

SERIAL VERBS IN TRANSITION

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1. Introduction¹

Serial verb constructions are widespread in the Kwa languages of West Africa. Often these constructions are relatable to two independent sentences, but in the serial construction the verb phrases necessarily refer to sub-parts or aspects of a single overall event. Consider an example in Ewe (from Ansre [1966b]):

- (1) é nò tsí²
'He drank water.'
- (2) é kú
'He died.'
- (3) é nò tsí éyē wò kú
'He drank water, and he died.'
- (4) é nò tsí kú
He drank water died
'He drowned.'

If (1) and (2) occur in a coordinate construction, as in (3), a close contextual relationship between the two verb phrases is not necessarily implied. However, when the two verb phrases occur in a serial construction, as in (4) they represent components of a single event, in this case a drowning.

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Tones are marked as follows, except where unmarked in my sources: ' high, ` low, - mid, ˋ lowered mid, ˊ downstepped high.

Often the meaning of a verb in a serial construction can be identified in terms of case relationship and can be translated with a preposition in English. E.g., in Igbo *jì* expresses Instrumental relationship (from Welmers and Welmers [1968]).

- (5) ó jì ńmá à bèé ánụ
 he have knife this cut meat
 'He cut the meat with this knife.'

In Twi *má* expresses Dative and Benefactive relationship (from Christaller [1881]):

- (6) ɔ yɛ adwuma má me
 he does work give me
 'He works for me.'

Other case-type concepts often expressed by serial constructions include Locative, Manner, Comitative, Accusative, Direction and Comparison.

Linguists do not agree on a synchronic derivation for such constructions. Stahlke [1970] notes that serial verb constructions can be differentiated syntactically and semantically from coordinate structures, and that verbs in serial constructions must agree in tense, aspect, mood and polarity. He considers the possibility that verbs in series are case markers, but his data and interpretations do not support this as a synchronic analysis.

Bamgboṣe [1972] differentiates between two types of serial verbal construction: a linking type which can be derived from two or more underlying sentences, and a modifying type which can only be derived from a single underlying sentence. In the second type, the modifying verb does not have the full range of verbal characteristics, and it merely modifies the meaning of the main verb.

Awobuluyi [1973] challenges the category of modifying verbs for Yoruba. He notes that, in comparing a verb occurring as the only verb in a sentence with the same verb in a serial construction, the primary difference may be in the English translation. He suggests that most of the so-called modifying verbs are better analyzed as

plain verbs, adverbs, prepositions or components of 'splitting verbs'.

In a language like Yoruba today, there are a variety of complicated serial-type constructions. Although prepositions are rare in these languages, they do exist. So do constructions for which the choice between verb in series and preposition (or adverb) is not clear. I would like to consider how the language may have arrived at its present situation. Although written records for these languages do not go back very far in time, we can make inferences about earlier forms based on a comparison of structures in related languages, guided by our knowledge of linguistic universals.

First, I will consider the evidence for Locative prepositions having evolved from Locative verbs in serial constructions. Then I will consider the possibility that a Comitative verb is a historical source for Comitative, Instrumental and Manner prepositions, as well as conjunctions and adverbs.

2. Verbs in series becoming prepositional case-markers: Locatives as evidence.

Locative prepositions in Kwa are often homophonous with locative verbs, verbs of possession, and incompletive aspect markers. Evidence suggests that this homophony is not accidental, and that locative prepositions have developed historically from verbs in serial constructions.

2.1. Locative verb and verbid/preposition in Ewe, Twi and Gã. Ewe has a locative verb, *lè* 'be at', as in:

- (7) *agbalẽa le kpɔ̃a dzi*
 book-the be-at table-the top
 'The book is on the table.'

The same word occurs in a serial-like construction as in:

- (8) *me fle agbalẽ le keta*
 I buy book be-at Keta
 'I bought a book in Keta.'

- (9) me kpɔ lɔri le mɔ dzi
I see lorry be-at street top.

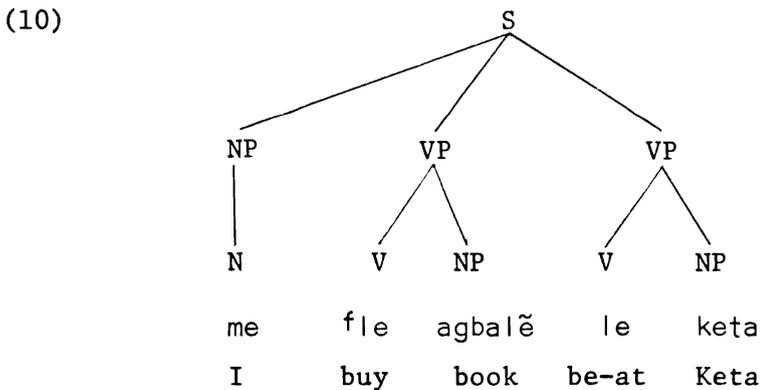
Ansre [1966a] distinguishes (8) and (9) from regular serial verb constructions. He says that $l\acute{e}$ in sentences like (8) and (9) combines with the following nominal group to form an adverbial group. This $l\acute{e}$ does not inflect; it has a homophone which is a verb, to which it may be historically related. Ansre identifies four other Ewe words with parallel characteristics (they all have preposition-like translations in English) and gives them the name verbid.

