

PARATAXIS IN LANGO*

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Lango regularly employs a syntactic construction involving the juxtaposition of two clauses within the same sentence without any marker of subordination or coordination specifying the relation between them. This construction is referred to as the (asyndetic) paratactic construction. In this paper, we examine both the syntactic properties of this construction and its semantic properties, showing how the two interrelate. In the final section we discuss the synchronic and diachronic relation between parataxis and serialization.

1. Introduction

Lango, a Western Nilotic language, regularly employs a syntactic construction which involves the juxtaposition of two clauses within the same sentence without any marker of subordination or coordination specifying the relation between the two clauses. We will refer to this construction as the *paratactic construction* (technically, *asyndetic parataxis*). Paratactic constructions seem to occur in all languages, but what is unusual in the case of Lango is the frequency of parataxis, its special features (versus other sorts of juxtaposition), and the manner in which the paratactic construction is integrated into the system of syntactic oppositions.

Below are some examples of parataxis (NB: the tonal and segmental forms given throughout represent careful pronunciation; predictable phonetic features are not in general specified in our notation):

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complementation

- (1) *dákó òdìò ìcò òpyètò kál*
 woman 3s-pressed man 3s-winnowed millet
 the woman pressed the man, he winnowed millet
 'the woman forced the man to winnow millet'
- (2) *àtín ònèná àjéḡḡé ì kór òt*
 child 3s-saw-ls ls-lean-reflex ì on side house
 the child saw me, I leaned against the house
 'the child saw me lean against the house'
- (3) *lócà òpòyò òcègò dógólá*
 man 3s-remembered 3s-closed door
 the man remembered it, he closed the door
 'the man remembered to close the door'
- (4) *nákó òcàkò òdèpò lèmón*
 girls 3s-began 3s-gathered orange
 the girl began it, she gathered oranges
 'the girl began to gather oranges'

directional

- (5) *lócà òyitò gòt òlòbò dákó*
 man 3s-climbed mountain 3s-followed woman
 the man climbed the mountain, he followed the woman
 'the man climbed the mountain toward the woman'

causative

- (6) *àték àcámó ríḡò*
 ls-strong ls-eat meat
 I am strong, I eat meat
 'I'm strong because I eat meat'

consequential

- (7) *àtíyó tìc àtíé ì cènnè*
 ls-work work ls-be+present at money
 I work, I have money
 'I work so I have money'
- (8) *tìccì tèk ólḡ*
 work-this hard 3s-tire-ls
 this work is hard, it tires me
 'this hard work tires me'

circumstantial

- (9) áðòk cên ànwóné pácò
 1s-go+back back 1s-found-3s home
 I went back, I found him home
 'when I went back, I found him home'

simultaneous events

- (10) dákkò ònwòṅò myéíó wéró myéíó wéró
 woman 3s-found 3s-dances 3s-sings 3s-dances 3s-sings
 the woman danced, she sang, she danced, she sang
 'the woman danced and sang'

evaluative

- (11) én òm'á dèk òrémá
 she 3s-gave-1s stew 3s-be+insufficient-1s
 she gave me stew, it is insufficient for me
 'she didn't give me enough stew'

In this paper, we will discuss the morphological, syntactic, and semantic characteristics of parataxis in Lango. We will try to relate the distribution of paratactic constructions to the general meaning of parataxis in Lango.¹ In the last section we will briefly compare parataxis and verb serialization.²

¹We are assuming that syntactic constructions, like the words that constitute them, can be assigned meaning in the sense that they make a regular contribution to the meaning of the sentences which contain them.

²In addition to those listed above, there is another important occurrence of parataxis in Lango, namely the "consecutive events" construction with *té* :
consecutive events

- (a) án àcámò dèk àté màttò tábà
 I 1s-ate stew 1s-and+then drink-infin tobacco
 I ate stew, and then I smoked
 'I ate stew and then I smoked'
- (b) téd r'ṅò àté càmmò
 cook-imper meat 1s-and+then eat-infin
 cook the meat, and then I'll eat it
 'cook the meat and then I'll eat it'

2. General Characteristics of Paratactic Construction

In this section, we will discuss some general characteristics of paratactic constructions. In particular, we will show that paratactic constructions are single sentences consisting of two (or more) syntactically independent though parallel clauses forming a single phonological unit. The second clause cannot have an overt nominal subject and no marker of subordination or coordination links the two clauses.

