PARATAXIS IN LANGO*

Michael Noonan
State University of New York at Buffalo

Edith Bavin
University of Oregon

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):

*This paper was originally presented at the Tenth Annual Conference on African Linguistics, University of Illinois, Urbana, April 1979. We would like to thank the anonymous reviewer for helpful criticism and above all our primary Lango informants, Mary Okello and Florence Monday.
complementation

(1) dákó òdÌÌÓ ló òpyètò ká!
woman 3s-pressed man 3s-winnowed millet
the woman pressed the man , he winnowed millet
'the woman forced the man to winnow millet'

(2) àtÌÌÓ Ònènà âjèrèrè ì kùr òt
child 3s-saw-ls 1s-lean-reflex on side house
the child saw me, I leaned against the house
'the child saw me lean against the house'

(3) lóçà òpòyoò òçègò dògbò ló
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 lèmò
girls 3s-began 3s-gathered orange
the girl began it, she gathered oranges
'the girl began to gather oranges'

directional

(5) lóçà òyòlò ògùt ó 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 àcàmò rènò
1s-strong 1s-eat meat
I am strong, I eat meat
'I'm strong because I eat meat'

consequential

(7) àtíyò tlc àtíè 1 cènnè
1s-work work 1s-be+present at money
I work, I have money
'I work so I have money'

(8) tlcìlc òèk ólé
work-this hard 3s-tire-1s
this work is hard, it tires me
'this hard work tires me'
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. In the last section we will briefly compare parataxis and verb serialization.

---

1 We 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.

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

### Consecutive Events

(a) án aćamò dëk àtè màttò tába
   I ls-ate stew ls-and+then drink-infin tobacco
   I ate stew, and then I smoked
   'I ate stew and then I smoked'

(b) téd rńo àtè càmmò
    cook-imper meat ls-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 entó '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 1kédó  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 tē 'and then', so that some of the generalizations about parataxis in Lango presented below will not apply straightforwardly to this construction. The verb tē is discussed more thoroughly in Noonan [1980].
(15) àtìn ọnwonọ dló dákó 'tédé dèk
cchild 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 [ç] (a voiceless tap) operate across clause boundaries in parataxis, so that the word final /k/ of gwók 'dog' in

(16) àwínọ gwók ògwèdò
ls-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') àwínọ 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. Each clause may be independently negative.

³For example in

(a) àwínọ dákó àjwàttò lócà
ls-hear-perf woman ls-hit-prog man
I heard the woman, she was hitting the man
'I heard the woman hitting the man'

the first verb àwínọ '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. ọnwonọ 'he/she found it, it is found' indicates secondary past with perfective aspect, past tense with habitual and progressive:

(b) àmákò lócọ ọnwonọ àkwàllò gwènò
ls-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. In the case of sentences like

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

(18) lócá odiè òkwáñò bùk
    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 ìbíìò orém
    people 3p-came 3p-be+insufficient
    people came, they are insufficient
    'not enough people came'

(b) jò ìbíìò pé orém
    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 àtëk àmáti kò́nò
    neg ls-strong ls-drink beer
    I'm not strong, I drink beer
    'Because I drink beer, I'm not strong'

Negation will be discussed further below.

The "consecutive events" construction with tè 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) *lòcà òdìò ôkwànò bùk 'the man forced him to read the book'
(20) *lòcà òdìò èn ôkwànò bùk '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 èn 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) èn ôkwànò bùk 'he read the 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) lòcà ôkwànò bùk 'the man who read the 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) ôkwànò bùk 'he read the book'
(24) lòcà ôkwànò bùk 'the man read the book'

---

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

7 The construction utilizing the subject pronoun èn most likely arose via a cleft construction. This would accord with its use in modern Lango since, like clefted constituents, èn 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 ókwànnò, 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 àmáto kòŋò
1s-though comp he 3s-drunk beer
'I thought that he drank beer'

We do not find relative tone on ókwànnò 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 ècègò dógólá (non-switch reference)
    king 3s-remembered comp 3s-closed door
    'the king i remembered that he closed the door'

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

In (26), the subject of ècègò must be interpreted as rwót 'king', while in (27) the subject of òcègò 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 è-, (28) is a possible sentence,

(28) òcègò dógólá
    'he/she closed the door'

whereas (29) is not.
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) rwôt ëpôyo ëcêgô ëdôgôla
  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) *rwôt ëpôyo ëcêgô ëdôgôla