Each of Ansre's verbid is similar in meaning to its homophonous verb. Both verbs and verbid take object pronouns, and each verbid takes the same range of object words as its corresponding verb does. $l\acute{e}$ can occur in the frame ${}_S[NP_NP]_S$ like a verb. When $l\acute{e}$ occurs in the frame ${}_S[NP\ VP_NP]_S$, it does not inflect, and it does not carry the main message of the sentence as a main verb does; this $l\acute{e}$ and its noun phrase object form a phrase which adverbially modifies the main verb. Such semantic and syntactic differences have been represented elsewhere by the grammatical terms verb and preposition. Why does Ansre coin the term verbid instead of using preposition? Ansre doesn't discuss this, but I assume that he wishes to recognize the verbal quality of $l\acute{e}$ (at least in historical origin) while acknowledging that the $l\acute{e}$ -NP phrase in (8) and (9) is differentiated from a verb phrase syntactically.

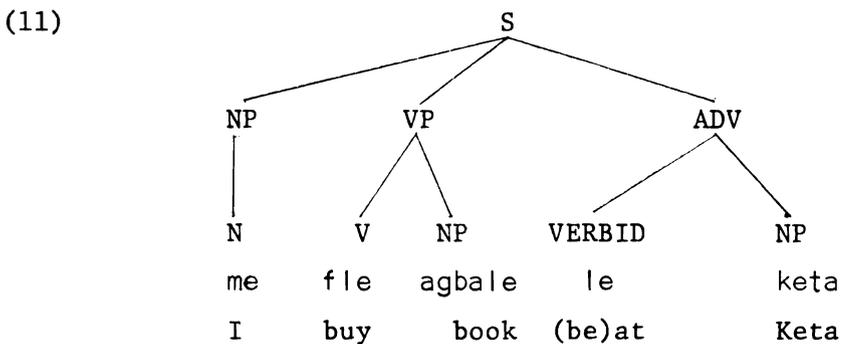
Note that an option open to Ansre is to call $l\acute{e}$ a verb in sentences like (8) and (9) as well as (7), and to attribute its semantic and syntactic restrictions in the frame ${}_S[NP\ VP_NP]_S$ to its occurrence in this particular environment. From Ansre's choice of verbid rather than verb, we can infer that he regards the differences between the $l\acute{e}$ -NP phrase in (7) as opposed to (8) and (9) as due to grammatical category differences.

Ansre does not explicitly identify verbid as a grammatical category. He provides no trees or labeled bracketings for either type of sentence.

But I infer from his discussion that, for sentences like (8) and (9), a surface structure like (10) is rejected:



in favor of something like:



The label preposition would serve just as well as verbid in (11); but the use of the label verbid serves to acknowledge that the category is related to the category verb. As described by Westermann [1930a, p. 129], "Many verbs when they stand next to others play the part of English prepositions, adverbs, or conjunctions. Now many of these verbs, in playing the part of prepositions, etc., begin to lose their verbal characteristics in that they are no longer conjugated: they thus begin to become form words."

Twi has a locative verb *wɔ* which is semantically comparable to Ewe *lɛ* E.g.,

- (12) ɔ wɔ mamfẽ
 he be-at Mamfe
 'He is at Mamfe.'

- (13) ɔ wɔ ɔdan mu
 he be-at house inside
 'He is in the house.'

(where mu is a noun, as is dzi in (7)). Like Ewe *lè* in (8) and (9), this verb also occurs in the frame:

- (14) $S[NP VP_NP]_S$

as in:

- (15) me hũũ no wɔ mamfẽ
 I saw him be-at Mamfe
 'I saw him at Mamfe.'

- (16) ɔ yɛ adwuma wɔ ɔdan mu
 he do work be-at house inside
 'He is working in the house.'

Ordinarily, Twi verbs in frame (14) show a range of verb-like characteristics--i.e., they are conjugated for tense and aspect, take pronominal prefixes, and take negative prefixes. However, *wɔ* is one of a very limited number of verbs (Christaller lists three) that "have so far stripped off their verbal character and have become mere particles, as they do not assume any prefixes, not even the pronominal prefix *me*, nor the negative prefix, except when they are used, not as prepositional auxiliary verbs or particles, but as principal verbs" (Christaller [1875, p. 76]).

The Twi locative situation parallels Ewe; to the extent that *lè* as a verbid in frame (14) can be distinguished from *lè* as a main verb, the same distinction applies to *wɔ*. For *wɔ* and the other Twi verbs which have lost their verbal character, a verbid or prepositional phrase configuration like (11) reflects the extent to which they have drifted from the serial pattern of other verbs.

Like Ewe and Twi, Gã has a Locative preposition homophonous with a Locative verb, e.g.,

(17) tètè yè ʃíà
 Tete be-at house
 'Tete is at home.'

(18) tètè bàánhé wòlò yè òsú
 Tete FUT-buy book be-at Osu
 'Tete will buy a book at Osu.'

Ordinarily, in a serial construction both verbs take the same tense-aspect and negation markers; but the preposition yè does not, as seen in (18). But even when yè occurs as the only verb in a sentence, as in (17), it appears to be missing some verb capabilities. It doesn't take the usual range of tense-aspect and negation markers; to express these meanings, other verbs are used. It may be that yè was formerly fully verbal and is now going through a transition stage to a solely prepositional identity.