The phonological status of paratactic constructions as single sentences is shown first of all by the fact that paratactic constructions form intonational units like simple sentences and not like compound sentences. In the case of true conjoined sentences, e.g. those conjoined with *éńtú* 'but, as for', there is a pause before the conjunction and each conjunct exhibits a left-to-right falling intonation contour. Paratactic constructions, like simple sentences, exhibit a single left-to-right falling intonation contour with no characteristic pause at the clause boundary. In this way, paratactic constructions differ from other sorts of juxtaposed clauses in Lango and other languages, where the intonation pattern reveals a division into two clauses. The English juxtaposed construction

(12) it's not cheap, it's expensive

exhibits this pattern, while

(13) go tell your brother to come in

is the English counterpart of the Lango paratactic construction. Downdrift as well as downstep phenomena in Lango operate in the normal way across clause boundaries in paratactic constructions. For example, the word *dákó* 'woman' conditions downstep on any high tone following it, as in:

(14) *dákó* ¹*kédó* *àkèddí* 'the woman braids grass'
 woman 3s-braid grass

dákó also conditions downstep across clause boundaries in parataxis:

This construction has a number of peculiarities, mostly centering around the defective verb *té* 'and then', so that some of the generalizations about parataxis in Lango presented below will not apply straightforwardly to this construction. The verb *té* is discussed more thoroughly in Noonan [1980].

- (15) àtín ònwòṅò díó dáko 'tédde dèk
 child 3s-found 3s-press woman 3s-cook+for-3s stew
 the child used to press the woman, she used to cook stew for him
 'the child used to force the woman to cook stew for him'

Similarly, other rules of external sandhi such as those converting /k/ to [x] and /t/ to [ɕ] (a voiceless tap) operate across clause boundaries in parataxis, so that the word final /k/ of gwók 'dog' in

- (16) àwíṅò gwók ògwèò
 1s-heard dog 3s-bark
 I heard the dog, it barked
 'I heard the dog bark'

is pronounced [x], whereas in sentence final position as in

- (16') àwíṅò gwók 'I heard the dog'

it is pronounced as a velar stop.

Each clause in the paratactic construction contains a fully inflected verb so that each clause could stand by itself as an independent sentence, as indicated by the glosses provided for (1) through (11) above. The verbs need not agree in aspect.³ Each clause may be independently negative.⁴ On-

³For example in

- (a) àwíṅò dáko àjwàttò lóca
 1s-hear-perf woman 1s-hit-prog man
 I heard the woman, she was hitting the man
 'I heard the woman hitting the man'

the first verb àwíṅò 'I heard' is perfective, while àjwàttò 'I was hitting' is in the progressive aspect. The Lango verb codes three aspectual categories: progressive, habitual, and perfective. Tense distinctions are not made directly in the verb, but can be indicated (optionally) by various auxiliary verbs. These auxiliaries may occur in either clause. ònwòṅò 'he/she found it, it is found' indicates secondary past with perfective aspect, past tense with habitual and progressive:

- (b) àmákò ícò ònwòṅò àkwàllò gwèṅò
 1s-caught-perf man aux 3s-steal-prog chicken
 I caught the man, he was stealing the chicken
 'I caught the man when he was stealing the chicken'

⁴For example, the second clause below may occur with or without negation:

ly the first verb in the series can have an overt nominal subject; any verbs following the first are inflected for subject agreement but have as their subject some referent that is either subject or object of the first clause in the series.⁵ In the case of sentences like

- (17) *lócà òdìò àtín òkwànò búk*
 man 3s-pressed child 3s-read book
 the man pressed the child, he read the book
 'the man forced the child to read the book'

the noun *àtín* 'child' is notionally the direct object of the first verb *òdìò* 'pressed' and the subject of the second verb *òkwànò* 'read', but syntactically, it functions only as the object of *òdìò*. There is one simple demonstration of the syntactic status of *àtín* in (17). When *àtín* is pronominalized, the verb *òdìò* is inflected for third person singular object, as in

- (18) *lócà òdìé òkwànò búk*
 man 3s-pressed-3s 3s-read book
 the man pressed him he read the book
 'the man forced him to read the book'

-
- (a) *jò òbínó òrém*
 people 3p-came 3p-be+insufficient
 people came, they are insufficient
 'not enough people came'
- (b) *jò òbínó pé òrém*
 people 3p-came neg 3p-be+insufficient
 people came, they are not insufficient
 'enough people came'

Negation of the first clause does not negate the entire construction:

- (c) *pé àték àmátó kòṅò*
 neg 1s-strong 1s-drink beer
 I'm not strong, I drink beer
 'Because I drink beer, I'm not strong'

Negation will be discussed further below.