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,

\[(32) \quad \text{arye}k \; \text{pe} \; \text{amato} \; \text{kono} \quad \text{I'm wise, I don't drink beer} \]

\[ls\text{-wise neg } ls\text{-drink beer} \]

can be interpreted as either

\[(33) \quad 'I'm wise because I don't drink beer' \]

or

\[(34) \quad 'I'm wise therefore I don't drink beer' \]

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

\[(35) \quad \text{arye}k \; p\dot{\imath} \; \text{en pe} \; \text{amato} \; \text{kono} \quad \text{ls-wise because+of it neg } ls\text{-drink beer} \]

\[I'm \text{ wise because I don't drink beer} \]

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

\[(36) \quad \text{onene} \; \text{omile} \; \text{buk} \quad \text{he saw him, he gave him the book} \]

\[3s\text{-saw-3s } 3s\text{-gave-3s book} \]

can be interpreted as

\[(37) \quad 'he saw him give him the book' \]
(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) dákó òtèdò rìŋò òmyènò 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) án 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 lócà ònà̀nò 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) nákó òpòyò ôdinò kál
girl 3s-remembered 3s-threshed millet
the girl remembered it, she threshed millet
'the girl remembered to thresh millet'
h hypotactic indicative complement

(49) ̀at̀ìn ̀onnò ̀nì ̀lóćà ̀onnò ̀paḷà
child 3s-remembered comp man 3s-blunted knife
'the child remembered that the man blunted the knife'

(50) ̀nàkò ̀opòyò ̀nì ̀èdìnò ̀kál
girl 3s-remembered comp 3s-threshed millet
'the girl remembered that she threshed millet'

(51) ̀rwòt bìnò ̀tàmòò ̀nì ̀lóćà ̀ôdò̀k
king 3s-fut think comp man 3s-went\+back
'the king will think that the man went back'

(52) ̀àpè ̀àyè ̀nì ̀ôkèlò ̀ôcàmò ̀rôc
ls-neg ls-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)

\[(48') \text{*pákó pé ḍọyọ̀ ṣẹ́dínọ̀ ká!} \]

\[ \text{girl neg 3s-remembered 3s-threshed millet} \]

the girl didn't remember it, she threshed millet

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

\[(50') \text{pákó pé ḍọyọ̀ ní ṣẹ́dínọ̀ ká!} \]

\[ \text{the girl didn't remember that she} \]

\[ \text{threshed millet'} \]

is not semantically anomalous.

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

\[(53) \text{ámíttò lòkkò tlc} \]

\[ \text{ls-want change-infin work} \]

\[(54) \text{ámíttò ní 'lòk tlc} \]

\[ \text{ls-want comp 3s-change-subj work} \]

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 ḏi- 'press',

\[(55) \text{rwót òdíá ní àkóp bùr} \]

\[ \text{king 3s-pressed-ls comp ls-dig-subj hole} \]

'the king pressed me to dig a hole'

\[(56) \text{rwót òdíá àkópò bùr} \]

\[ \text{king 3s-pressed-ls ls-dug hole} \]

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 mittò '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, there 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

\[(59) \text{ànènò lòcà òmàkò gwènò} \]
\[ls\text{-saw man 3s-caught chicken} \]
'I saw the man, he caught the chicken

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

\[(60) \text{a.ànènò lòcà} \]
\'[I saw the man']

\[(60) \text{b.òmàkò gwènò} \]
'he caught the chicken'

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

(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

\[(61) \text{àtámó ní 'rwótwá ràc} \]
\[ls\text{-believe comp king-our bad} \]
'I believe that our king is 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.

\[(62) \text{àtámó 'rwótwá ràc} \]
\[ls\text{-think king-our bad} \]
'I think of our king, he is 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 'rwótwa 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 rwótwa 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) lòcà ôpòyò ôlwèrò mòdò  
    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 lòcà ôpòyò ôlwèrò mòdò  
    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) dákó ôdíô àtín ôjòbò 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 òdlò ètín 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 òcàkkò ďtèddò 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 conjoinder 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 \textit{tē} construction (fn. 2): \textit{tē} is a verb, and its clause is linked paratactically with the preceding clause. 'Or' is translated by \textit{ōpō}, which is the third singular perfective of \textit{po} - 'be possible'. 'But' is translated by \textit{ēntō}, which consists of \textit{ēn}, the third singular pronoun, and \textit{tō}, which appears to be related to \textit{tē} [Noonan 1980]. Only \textit{kā} '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. \textit{dōŋ}, 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 serialization.
Serial verb construction have much in common with paratactic constructions. The constructions share the following characteristics:

1. Both consist of a subject NP followed by a series of verb phrases.
2. Each verb phrase contains a fully inflected verb.
3. No overt marker of subordination or coordination links the two verb phrases.