In Ewe, Twi and Gã, the evidence for historical relationship between the locative verb and the locative verbid/preposition is fairly substantial (identical phonological shape and identical sets of co-occurring object noun phrases). In two related languages, Yoruba and Igbo, there are locative words which are quite clearly prepositional, but the relationship between these prepositions and verbs is not firmly established. I would like to discuss evidence for such a relationship and suggest that Yoruba and Igbo represent later stages of the process that Ewe, Twi and Gã are in now.

2.2. Locative preposition in Yoruba and Igbo. In Yoruba, ní is a preposition-like word that takes a noun phrase object and is often translatable as 'in' or 'at'. E.g.,

(19) ó ṣè īṣé ní īlè
 he do work at house
 'He worked at home.'

(20) ó wà ní ìbàdǎ
 he be at Ibadan
 'He is at Ibadan.'

The particle *ní* does not occur as a locative main verb. In serial-like constructions like (19) and (20), it doesn't conjugate for tense or aspect, and it doesn't negate. Transitive true verbs take a third person pronoun object in the form of a repeated stem vowel on a predictable tone, but Locative *ní* doesn't. Verbs can undergo a form of focus-placement transformation, but locative *ní* can't. Thus, in (21) *mú* and *wá* are both verbs and can be fronted in *mímúwá*; however in (22) *ṣē* is a verb but *ní* is not, and there is no analogous **ṣíṣēní*.

(21) *mō mú iwè wá Tlé* ==> *mímúwá nī mō mú iwé wá Tlé*
 I take book come house
 'I brought a book home.'

(22) *mō ṣē íṣé ní ōkō* ==> **ṣíṣēní nī mō ṣē íṣé ní ōkō*
 I do work at farm
 'I worked at the farm.'

Locative *ní* is clearly not a verb. But *ní* does occur as a main verb meaning 'have', 'possess', 'be at', as in:

(23) *ó ní ōwó*
 he have money
 'He has money.'

To the English speaker, the locative preposition *at* and the verb *have* don't appear to have much in common. However, a number of languages do show parallel forms for location and possession. Twi, for example, uses the verb *wɔ* for both location and possession:³

(24) *mewɔ ɔdan no mu*
 I-be-at house the inside
 I am in the house.

(25) *mewɔ ɔdan bi*
 I-possess house a
 'I have a house.'

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This relationship is discussed in detail in Ellis and Boadi [1969].

- (26) ɔdan yi wɔ me
 house this be-at me
 'This house belongs to me.'

In Gã, the locative verb *yè* also indicates possession, as in:

- (17) tètè yè ʃíá
 Tete be-at house
 'Tete is at home.'

can also be glossed as 'Tete has a house.' And in Ewe the Locative verb *lè* occurs in an idiom expressing possession, as in:

- (27) agbalẽ le asinye
 book be-at hand-my
 'I have a book.'

This use of parallel forms for location and possession is by no means limited to Kwa languages. Other instances include the verb *van* in Hungarian, the suffix *lla* in Finnish, *ag* in Irish and *u* in Russian.⁴ This parallel is too widespread to be coincidence; a historical relationship is suggested. Lyons [1967] claims that in many and perhaps all languages existential and possessive constructions derive (both synchronically and diachronically) from locatives. Other studies strongly support a universal relationship between location and possession.⁵

The data from the related languages Ewe, Gã and Twi, plus strong evidence for a universal linguistic relationship, then, suggests

⁴Data from Edith Moravcsik, Helen Martucci and Michael Noonan, personal communication.

⁵Lyons [1967] suggests that, where locatives and possessives are distinct, the development has arisen based on syntactic differences corresponding to animate and inanimate nouns. He discusses the relationship further in Lyons [1968] and gives examples. Data from thirty-five languages in Clark [1970] support the locative-possessive relationship and relate the parameters of animacy, definiteness and word order. The relationship is explored further in Anderson [1971], who notes that studies have pointed out the comparative recent-ness of have-type constructions in various Indo-European languages, and the existence of earlier 'possessive' constructions more obviously parallel to 'ordinary' locative clauses.

that the homophony between the Yoruba locative preposition and verb of possession reflects a historical relationship. Both have probably developed from an earlier locative verb form, reconstructed ní 'be at.'

One of the few words in Igbo that can be called prepositions is ná, translatable as 'at', 'on', 'in', 'to', as in:

- (28) ó bì ná ́ká⁶
'He lives at Awka.'

The verb root 'possess' in Igbo is unfortunately ́wé, not ná, and the closest locative verb is nò. There is, however, a verb ná meaning 'take' or 'receive,' which is semantically not too distant from 'have.' There is also an incompletive aspect marker ná, as in:

- (29) ́ ná èrí hí ná ànyú ́mànyá
he INC eat food, INC drink wine
'He is eating and drinking.'

Welmers (in press) makes a good case for relating this aspect marker historically to a locative verb reconstructed ná 'be at'. The semantic relationship can be seen if we think of (29) as meaning something like 'He is at eating and drinking'. Compare this with the a prefix in the archaic English he went a-hunting which comes from the Old English locative on (Robert Stockwell, personal communication).