⁵The "consecutive events" construction with *té* is exceptional in that it can have a subject for the second clause that is not identical to an argument in the first, but this subject can only have pronominal reference in the second clause, i.e. it cannot be expressed as an overt noun unless it appears also in the first clause.

Pronominalized direct objects in Lango appear as object affixes as in (18), but pronominalized subjects can either be non-overt, appearing only as inflections on the verb, or can appear as a subject pronoun accompanied by the subject agreement inflection. If *àtín* in (17) is pronominalized by either of the techniques available for subjects, the result is ungrammatical:

(19) *lócà òdìò òkwànò búk 'the man forced him to read the book'⁶

(20) *lócà òdìò én òkwànò búk 'the man forced him to read the book'

It might be maintained, however, that (18) is simply some sort of phonological reduction of (20). There are good semantic reasons why this could not be the case given the respective functions of *én* and the paratactic construction, as will become evident in what follows, but an additional problem with this analysis involves the tone on the second verb. When a third person singular verb in Lango has an overt pronominal subject, as in

(21) én òkwànò búk 'he read the book'
he 3s-read book

the verb in the perfective assumes the relative clause tonal pattern of low-high-low, the same as we find in the relative construction in

(22) lócà òkwànò búk 'the man who read the book'
man 3s-read book

When the verb has no overt subject or when the subject is a noun, the tonal pattern in the perfective is low-low-low, as in

(23) òkwànò búk 'he read the book'

(24) lócà òkwànò búk 'the man read the book'⁷

⁶Sentence (19) is grammatical with the reading 'the man forced it to read the book'.

⁷The construction utilizing the subject pronoun *én* most likely arose via a cleft construction. This would accord with its use in modern Lango since, like clefted constituents, *én* is typically only used when the argument it represents is focused or in contrast.

This tone alternation is a grammatically conditioned feature and is not a matter of tone sandhi. If (18) did in fact arise through phonological reduction of some construction like (20), where *én* was the subject of *òkwàndò*, then we would expect the second verb in (18) to have the relative tone. This relative tone can occur in subordinate clauses when the pronoun *én* is subject, as in

- (25) *àtámò ní 'én òmátò kòṅò*
 1s-though comp he 3s-drank beer
 'I thought that he drank beer'

We do not find relative tone on *òkwàndò* in (18), even as an option.

Another indication of the syntactic status of paratactic constructions comes from a comparison of paratactic complements with hypotactic complements. A hypotactic complement is a subordinate clause, whereas a paratactic complement is not. With hypotactic complements, both indicative and subjunctive, a verb inflected for third person must have a prefix indicating whether the subject of the subordinate clause is the same or different from the subject of the main clause. In the third person singular perfective, the prefix indicating same subject (non-switch reference) is *è-*, and the prefix indicating different subject (switch reference) is *ò-*:

- (26) *rwót òpòyò ní ècégò dógólá* (non-switch reference)
 king 3s-remembered comp 3s-closed door
 'the king₁ remembered that he₁ closed the door'

- (27) *rwót òpòyò ní òcégò dógólá* (switch reference)
 'the king remembered that he/she closed the door'

In (26), the subject of *ècégò* must be interpreted as *rwót* 'king', while in (27) the subject of *òcégò* must be interpreted as being someone other than the king. This opposition is available only in subordinate clauses. Since the switch reference prefix *ò-* is phonologically identical to the ordinary main clause third person singular perfective prefix *ò-*, (28) is a possible sentence,

- (28) *òcégò dógólá* 'he/she closed the door'

whereas (29) is not.

(29) *ècégò dógólá

The non-switch reference è- is possible only in subordinate clauses and is not available in adjacent sentences in discourse or in paratactic constructions. So, the paratactic construction

(30) rwót òpòyò òcégò dógólá
king 3s-remembered 3s-closed door
the king remembered it, he closed the door
'the king remembered to close the door'

does not have a counterpart in

(31) *rwót òpòyò ècégò dógólá

even though the subjects of both verbs in (30) are taken to be coreferential, which in the case of a true subordinate clause would require the non-switch reference prefix è- , as in (26).

We can sum up the characteristic features of paratactic constructions so far as follows:

1. The two clauses form a phonological unit like simple sentences and unlike conjoined clauses.
2. Each clause contains a fully inflected verb.
3. The verbs need not agree in aspect (there is no tense marking on the verbs per se; auxiliaries may occur on either clause).
4. Each verb may be independently negated.
5. Only the first verb in the series has an overt subject NP.
6. Hypotactic switch reference morphology is not available to the second clause.
7. No overt marker of coordination or subordination links the clauses.

