is the notion "indirect object" for Swahili. It is important to remember that there is no a priori reason why the relation of indirect object in Swahili should be identical to that in English and other languages. This is the crunch. What functions syntactically as a single category of indirect object in English does not seem to do so in Swahili.

Consider the sentences in (21) through (23).

(21) Mwalimu---a----li----ni----onyesha kitabu.
teacher--s.m.-tns.---me----show book
'The teacher showed me a book.'

(22) Ni----li----onyeshwa kitabu na mwalimu
I----tns.---show-pas. book by teacher
'I was shown a book by the teacher.'

(23) *kitabu----ki----li----ni----onyeshwa na mwalimu
book------s.m.--tns.--me----show-pas. by teacher
'The book was shown to me by the teacher.'

As we saw before in (16) through (18), only the NP traditionally called the indirect object can be passivized when there is also a direct object present. Besides the relational grammar approach, one possible explanation is that only animate NP's can be passivized. But consider what happens in sentences (24) to (26) where both object NP's are animate:

(24) Mfalme a----li----wa---pa maaskari mtumwa
king s.m.---tns.--o.m.-give soldiers slave.
'The King gave the soldiers a slave.'

(25) Maaskari wa----li----pewa mtumwa na mfalme
soldiers s.m.---tns.-give-pas. slave by king
'The soldiers were given a slave by the king.'

(26) *Mtumwa a---li-----pewa maaskari na mfalme.
slave s.m.-tns.-give-pas. soldiers by king.
'The slave was given to soldiers by the king.'

In sentence (24) maaskari triggers the presence of the object agreement marker wa in the verb. Maaskari has been acceptably passivized in (25) and the ungrammatical (26) demonstrates that mtumwa, 'slave', cannot be passivized, even though it is an animate NP. (26) is fine on the reading 'soldiers were given to the slave by the king' where slave has been topicalized, but this reading comes from a source other than that of (25). I will call NP's such as maaskari in (24) to (26) which express the notion of being the recipient of some action 'donatives'. They are similar to to-datives in English.

Another type of indirect object is the benefactive, which expresses the idea that an action is performed for the NP in question. This was illustrated in (16) and (17) and can also be seen in (27).

(27) Mwalimu a----li---ni--onyeshea Ali kitabu.
teacher s.m.-tns.--me--show appl. Ali book
'The teacher showed Ali a book for me.'

In (27), the only passivizable NP is the benefactive ni meaning 'for me'. This is shown in (28).

(28) Ni--li---onyeshewa Ali kitabu na mwalimu
I--tns.--show--pas. Ali book by teacher
'For me was shown to Ali a book by the teacher.'

Passivization of either Ali, the donative, or kitabu, the direct object, results in an ungrammatical sentence. This is shown in (29) and (30).

(29) *Ali ni---li---onyeshewa kitabu na mwalimu
Ali I---tns.--show--p.a. book by teacher
'Ali was shown the book for me by the teacher.'

(30) *Kitabu ki----li---ni---onyeshewa Ali na mwalimu.
book s.m.--tns.--me--show--p.a. Ali by teacher.
'The book was shown to Ali for me by the teacher.'

Consider another set of examples:

(31) Juma---a-----li---wa-----pelea wazee mtoto mbwa.
Juma--s.m.--tns.--o.m.-give-appl. parents child dog.
'Juma gave the dog to the child for the parents.'

(32) Wazee wa----li---pel---ewa mtoto mbwa na Juma.
parents s.m.--tns.--give--p.a. child dog by Juma
'For the parents was given the dog to the child by Juma.'

(33) *Mtoto---a---li----pel---ewa wazee mbwa na Juma
Child--s.m.-tns.--give--p.a. parents dog by Juma
'The child was given a dog for the parents by Juma.'

(34) *Mbwa-----a----li---pel---ewa wazee mtoto na Juma.
the dog-s.m.-tns.--give--p.a. parents child by Juma.
'The dog was given to the child for the parents by Juma.'

As these sentences show, when the benefactive, donative, and direct object co-occur, only the benefactive may be passivized. This cannot be due to the animacy of the benefactive, since all three NP's in question are animate.

Now let us consider a third type of object NP which is illustrated in (35).

(35) Mtoto a----li---m-----kimbilia mama wake.
Child s.m.-tns.--o.m.--run mother his.
'The child ran towards his mother.'