Parallel to Igbo incompletive marker ná in (29) is the Yoruba incompletive marker hí, which is probably similarly related to the Yoruba locative ní. Homophonous forms for location, possession and incompletive aspect occur also in Ewe;⁷ compare lè in (7), (27) and (30):

⁶The vowel in ná is deleted when the following word begins with a vowel. Before consonants its tone is low.

⁷Evidence for the development of auxiliaries from verbs is not uncommon in Kwa languages, so the similarity of verb and aspect marker should not surprise us. Stahlke [1970] shows auxiliaries just beginning to be differentiated from verbs in series in Yatye--e.g., aga as principal verb means 'wander', but in a serial construction is a Habitual auxiliary.

- (30) mele agbalě xlem
 I-INC book reading
 'I am reading a book'. ('I am at book-reading')

Homophonous forms for location, possession and incompleting action are also found in unrelated languages, suggesting a possible universal relationship. It occurs, for example, in Mandarin Chinese and Thai (both of which, like Kwa languages, have verbs in series). Mandarin has *zǎi* as a Locative verb and preposition and as an aspect marker. Thai has *yùu* as Locative verb and as aspect marker. (Data from Sandra Thompson and Rasami Karnchanachari, personal communication.) Irish uses *ag* for location, possession and incompleting action; Finnish has *ssa* as a locative ending and in a construction indicating incompleting action (data from Michael Noonan and Helen Martucci; personal communication).

Thus, data from related languages and evidence for a possible linguistic universal support the analysis that the Igbo preposition *ná* (as well as the incompleting aspect marker *ná*) has evolved from a locative verb.

To summarize: Locative prepositions are homophonous with Locative verbs in Ewe, Twi and Gã. The prepositions have developed historically from verbs in serial constructions. The Locative in a serial construction has lost its verb properties--it no longer takes tense-aspect and negation markers, and it no longer undergoes transformations that regularly apply to verbs--leaving us with a preposition. Yoruba and Igbo represent a later stage of a parallel historical development, where the homophonous Locative verb is no longer present.

3. From Comitative verb to preposition and beyond

Evidence suggests that, just as the Locative verb phrase has become a prepositional phrase, so has the Comitative verb phrase. Because of its Comitative semantics, this phrase has also come to be treated as part of a noun phrase, with the former Comitative verb now functioning as a subordinating conjunction. The preposition, minus its object,

also occurs as an adverb.

3.1. Comitative verb and preposition in Yoruba, Ewe, Fon and Gã.

Yoruba has a verb *kpèlú* 'be included among, be together with', as in:⁸

(31) *ìwé náà ' kpèlú àwṣ́ tí mō rà*
 book the SHT be-included-among those that I buy
 'The book is included in those that I bought'.

(32) *fémí ' kpèlú àwṣ́ òlè*
 Femi SHT be-included-among PL thief
 'Femi is one of the thieves'.

Since the verb status of *kpèlú* is not always recognized, it is worth noting that it has the following verb characteristics:⁹

- (i) A non-pronoun subject preceding it ends in a high tone, referred to here as Subject High Tone (SHT), in some constructions, as in (31) and (32).
- (ii) It is subject to the focus-placement transformation; compare (32) and (33).
- (iii) It takes tense-aspect markers, as in (34).

(33) *kpíkèlú nī fémí ' kpèlú àwṣ́ òlè*
 Femi SHT be-included-among PL thief
 'Femi is really one of the thieves'.

⁸I follow Courtenay's [1968] phonological analysis in representing Yoruba; a tone marked high is phonetically rising after low; a tone marked low is phonetically falling after high.

⁹Abraham [1958] considers *kpèlú* to be an abbreviation for *wà kpèlú* in sentences like (31). However, *kpèlú* and *wà kpèlú* are not always synonymous. Thus, (31) and (35) are not necessarily synonymous:

(35) *ìwé náà ' wà kpèlú àwṣ́ tí mō rà*
 book the SHT be with those that I buy
 'The book is with those that I bought'.

Kpèlú is a distinct verb, not derived from *wà kpèlú*

- (34) kpíkpèlú nī fémī máā kpèlú àwō̄ òlè
 Femi FUT be-included-among PL thief
 'Femi will really be one of the thieves'.

Kpèlú has other properties that parallel those of a limited set of Yoruba verbs that are apparently derived historically from verb+noun combinations:

- (i) It takes the possessive rather than the object pronoun as its semantic object.
- (ii) A mid tone precedes consonant-initial object nouns. (A common example of this set of verbs is kpārí 'finish', which is apparently derived historically from kpā 'kill' + ōrí 'head'; thus 'finish the work' is comparable to 'kill the head of the work'.) As is the case with many verbs in this set, verb and noun source components are no longer readily identifiable. Semantically comparable forms include kpé 'assemble', 'collect', 'gather'; and lù ú come into contact with it, 'mix it'; whether these are related to kpèlú or not is open to speculation.

This word kpèlú occurs in serial-like constructions where it has a Comitative meaning, as in:

- (36) mō wà níbè kpèlú ākī
 I be there with Akin
 'I was there with Akin'.