3. Semantics of Parataxis

Having considered some aspects of the syntax of parataxis, it remains now to consider its semantic aspects and to try to relate the syntax to the semantics.

Sentences (1) through (11) are a representative sample of the sort of semantic relations that can be coded with the paratactic construction in Lango. It might seem on first inspection, given the diversity of the sample, that any sort of relation between two propositions can be coded paratactically.

This is, in fact, not the case. The relationships that can be expressed by means of parataxis include only those that are compatible with a separate assertion of each of the juxtaposed clauses, where, moreover, both clauses must be taken as true, a situation which resembles that of ordinary conjunction with 'and'. The exact nature of the relationship between the two clauses is inferred from the set of relationships compatible with the meaning of the construction on the basis of real world knowledge. In this way, more than one interpretation of a paratactic construction is often possible. For instance,

- (32) àryék pé àmátó kòṅò I'm wise, I don't drink beer
 ls-wise neg ls-drink beer

can be interpreted as either

- (33) 'I'm wise because I don't drink beer'

or

- (34) 'I'm wise therefore I don't drink beer'

In cases of real ambiguity, a more exact meaning can be specified by resorting to a non-paratactic construction, so that the meaning of (33) can be rendered by

- (35) àryék pì éṅ pé àmátó kòṅò
 ls-wise because+of it neg ls-drink beer
 'I'm wise because I don't drink beer'

The characterization of the semantics of parataxis given above makes certain predictions about non-occurring interpretations of paratactic constructions. A few of these will be mentioned here:

(i) Because each of the clauses is asserted to be true, paratactic constructions cannot receive a conditional interpretation. Therefore the sentence

- (36) òṅèné òmìé búk he saw him, he gave him the book
 3s-saw-3s 3s-gave-3s book

can be interpreted as

- (37) 'he saw him give him the book'

or

(38) 'when he saw him, he gave him the book'

but not as

(39) *'if he saw him, he gave him the book'

The reason, of course, is that in the conditional interpretation neither clause is asserted to be true.

(ii) Similarly, paratactic constructions cannot be interpreted disjunctively, because this interpretation would require that one of the clauses be interpreted as not true. For instance, the paratactic construction

(40) *dákwò òtèdò rìṅó òmyèṅò kwàn*
 woman 3s-cooked meat 3s-stirred millet-meal
 the woman cooked meat, she stirred millet-meal

can only mean

(41) 'the woman cooked meat and millet-meal'

and cannot be interpreted disjunctively as

(42) *'the woman cooked meat or millet-meal'

(iii) A paratactic construction consists of a pair of assertions united within a single sentence and in this way resembles clauses conjoined by 'and' in English. Such clauses are normally arranged in a linear order that accords with their order in real time, so that

(43) Zeke got sick and he died

is acceptable, but

(44) *Zeke died and he got sick

is not. Conjoined clauses may also describe simultaneous actions as in

(45) He ate, and he drank

A similar situation holds in parataxis. Where the two clauses represent events, their order will correspond to real time order or be interpreted as being roughly simultaneous. In this way,

- (46) áń àdók pàcò pé ànwónò gínnóró
 I ls-go+back home neg ls-found anything
 I went back home, I didn't find anything
 'after I went back home, I didn't find anything'

can't be interpreted as 'when I didn't find anything, I went back home' since that would require that the event coded by the second clause be interpreted as occurring before that of the first clause.

(iv) As complements, the second, complement-like clause of a paratactic construction is a member of a system of oppositions that includes a hypotactic indicative, a subjunctive, and an infinitive (in Noonan and Bavin [ms] we have a more detailed discussion of this). The indicative is used with complements with independent time reference, the subjunctive and infinitive with clauses with determined time reference, the infinitive being further specified for equi-subject conditions; it is not marked for subject agreement. The paratactic complement only occurs in semantic environments where both the clause containing the complement taking predicate and the complement clause itself can be interpreted as separate assertions. This contrasts with the situation in hypotaxis, which affects all the other complement-types in Lango, where there is a single assertion involving both the complement taking predicate and the complement, allowing the complement taking predicate to act as a sort of semantic filter qualifying the interpretation of the complement.