In addition, there are many similarities in the semantic ranges of the constructions. Both, for instance, may be used in causative, consequential, and directional constructions, among others. Below are some examples of Nupe serialization [George 1976:63-64]:

\[(71) \text{Tsoda bici lo dzukó} \quad \text{cf. (5)}\]
\[
\begin{align*}
&\text{Tsoda ran} \\
&\text{went market} \\
&\text{'Tsoda ran to the market'}
\end{align*}
\]

\[(72) \text{yigdī lā egō wo} \quad \text{cf. (6)}\]
\[
\begin{align*}
&\text{sun} \\
&\text{took grass dry} \\
&\text{'the sun caused the grass to dry'}
\end{align*}
\]

\[(73) \text{Tsoda gī jè áfunīn} \quad \text{cf. (7-8)}\]
\[
\begin{align*}
&\text{Tsoda ate food full} \\
&\text{'Tsoda ate and he is full'}
\end{align*}
\]

But the similarity ends there. The verbs in serial constructions have obligatory agreement in tense-aspect,\(^{11}\) whereas paratactic constructions do not. Further, each clause may be independently negated in parataxis, whereas with serials only one negative is allowable and has the entire construction within its scope.\(^{12}\) In parataxis, each verb may have a different subject,

---

\(^{10}\)For discussion of serial constructions in African languages, see Stahlke [1970], and Welmers [1973].

\(^{11}\)Exceptions have been noted by Bambose [1974:27], though it remains to be seen whether the example he cites from Izi is really serial. Since the distinction between serial and paratactic constructions has not previously been made, it's possible that at least some examples described in the literature as serial may turn out to be paratactic.

\(^{12}\)See Stahlke [1974:274].
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) ãcwé àló rwöt
    ls-fat  ls-exceed king

'I'm fatter than the king'

(76) dákó 'dwón  ló  lçó
    woman  3s-big  3s-exceed man

'the woman is bigger than the man'

**Ingressive**

(77) òwöt ôyên  cêm
    lp-go-subj lp-look+for-subj food

'let's go and look for food'

(78) án òwôtò àlóbò  dákó
    I  ls-went  ls-followed woman

'I followed the 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) \( \neg \text{pe} \ \text{aci} \ \text{al5} \ \text{rw6t} \) 'I'm not fatter than the king'

neg 1s-fat 1s-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. 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) \( \text{aci} \ \text{pe} \ \text{al5} \ \text{rw6t} \)

when the construction is paratactic, to

(81) \( \text{pe} \ \text{aci} \ \text{al5} \ \text{rw6t} \)

following reanalysis.

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

\[13\] Serial 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 \( \text{te} \) constructions.
if not as consistently, at least regularly. For instance, the causative para-
tactic construction:\footnote{Causative constructions like (82) can be shown to be paratactic in the following way. First, the second clause may be independently negated,}

\begin{verbatim}
(82) mac omlo obokè otwò
    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'
\end{verbatim}

meets the syntactic specifications for a serial as would quite likely the ma-

\begin{verbatim}
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,
\textit{lo-} 'exceed' (and its synonym \textit{kat-}) have assumed the role of marker of
comparative, and \textit{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 af-
flect the meaning of the sentence. Lango lacks the 'take' construction, found
frequently in West African serializing languages and used there to mark di-
rect objects and instruments, as a causative marker, among other functions.
Because of its widespread use and its ability to take on sentence functional

\begin{verbatim}
and it may have a different subject than the first:
\end{verbatim}

\begin{verbatim}
(b) loca omia awotò
    man 3s-gave-Is ls-went

    the man did something to me, I went
\end{verbatim}
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 my '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 omIò obòkè 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) lócà pé òdlà ní òwòt
   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.
REFERENCES