It also occurs in Instrumental and Manner contexts, as in (38) and (39):

- (37) ó gé ērā̄ kpèlú ākī
 he cut meat with Akin
 'He cut the meat with Akin'.
- (38) ó gé ērā̄ kpèlú òbē
 he cut meat with knife
 'He cut the meat with a knife'.

- (39) ó gé ērā̄ kpèlú èsò
 he cut meat with care
 'He cut the meat with care'.

Although the *kpèlú*-NP phrase can have Comitative, Instrumental or Manner meaning, confusion of meaning is unlikely, because in general a [+Concrete, +Animate] NP indicates a Comitative reading, a [+Concrete, -Animate] NP indicates an Instrumental reading, and a [-Concrete, -Animate] NP indicates a Manner reading. (Note that English also uses a single preposition, with, for Comitative, Instrumental and Manner, as illustrated by the English glosses for (37) - (39).) In a sentence with an Agentive subject, like (37), the broadening of the meaning of *kpèlú* to include Instrumental when followed by a [-Animate] NP, as in (38), is plausible. A quick check shows that within Kwa the same form is used for both Comitative and Instrument in (at least) Ewe, Gã, Fon, Twi, Igbo and Gwari; outside Kwa the same is true for Fe?fe?, Dagbani, Hausa, French, Romanian, German and Hungarian; the ease with which examples can be found suggests that this relationship is widespread in languages of the world. The further semantic extension of *kpèlú* to take abstract nouns in Manner phrases as in (39) is equally plausible; at least ten of the thirteen languages listed use the same form for Manner.¹⁰

Historically, the semantic extension of *kpèlú* may have taken this route, from Comitative to Instrument to Manner. Syntactically, *kpèlú* in a serial verb construction lost its verb properties and survived as a preposition, semantically subordinate to the principal verb.

The preposition *kpèlú* can be distinguished from the verb. When *kpèlú*-NP functions as a Comitative, Instrumental or Manner phrase, it can be fronted and questioned, unlike a verb phrase, e.g.,

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Fon data from Alapini [1969]; Gwari and Fe?fe? from Hyman [1971]; Dagbani from Wilson [1970]; Hausa from Paul Schachter, personal communication; French, Romanian and German from Georgette Silva, personal communication; Hungarian from Edith Moravcsik, personal communication.

the other verbids have related meanings as regular verbs, and since the syntactic behavior of *kplé* parallels that of the other verbids, it is possible that *kplé* was a regular verb at an earlier point in time. Paralleling Yoruba *kpèlú*, it may have meant something like 'be together with'. There are phonologically and semantically similar verbs in Ewe and related languages:

(46)	Ewe:	<i>kpé</i>	'meet', 'come in contact'
	Gã:	<i>kpè</i>	'meet', 'collide'
		<i>k̀plé</i>	'agree with'
	Fon:	<i>kple</i>	'assemble', 'bring together'
	Yoruba:	<i>kpé</i>	'assemble', 'collect'
	Igbo:	<i>kpá</i>	'collect', 'keep'
		<i>kpó</i>	'accompany', 'take along'

It is possible that some of these verbs may be ultimately related historically to Ewe *kplé* and Yoruba *kpèlú*¹¹.

Fon has a similar preposition, *kpôdô...kpan*, for Comitative, Instrumental and Manner phrases, as in:

(47) n na i kpôdô kakpô kpan ¹²
 I FUT go with Kakpo
 'I will go with Kakpo'.

(48) e hou dan kpôdô kpô kpan
 he hit snake with stick
 'He hit the snake with a stick'.

¹¹In Gã there is a 'multiple' verb form, CV ---> CVlV ---> ClV; this process may be responsible historically for the l in the Gã verb form *kplé* 'agree with', and a similar process in Ewe could conceivably have produced Ewe *kplé* from *kpé* 'meet'. It is tempting to speculate that the Fon preposition *kpôdô* (see below) could have resulted from a monosyllabic verb by a similar process, since *l* and *d* are plausible phonological correspondences.

¹²The only Fon source available to me is Alapini [1969]; the Fon examples here are as Alapini gives them, with French glosses translated. He does not mark tone; *ô* represents a vowel between [o] and [u], and *Vn* represents a nasal vowel; *ou* represents [u].

- (49) kpôdô ahi kpan
 with heart
 'with sincerity'

There appears to be no homophonous verb in Fon. Sometimes kpôdô occurs as a preposition without kpan, and under certain circumstances the kpan occurs as kpô. (Looking for possible cognates, it is interesting to note that in certain uses Ewe kplé occurs as kpákplé; and Zimmermann [1858] lists the Gã verb kpã 'bind each other', 'make a covenant'.) Since Fon is also a serializing language, and the function and properties of the preposition parallel those in Yoruba and Ewe, it is likely that this preposition too evolved from a verb in a serial construction.