The system of oppositions in complementation involving the paratactic construction will be illustrated briefly. First, the paratactic complement and the hypotactic indicative complement:

paratactic complement

- (47) àtín ònènò lóca ònàpò pàlà
 child 3s-saw man 3s-blunted knife
 the child saw the man, he blunted the knife
 'the child saw the man blunt the knife'
- (48) pákó òpòyò òdìnò kál
 girl 3s-remembered 3s-threshed millet
 the girl remembered it, she threshed millet
 'the girl remembered to thresh millet'

hypotactic indicative complement

- (49) àtín ònènò ní lóca òr̀à̀r̀ò pàlà
 child 3s-remembered comp man 3s-blunted knife
 'the child remembered that the man blunted the knife'
- (50) pákó òpòyò ní èdínò kál
 girl 3s-remembered comp 3s-threshed millet
 'the girl remembered that she threshed millet'
- (51) rwót b́f́nó tàm̀m̀ò ní lóca òd̀ò̀k
 king 3s-fut think comp man 3s-went+back
 'the king will think that the man went back'
- (52) àpé àyé ní òkéìò òcàmò réc
 1s-neg 1s-believe comp Okello 3s-ate fish
 'I don't believe that Okello ate the fish'

The paratactic and hypotactic indicative complements share indicative verb morphology, differentiating both from subjunctive and infinitive complements. As mentioned above, (hypotactic) indicative complements are used where the complement has independent time reference vis-à-vis the matrix clause and where the entire sentence constitutes a single assertion. Example (51) provides an illustration of a case where the time reference of the complement taking predicate and the complement differ. Examples (49-52) also constitute single assertions: the interpretation of the complement predication as true or false follows from the meaning of the complement taking predicate, so that the complements in (49-50) are interpreted as true, while those in (51-52) are interpreted as false. That is, the logical status of the complement is provided by the matrix predicate. In parataxis, there are limitations in time reference possibilities (cf. (iii) above), and both clauses must constitute assertions regardless of the meaning of the first predicate. The logical status of the second clause is not in any way qualified by the first. If poy- 'remember' is negated in (48), the meaning is not the negation of the English gloss, 'the girl didn't remember to thresh millet', since the only interpretation possible with this gloss is that the girl didn't thresh the millet. In parataxis each clause is a separate assertion, so negating the first clause cannot affect the truth value of the second. In fact, the nega-

tion of the first clause in (48)

- (48') *nákó pé òpòyò òdìnò kál
 girl neg 3s-remembered 3s-threshed millet
 the girl didn't remember it, she threshed millet

results in a semantically anomalous sentence because it makes no sense to assert that the girl didn't remember something but did it anyway. Notice that the negation of (50)

- (50') nákó pé òpòyò ní èdínò kál 'the girl didn't remember that she
 threshed millet'

is not semantically anomalous.

Both subjunctive and infinitive complements have determined time reference, which is to say that the time reference of such complements follows from the meaning of the matrix predicate. For example, in

- (53) ámìttò lókkò tìc 'I want to change jobs'
 1s-want change-infin work
 (54) ámìttò ní 'lók tìc 'I want him to change jobs'
 1s-want comp 3s-change-subj work

both in the infinitive complement in (53) and the subjunctive in (54), the time reference of the complement must be future relative to the matrix. The infinitive only occurs where its implied subject is the same as the matrix subject. Neither subjunctive nor infinitive is marked morphologically for tense or aspect.

The subjunctive contrasts with the paratactic complement with a few predicates. For example, with *dì-* 'press',

- (55) rwót òdìá ní àkón bùr
 king 3s-pressed-1s comp 1s-dig-subj hole
 'the king pressed me to dig a hole'
 (56) rwót òdìá àkónò bùr
 king 3s-pressed-1s 1s-dug hole
 the king pressed me, I dug a hole
 'the king forced me to dig a hole'

the subjunctive (55) receives a "non-realized" interpretation, hence the gloss

with 'press', while the paratactic complement (56) has a "realized" interpretation, so 'force' is used in the gloss. The realized interpretation in (56) results, of course, from the fact that the second clause is separately asserted.

In sum, the difference between hypotaxis and parataxis can be diagrammed as in (57):

- (57) *hypotaxis*
 complement taking predicate [complement]
 └──┘
 assertion
- parataxis*
 complement taking predicate [complement]
 └──────────────────┘ └──────────┘
 assertion assertion

Those complement structures whose interpretation is not compatible with an assertion of both clauses do not occur with paratactic complements. For example, complements to desiderative predicates like *mìttò* 'want' are not coded paratactically since the second clause cannot be taken to be a realized event. The same situation holds for predicates of fearing. Utterance predicates like *kòbbò* 'say' also do not take paratactic complements since the use of these predicates does not imply an assertion of the complement, as in

- (58) Roscoe said that the Earth is flat

Such complements, except when the matrix verb is present and the subject of the matrix is first person singular, are reports of assertions, not assertions themselves. Complements to commentative predicates (factives) are similarly not assertions, though they are taken to be true. Their status as discourse backgrounded material is incompatible with the function of the paratactic construction to display two connected assertions. Further, modal predicates like *twèèrò* 'be able' and *myèèrò* 'be necessary' cannot occur as complement taking predicates with paratactic complements because, like desideratives, their complements do not represent realized events and cannot in themselves constitute assertions.