(36) Mama----a----li---kimbiliwa na mtoto.
Mother-s.m.-tns.--run--p.a. by child
'The mother was run towards by the child.'

Mama in (35) is an example of a directional object, and it is passivizable, as shown in (36). It is the object in whose direction a particular action is performed.

(37) illustrates the situation where there is both a direct and a directional object.

(37) Yule mchawi---a--li----wa----tup---ia watoto
the wizard--s.m.-tns.--o.m.--throw-appl.children
'The wizard threw a rock at the children.'
majabali
rock.

Watoto is the directional object and it triggers the object agreement marker wa in the verb. In this sentence, only the directional object is passivizable. Majabali, the direct object, is not. This is shown in (38) and (39).

(38) Watoto----wa----li------tupiwa--majabali na yule
children-s.m.--tns.--throw-p.a.-rock by the
'The children were thrown a rock at by the wizard.'
mchawi.
wizard

(39) *Majabali-ya---li----tup-iwa---watoto na yule mchawi.
rock----s.m.-tns.--throw-p.a.-children by the wizard
'A rock was thrown at the children by the wizard.'

Again, to demonstrate that this situation is not merely the result of the animacy distinction, consider sentences (40) to (42), which have two inanimate object NP's.

(40) Mtu---a-----li----tup----ia mlango jiwe
Man--s.m.--tns.--throw-appl. door stone
'A man threw a stone at the door.'

(41) Mlango---u----li---tup---iwa jiwa na mtu.
door---s.m.--tns.-throw-p.a. stone by man
'A door was thrown a stone at by a man.'

(42) *Jiwe li----li---tup---iwa mlango na mtu.
stone s.m.--tns.-throw--p.a. door by man
'A stone was thrown at a door by a man.'

As (41) and (42) show, only the directional object can be passivized when it co-occurs with a direct object.

Further examples are given in (43) to (45).

(43) Mtu----a----li----m----tup-ia paka panya.
Man--s.m.--tns.-o.m.-throw-appl. cat mouse
'The man threw a mouse to the cat.'

(44) Paka a----li---tup-iwa panya na mtu.
cat s.m.-tns.-throw-p.a. mouse by man
'The cat was thrown a mouse by the man.'

(45) *Panya a----li----tupiwa paka na mtu.
mouse s.m.-tns.-throw-p.a. cat by man
'A mouse was thrown to the cat by the man.'

In these sentences with two inanimate NP's, again only the directional object is passivizable.

4. The passivization hierarchy

We have looked at four different types of objects: direct, donative, benefactive, and directional. The latter three have in common the fact that they may generally be expressed by the applied form, although this is not apparent in all the examples, since when there are two or more indirect-type objects, only one may be expressed by the applied.

It is possible to form a hierarchy of what is passivizable in Swahili as shown in (46).

(46) benefactive

{donative
directional

direct object

When two or more NP's are present in a sentence, the NP highest on the hierarchy takes precedence for the purposes of passivization. The donative and the directional are grouped together on the hierarchy because they seem to be mutually exclusive. It is

pragmatically impossible to perform an action such that its recipient and its directional goal refer to different things. The benefactive and the directional can co-occur, but in this case, the benefactive, which is the NP higher up on the hierarchy, takes the applied form. The directional shows up as the object of the preposition kwa. In this position the directional cannot be passivized.

5. Conclusion.

What these facts make clear is that the benefactive, donative, and directional are semantically and syntactically distinct categories and that for at least the purposes of passivization, they cannot be lumped together in a single category of "indirect object."

One could try to save the relational grammar approach by positing a rather abstract rule or rules which would convert the different "indirect objects" to II's in surface structure, but this runs into problems. The sole motivation for positing this type of rule is the desire to maintain the universal claim that only II's passivize. Also, in order to determine which NP this type of rule would apply to in sentences with more than one object NP, it would still be necessary to refer to the hierarchy. It seems much more reasonable to assume that what passivization itself applies to is determined by the hierarchy.

A task for further research will be to see if there is any substantive semantic or pragmatic basis for this hierarchy, other than the animacy distinction, which is not significant in all cases.

Footnotes

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[1]Abbreviations:

s.m.	subject marker
o.m.	object marker
tns.	tense
pas.	passive
appl.	applied form
p.a.	passive applied
v.d.a.	verb denoting action

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