Not surprisingly, Gã has a similar preposition, kè, occurring with Comitative, Instrumental and Manner noun phrases in the same serial like construction, $_S[NP VP \text{ --- } NP]_S$. Kè patterns with verbs in Gã syntactically to some extent; it takes object pronouns, and an inanimate third person singular pronoun object is realized as zero, as demonstrated by Trutenau [1973]. In fact, Trutenau argues for an analysis of kè as a verb, and Zimmermann [1858] and Dakubu [1970] call it an auxiliary verb. But kè has a number of properties that distinguish it from regular verbs. For example, it does not occur without another verb in the sentence, and it does not inflect. Also, the kè-NP phrase can occur either before or after the VP; when it occurs before the VP, the following verb never has a subject pronoun; and when kè occurs followed by a high tone verb prefix (e.g., perfect or subjunctive) it assimilates to the high tone and the prefix vowel is deleted. Kè has more idiosyncrasies, occurring in constructions where no regular verb occurs (see below). Native speaker intuitions conflict regarding verb status for kè. In a synchronic analysis kè would be a defective verb at best, and a number of special features and exceptions would be needed to account for its idiosyncrasies. Given its wide range of occurrences in the language today, we can't satisfactorily categorize kè as a verb, and such a radical extension is not motivated by other facts of the language. But kè does have many characteristics that are unmistakably verb-like,

and they provide strong evidence that its historical source was a verb.

To summarize, the Yoruba Comitative verb *kpèlú* in a serial construction lost its verb properties, functioning as a Comitative preposition with animate nouns. Later, it occurred with inanimate nouns with Instrumental meaning, and then with abstract nouns in Manner phrases. A parallel historical development probably accounts for the semantically similar prepositions Ewe *kpíé*, Fon *kpôdô* ... *kpan* and Gã *kè*, even though there are not homophonous verbs today in these languages. As case-marking prepositions without homophonous verbs, they are analogous to the Locative prepositions in Yoruba and Igbo discussed in section 2.2. above.

3.2 Comitative verb and conjunction in Yoruba, Ewe, Fon and Gã. When the preposition *kpèlú* in Yoruba precedes a Comitative (animate) NP in a transitive¹³ sentence like (37), it is preferable for the *kpèlú*-NP phrase to follow the subject and precede the verb phrase, as in:

- (50) *ó kpèlú ākī gé ērā*
 he with Akin cut meat
 He cut the meat with Akin.

In post-VP positions as in (37) the prepositional phrase is semantically and syntactically adverbial. However, it may be that, in pre-VP position as in (50) the *kpèlú*-NP phrase is part of the subject NP. Compare the placement of the Subject High Tone in (51) and (52):

- (51) **fémi ' kpèlú ākī gé ērā*
 Femi SHT with Akin cut meat
- (52) *fémī kpèlú ākī ' gé ērā*
 Femi with Akin SHT cut meat
 'Femi cut the meat with Akin'. ('Femi and Akin cut the meat').

¹³Transitive is used in the 'notional' sense of Lyons [1968], with an Agentive animate subject.

The ungrammaticality of (51) and the placement of the Subject High Tone in (52) indicates that $f\acute{e}m\bar{I} \text{ kp}\acute{e}l\acute{u} \bar{a}k\bar{I}$ is the subject, not just $f\acute{e}m\bar{I}$. The possibility of translating the subject of (52) as 'Femi and Akin' or 'Femi with Akin' suggests that the Comitative verb $\text{kp}\acute{e}l\acute{u}$ has extended its role to serve as a subordinating conjunction.

The situation is comparable in Ewe; Comitative phrases like kple akuwa 'with Akuwa' in (44) can occur before the VP, as in:

(53) $\text{kofi kple akuwa yi asime}$

Kofi with Akuwa go-to market

'Kofi went to market with Akuwa', 'Kofi and Akuwa went to market'.

In this environment $\text{kpl}\acute{e}$ is usually translated as 'and'. Ansre [1966b] differentiates between $\text{kpl}\acute{e}$ as a verbid (preposition) in an adverbial group and $\text{kpl}\acute{e}$ as an additive linker in a nominal group. This additive linker translates the English noun phrase conjunction 'and'. It appears that, paralleling Yoruba, a Comitative verb has become a conjunction. In Yoruba there is another word, $\acute{a}t\bar{I}$ 'and', which functions as a coordinating conjunction; $\text{kp}\acute{e}l\acute{u}$ is semantically subordinating, even within noun phrases. In Ewe there is no other word functioning as a coordinating conjunction, so $\text{kp}\acute{e}l\acute{u}$ has moved further than $\text{kp}\acute{e}l\acute{u}$, taking on coordinating as well as subordinating function.

I do not have sufficient data on Fon to determine whether the verb-to-conjunction development has taken place, but it is interesting to note that apparently Comitative but not Instrumental or Manner phrases can precede the VP, as in:

(54) $\text{to tche kp}\acute{o}d\acute{o} \text{ no tche kp}\acute{o} \text{ na wa}$
 male parent with female parent FUT come
 'My father and mother will come'.

It may be that post-VP $\text{kp}\acute{o}d\acute{o} \dots \text{kpan}$ is semantically adverbial, and pre-VP $\text{kp}\acute{o}d\acute{o} \dots \text{kp}\acute{o}$ is semantically conjunctive. The development in Fon appears to resemble Yoruba.

In Gã the $\text{k}\acute{e}$ -NP phrase can occur before the VP when the NP is Comitative as well as Instrumental or Manner. In a sentence with a

Comitative NP (when the subject and the object of *kè* are both animate) like (55), both adverbial and conjunctive readings are possible:

- (55) àyí kè tètè fà wónù
 Ayi with Tete drink soup
 (a) 'Ayi drank soup with Tete'.
 (b) 'Ayi and Tete drank soup'.