Paratactic complements do occur in the following environments, all of which are compatible with an interpretation of each clause as an assertion:

(a) Complements to immediate perception predicates:

In the sentence

- (59) ànéno lóca òmàkò gwèno
 ls-saw man 3s-caught chicken
 I saw the man, he caught the chicken
 'I saw the man catch the chicken'

both the first and second clauses ((60a) and (60b) respectively)

- (60) a. ànéno lóca 'I saw the man'
 (60) b. òmàkò gwèno 'he caught the chicken'

can be uttered as separate assertions without damage to the immediate perception sense of the whole since both the act of perception and the thing perceived must be real events in order for the sentence as a whole to be true.

(b) Complements to positive propositional attitude predicates when used assertively:

Positive propositional attitude predicates, especially with a first person singular subject and the verb in the habitual aspect, can be used both to make an assertion about the speaker's belief and to make an assertion about the content of the complement clause. In Lango, this difference is made manifest in the use of the hypotactic indicative complement when making an assertion about speaker belief and the paratactic complement when asserting the content of the complement proposition. So the sentence

- (61) àtámó ní 'rwótwa ràc 'I believe that our king is bad'
 ls-believe comp king-our bad

using the hypotactic indicative with its complementizer ní, involves making an assertion about belief. The corresponding paratactic construction, however, asserts that I believe something, but at the same time it asserts the content of the complement proposition.

- (62) àtámó rwótwa ràc I think of our king, he is bad
 ls-think king-our bad 'I believe our king is bad'

The difference between the two constructions is brought to sharp relief when they are negated. The hypotactic construction (61) can be negated with no contradiction as (63)

- (63) pé àtámó ní 'rwótwá ràc
 neg 1s-believe comp king-our bad
 'I don't believe that our king is bad'

since it is belief that is being asserted. In the case of the paratactic construction, where both belief and the badness of the king are being asserted, its negation

- (64) *pé àtámó rwótwá ràc

produces an unacceptable sentence since it is semantically anomalous to assert that you have no thoughts about the king and then assert that the king is bad. Sentences with propositional attitude predicates containing paratactic complements have a great deal in common with sentences in other languages containing parenthetical uses of these predicates [Noonan 1981].

(c) Complements to positive achievement predicates (implicatives):

Achievement predicates like pòyò 'remember' also take paratactic complements as in

- (65) lóca òpòyò òlwèrò módó
 man 3s-remembered 3s-cleared compound
 the man remembered it, he cleared the compound
 'the man remembered to clear the compound'

since an interpretation of the whole is compatible with the assertion of the two component clauses. Here again, negation of the first clause produces an anomalous sentence

- (66) *pé lóca òpòyò òlwèrò módó
 neg man 3s-remembered 3s-cleared compound

since it makes no sense to assert that the man forgot something and then to assert that he did it.

(d) Complements to causative predicates:

When paratactic constructions occur as complements to causative predicates, the complements are always implied to be realized events, as in

- (67) dáko òdìò àtín òjòbò kál
 woman 3s-pressed child 3s-scooped+up millet

the woman pressed the child, she scooped up millet
 'the woman forced the child to scoop up millet'

since both clauses are individually asserted. When the complement is not taken to be a realized event, another complement-type, the subjunctive, must be used:

(68) dákó òdìò àtín ní 'jób kál
 woman 3s-pressed child comp 3s-scoop+up-subj millet
 'the woman pressed the child to scoop up millet'

(e) Complements to phasal predicates:

Phasal predicates like càkkò 'begin' take paratactic complements because they too are compatible with an interpretation where each clause is an assertion:

(69) nákó òcàkò òtèdò dèk
 girl 3s-began 3s-cooked stew
 the girl began it, she cooked the stew
 'the girl began to cook the stew'

In the course of this section, we have referred on a couple of occasions to the similarity of the paratactic construction to clauses conjoined with 'and' in English. We mentioned, for example, that in both constructions certain temporal relations between the clauses are normally observed. A further similarity lies in the sort of logical relations that may be inferred to hold between the clauses. For example, the relation of cause and consequence can be found in parataxis, e.g. (6-8), and in clauses conjoined with 'and', as in (70) she took arsenic and (in consequence) fell ill⁸

As Dik [1968:266] points out, the semantic value of 'and' as a conjoiner of clauses is only that the clauses "should be taken as combined in some way". The exact nature of the relation between the clauses is left to inference, which, as we have indicated above, is the same for clauses in parataxis.

Lango has no word that functions like English 'and'.⁹ In fact, conjunc-

⁸See Dik [1968:265-267] for a detailed discussion of the semantics of this and similar sentences.

⁹Driberg [1923] gives ka as the Lango translation of 'and', but in our

tions per se are notably rare in the language. 'And then' is translated by the *té* construction (fn. 2): *té* is a verb, and its clause is linked paratactically with the preceding clause. 'Or' is translated by *òpò*, which is the third singular perfective of *po-* 'be possible'. 'But' is translated by *éntó*, which consists of *én*, the third singular pronoun, and *tó*, which appears to be related to *té* [Noonan 1980]. Only *ká* 'if' seems to be an unambiguous conjunction.

The 'and' relation in Lango is served by parataxis, which like 'and' in English, functions only to indicate that clauses are to be taken as combined, without indicating anything further about their semantic relationship. Note, however, that not all clauses conjoinable with 'and' in English may be linked paratactically in Lango. For example, in parataxis the subject of the second clause must be an argument of the first. This constraint, which amounts to a "topic-link" requirement, greatly limits the range of parataxis vis-à-vis 'and'. The indication of cohesion between sentences not topic-linked in this way is handled by a set of particles, e.g. *dòŋ*, whose significance is not yet fully understood.

In sum, the semantic force of parataxis in Lango is the asyndetic conjunction of two topic-linked assertions. The semantic relation between the clauses is inferred from real world knowledge, allowing for a variety of interpretations all of which must be consistent with the two assertion aspect of the construction.

4. Parataxis and Verb Serialization

In this paper we have discussed syntactic and semantic aspects of parataxis in Lango and have tried to show ways in which the uses of the construction are predictable from its meaning. One issue remains to be discussed, namely the relation of parataxis to the related construction known as verb serializa-

data (as well as Driberg's own texts) the form only occurs with the third singular pronoun *én* as *ékká* 'then'. This form never occurs alone as a conjunction, but instead optionally accompanies the *té* construction (see fn. 2). There is no coordinate conjunction for nouns, which are linked instead with *ì* 'with'.

though only the first may be an overt NP. With serials, there is only one grammatical subject, whatever the semantic subject of the following verbs may be, as in the following Akan example [Schachter 1974:258]:

- (74) mede aburow migu msum
 ls-take corn ls-flow water-in
 'I pour corn into the water'

Clearly aburow 'corn' is the semantic subject of 'flow', yet the verb takes first person concord. Obligatory subject agreement does not occur in paratactic constructions (cf. (2), (56)).

The syntactic differences noted above correlate with a crucial semantic difference, namely that paratactic constructions contain two assertions while serial constructions contain just one. Independent aspect marking and negation would seem a necessary consequence of a clause that constitutes a separate assertion, as would a lack of obligatory subject agreement. Note also that the "one assertion" aspect of serialization leads to the possibility of verb compounding [Lord 1975, 1977] where two verbs in a serial construction constitute a lexical unit. The two assertion aspect of parataxis would preclude such a possibility.

It should be noted that Lango does have serial constructions as defined above. Serial constructions are used, for example, to express comparative and ingressive senses:

Comparative

- (75) àcwé àlís rwót 'I'm fatter than the king'
 ls-fat ls-exceed king
 (76) dákó 'dwón lís ìcò 'the woman is bigger than the man'
 woman 3s-big 3s-exceed man

Ingressive

- (77) òwót òyép cèm 'let's go and look for food'
 lp-go-subj lp-look+for-subj food
 (78) án àwótò àlóbò dákó 'I followed the woman'
 I ls-went ls-followed woman

In the comparative and ingressive, there is obligatory subject agreement, obligatory aspect agreement, and only one negative possible whose scope is

the entire sentence. If (75) is negated,

(79) pé àcwé àlís rwót 'I'm not fatter than the king'
neg ls-fat ls-exceed king

we cannot infer that 'I'm not fat' or that 'I exceed the king' in anything, inferences that would be possible with a two assertion paratactic construction. The negative in (79) has the entire sentence, not just the first clause, within its scope.