The ambiguity of (55) suggests that different syntactic structures underlie the (a) and (b) readings. *Kè tètè* as an adverbial phrase underlies (a), and *àyí kè tètè* as a subject noun phrase underlies (b). As in Ewe, the Comitative verb has become a conjunction joining nouns within noun phrases.

Like *kplé* in Ewe, *Gã kè* functions as a noun phrase linker. In (55) and (57), for example, the *kè*-NP phrase is not adverbial; *kè* conjoins nouns here.

- (56) tètè nà àyí kè kókó
 'Tete saw Ayi and Koko'.
 (57) kòfí kè ámá tsè dzí ówúlà ágó
 Kofi and Ama father is Mr. Ago
 'Mr. Ago is the father of (both) Kofi and Ama'.

But even within NP structures, there is evidence of the verb origins of *kè*. Thus:

(i) *Kè* is preceded by subject pronouns and is followed by object pronouns, regardless of whether the $NP[\text{pronoun } k\grave{e} \text{ pronoun}]_{NP}$ is functioning as the subject or object in the sentence.

(ii) Singular subjects take singular verbs, and plural subjects, take multiple verbs, but when two singular nouns are conjoined as subjects by *kè*, they take singular verbs (e.g., *mì tá* 'I sit', *wò trá* 'we sit,' but *mì kè lè tá* 'I and he sit'. Thus, *mì kè lè* 'I and he' is not treated like a plural noun phrase). This reflects the earlier situation when *kè*-NP was a verb phrase or adverbial phrase.

(iii) When two noun phrases occur in the associative construction, there is a prefix *à* on the second noun only when the first noun phrase

is plural. But when the first noun phrase is, say *kòfí kẹ́ áamá* as in (57), there is no prefix *à* on the second noun (in (57) it is *tsẹ́*, not *àtsẹ́*). Thus, 'Kofi and Ama' is not treated like a plural noun phrase in this construction.

(iv) Either noun in a $[N \text{ kẹ́-N}]_{NP}$ structure can be fronted in a focus-placement transformation, violating Ross's coordinate structure constraint.

Because of the historical development of *kẹ́*, it is difficult to reconcile the data on it as a conjunction and come up with an unambiguous synchronic analysis. The best approximation is probably to recognize *kẹ́-NP* as a constituent in a $[NP \text{ kẹ́-NP}]_{NP}$ structure, reflecting its origins, and to call *kẹ́* a subordinating conjunction in such a structure.

To summarize: the Comitative verb *kpẹ́lú* in Yoruba has developed conjunction-like functions. Ewe *kpélé* and Gã *kẹ́* have had analogous developments, and have taken on roles as joiners of noun phrases to an even greater extent than Yoruba *kpẹ́lú*.

3.3. Comitative verb and adverb in Yoruba and Gã. Recall that the Yoruba Comitative verb *kpẹ́lú* is glossed as 'be together with', 'be included among'. When it occurs without an object, its meaning is comparable: 'together with', 'also',:

(58) *fémí nī òrúkò mī kpẹ́lú*
 Femi FOCUS name my also
 'Femi is my name too' (as well as someone else's).

(59) *émí kpẹ́lú ɪ*
 I also go
 'I also went' (along with someone else).

Objectless *kpẹ́lú* has similar meaning when reduplicated:

(60) *kpẹ́lúkpẹ́lú n̄ kò fẹ́é ɪ*
 also I NEG wish go
 'Moreover, I do not wish to go.'

Neither verbs nor prepositions ordinarily show this behavior in Yoruba. The usages in (58) and (59) may have evolved from Comitative prepositional

phrases from which the object NP was dropped, (60) could conceivably have developed by a similar route. The result is an adverb with roughly Comitative semantics, homophonous with the Comitative verb.

Recall that in Gã with an abstract NP, *kè*-NP can be a Manner adverbial:

- (61) àyí kè hẹ́jìtswàà fà wónù
 Ayi with haste drink soup
 'Ayi hastily drank soup'.

Objectless *kè* is found in Gã sentences like:

- (62) tètè nyié kè bà
 Tete walk with come
 'Tete came on foot'.

which means something like 'Tete came by walking' or 'Tete came walking-ly'. Although *kè* has no object in (62), the semantic object is understood as equivalent to a nominalization of the preceding VP (*nyié* 'walk'). A synchronic analysis might consider this *kè* as a general Manner preposition meaning 'in the manner of'. It probably has developed historically from the Manner adverbial usage, as in (61).

Recapitulating, then: evidence suggests that Comitative verbs in serial constructions lost verb status and became prepositions, accepting a range of objects and thereby taking on Instrumental and Manner as well as Comitative semantics. The Comitative preposition later developed into a noun phrase component with conjunction-like meaning; in other contexts the preposition lost its object and became an adverbial particle.

4. Evolution of prepositions as a continuing process.

Since the Comitative, Instrumental and Manner prepositions evolved from serial verb constructions, it is not surprising that sentences with these prepositional phrases have near-paraphrases using other verbs in serial constructions. For example, a Yoruba sentence like (37), with *kpèlú* in a Comitative phrase, has the near-paraphrase (63) with the verb *bá* 'meet' in a serial construction:

- (63) ó bá ākī gé ērā
 he meet Akin cut meat
 'He cut the meat with Akin.'