Having now examined the differences between parataxis and serialization in Lango, and presumably elsewhere, we can now speculate on a possible diachronic relation between the two. We would like to suggest parataxis as a possible source for serialization.¹³ Serial constructions could develop by reanalysis of paratactic constructions, especially where the *syntactic* constraints on serialization match, or nearly match, the *pragmatic* requirements of certain constructions.

In the case of the comparative and ingressive, we find a match of this sort. In these constructions, the subject of both clauses will necessarily be the same, as will the aspect marking on both predicates. Independent negation, hardly possible given the sense of the ingressive, is not likely with the comparative. And the semantic effect of one versus two assertions is minimal in these cases. Reanalysis as serial would just syntacticize the pragmatic status quo. The only obvious syntactic consequence would be the placement of the negative -- from

(80) àcwé pé àlís rwót

when the construction is paratactic, to

(81) pé àcwé àlís rwót

following reanalysis.

In other cases, the syntactic requirements of serialization will be met,

¹³Serial constructions could also develop from "consecutive" constructions as suggested by Hyman [1971]. Paratactic and consecutive constructions have a number of similarities (see Noonan [forthcoming]). The Lango translations of Hyman's consecutive are the paratactic and *té* constructions.

if not as consistently, at least regularly. For instance, the causative paratactic construction¹⁴

- (82) màc òmìò òbòkè òtwò
 fire 3s-gave leaf 3s-dried
 the fire gave it to the leaf (= did something to the leaf), it dried
 'the fire dried the leaf'

meets the syntactic specifications for a serial as would quite likely the majority of instances of causative parataxis. Reanalysis would leave the overall semantic complexity of these sentences virtually unchanged, so that (82) as a serial could carry basically the same information as before. Such constructions are potential candidates for reanalysis.

Reanalysis from paratactic to serial will most likely occur where one of the verbs assumes a regular role in a construction so that it can be given a sentence functional interpretation. By this, we mean direct object marker, indirect object marker, marker of comparative, marker of aspect, etc. In Lango, ɪɔ- 'exceed' (and its synonym kat-) have assumed the role of marker of comparative, and wot- 'go', when followed by another finite verb, serves to reinforce perfective aspect, though it retains a motional sense as well. Its omission, however, in the ingressive construction would not significantly affect the meaning of the sentence. Lango lacks the 'take' construction, found frequently in West African serializing languages and used there to mark direct objects and instruments, as a causative marker, among other functions. Because of its widespread use and its ability to take on sentence functional

¹⁴Causative constructions like (82) can be shown to be paratactic in the following way. First, the second clause may be independently negated,

- (a) màc òmìò òbòkè pé òtwò
 fire 3s-gave leaf neg 3s-dried
 the fire did something to the leaf, it didn't dry
 'the fire didn't dry the leaf'

and it may have a different subject than the first:

- (b) lóca òmíá àwótò
 man 3s-gave-1s 1s-went
 the man did something to me, I went

interpretations, this verb is a fine candidate for reanalysis. Perhaps the frequent use of serialization in some West African languages has gone hand-in-hand with the frequent use of the 'take' construction. Lango lacks any verb in parataxis or serialization with the generality of the 'take' construction. The various words for 'take' in Lango play no special role in parataxis or serialization. 'Give', another frequent participant in serial constructions across languages, does have a regular role in a paratactic construction in Lango. But *mty-* 'give' does not mark indirect objects in Lango, unlike similar verbs in West African serializing languages, and it has a regular role only in the causative construction, which has not been reanalyzed as serial (see fn. 14). It may be that the lack of a 'take' construction or something similar is an important factor in the predominance of parataxis over serialization in Lango.

In this section, we have contrasted the syntactic and semantic aspects of parataxis and serialization. We have suggested that at least some instances of serialization could arise via reanalysis of a paratactic construction. We have also indicated that certain paratactic constructions are more likely to undergo such reanalysis.

Further, if the first clause in (82) is negated,

(c) pé màc òmìò òbòkè òtwò

the resulting sentence is somewhat anomalous since pragmatically it makes no sense to assert that the fire did nothing to the leaf, and it dried anyway. But the important point is that the scope of the negative in (c) does not extend to the second clause since that clause constitutes a separate assertion. This characteristic differentiates paratactic constructions from serials, as well as constructions involving hypotaxis like

(d) lóca pé òdiá ní àwót
man neg 3s-pressed comp ls-go-subj

'the man didn't press/force me to go'

where the negative has the whole sentence within its scope.

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