Here *bá* 'meet' is a verb, not a preposition. It inflects, and it can serve as the only verb in a sentence. Also, sentences like (38) and (39), with preposition *kpèlú* in Instrumental and Manner phrases, are similar in meaning to sentences with serial verb constructions, but the verb 'take, put' is used, not *bá* 'meet.'

- (64) ó fī ðbē gé ērā
 he take knife cut meat
 'He cut the meat with a knife.'

- (65) ó fī èsò gé ērā
 he take care cut meat
 'He cut the meat with care.'

In Ewe also, sentences with *kpíé* in Instrumental and Manner phrases can be paraphrased by sentences with the fully verbal *tsó* 'take' in a serial construction. And in Gã, sentences with *kè* in Instrumental and Manner phrases are semantically similar to sentences using the verb *kó* 'take' or *ɔ̀* 'take' in serial constructions.

Hyman (1971) has described a similar situation in Feʔfeʔ, where sentences with the preposition *mà* 'with' in Comitative, Instrumental and Manner phrases have paraphrases with the verb *láh* 'take' in a consecutive verb construction. In certain environments the verb *láh* behaves idiosyncratically; Hyman suggests that it has become a grammatical morpheme, replacing *mà* historically. He notes that Igbo has no preposition 'with', and suggests that it may have had one earlier which has now been replaced by a verb evolving like *láh* in Feʔfeʔ (the Igbo verbs *wè* 'take' and *jì* 'have' express this range of meaning as verbs in series).

I have discussed the process by which Locative and Comitative/Instrumental/Manner prepositions may have evolved from verbs in serial constructions. Hyman suggests a process by which prepositions are eliminated and their semantic functions taken over by verbs. To find out

whether something like this may be happening to the prepositions discussed here, we can look at the prepositions and their verb paraphrases cited above for indications that a given paraphrasing verb is beginning to lose its verb properties, becoming 'defective'. We note that Yoruba $f\bar{i}$ 'take, put' exhibits considerable syntactic irregularity. It can not stand as the only verb in a sentence; it must occur in a serial construction with another verb or with a de-verbal preposition like $kp\grave{e}l\acute{u}$ 'with' or $s\acute{i}$ 'to' (which is comparable to the de-verbal Locative preposition $n\acute{i}$ 'at', discussed above). In some dialects it doesn't inflect. Verbs take object pronouns, but $n\acute{i}$ 'at' doesn't, and $f\bar{i}$ usually doesn't either. An unemphatic 'him/her/it' is not usually expressed after it, in contrast to regular verbs. $F\bar{i}$ 'take' looks like a likely candidate to follow the path from verb to prepositional case marker. It might be beginning the process of replacing $kp\grave{e}l\acute{u}$ for Instrumental and Manner meaning, conceivably establishing a preposition contrasting with the Comitative $kp\grave{e}l\acute{u}$.

In the case of Ewe, $kp\acute{l}\acute{e}$ has a heavy functional load--Comitative, Instrumental and Manner marker as well as conjunction--but the paraphrasing verb $ts\acute{o}$ 'take' is fully verbal and shows no sign of retiring to prepositional status. Not yet, anyway.

5. From verb to preposition in Mandarin Chinese and Thai.

In non-African languages with serial verb constructions, there is evidence that prepositions have developed from verbs. Mandarin Chinese has serial verb constructions analogous to those in Kwa. As in Kwa, they are of the form ${}_S[NP VP VP]_S$; the two verb phrases are related semantically. Certain verbs in serial constructions no longer take the full range of verb affixes, and are called co-verbs. Some co-verbs have homophonous verbs, some do not. Since written records for Mandarin do exist, it has been established that the present-day co-verbs were transitive verbs at earlier stages of the language. As Li and Thompson [1973] have argued, the Mandarin co-verbs are best viewed as prepositions which are still in the process of changing from earlier verbs.

Verbs also occur in serial constructions in Thai. For certain verbs, e.g., *hây* 'give', Warutamasintop [1973] argues that in the context $S[NP V NP \text{ --- } NP]_S$ a prepositional analysis is preferable to a verb analysis (compare the use of the verb 'give' in Twi in (6)).

It appears that this pattern of evolution from verb to preposition in serial verb constructions may represent a valid generalization about human language.

6. Conclusion.

Why do certain verbs, like Locatives, undergo this change of grammatical category? A Locative verb in a true serial construction corresponds to an aspect of the single overall event that the sentence is about (see section 1.). Because location is generally considered to be less significant than other aspects of events, in the serial construction the Locative verb phrase is not as important as the other verb phrase semantically (the meaning of the sentence is clear and the location phrase doesn't need to be fully verbal). Accordingly, it loses status syntactically; i.e., it loses its verb properties, remaining as a mere function word. And if serial verb constructions are more prevalent than prepositional phrase constructions in the language, new speakers may prefer using a semantically equivalent serial verb construction; consequently, the preposition is heard infrequently and finally disappears.

Man tends to comprehend an event in terms of its location, the means employed to bring it about, the manner in which it occurs, and the recipient or beneficiary. This is reflected in the structures man uses in communication. It is these semantic case relationships that are most likely to be expressed in serial constructions--and then, are most likely to be indicated by a new category, preposition.

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