

THE VERBAL STATUS OF THE NP-LINKER IN GĀ¹

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0. Kropp Dakubu in a recent paper on the Gā verb lists in her "extended verbal group" (among other verbal items) the "auxiliary verb...kɛ 'take, be with'" [1970:74], and explains further: "It is treated as a verb (not a particle) mainly for syntactic reasons."

1. Anyone who works on the Gā language has to account, sooner or later, for what on the surface appear to be two homophonous formatives kɛ: the one mentioned, and another which is used as a linker of NP's, from minimal constructions formed by two simple nouns, as in:

- (1) kɔfɪ kɛ əkúá ná dzù-lɔ́ lɛ²
Kofi and Akua saw thief the

or its pronominalized version:

- (2) ɛ kɛ lɛ ná lɛ
he₁ and she saw him₂³

to maximally expanded ones like:

- (3) núú-mó lɛ kɛ ɛ ná-nè-mɛ-ì ényɔ́ ní gbè mí nyè-mí lɛ ná dzù-lɔ́ lɛ
old-man the and his friends two who killed my brother/sister the
saw thief the
'The old man and his two friends who killed my brother (or sister)
saw the thief.'

¹An earlier version was presented at a Staff Seminar, Dept. of Linguistics, Univ. of Ghana. I should like to express my special gratitude to K. Ford for his useful comments. My thanks also go to one of my Gā informants, Miss M. Akita.

²In the presentation of examples (-) is used to represent morpheme-boundaries. Underlying forms are written (thus mɪɪɪ 'inside', rather than the phonetic realization [mɪɪɪ], see Trutenau [in press]), in a slight adaptation of current Gā orthography (an exception is the recent loan from English, petrol, which, if native Gā, would have required an underlying form pɛ̀tòlòó), though the transcription is phonological in orientation. Tonemarks indicate the "deep tones": (´) deep high; (˘) deep mid; (˙) deep low.

³In some glosses subscripts are used to indicate identity/nonidentity of reference.

1.1. This NP-linker *kɛ̀* is quite distinct from the true conjunction 'and', which links VP's and sentences, and the two do not overlap. As an example of the use of the conjunction, consider:

- (4) *kɔ̀fɪ yɪ ɔ́má nɪ ɔ̀tò yɪ àkúá*
 'Kofi beat Ama and Oto beat Akua.'

and compare:

- (5) *kɔ̀fɪ kɛ̀ ɔ́má yɪ àmɛ̀-hè*
 'Kofi and Ama beat each other.'

To illustrate further the superficially conjunction-like use of the NP-linker *kɛ̀*: it can be maintained that for most Ga expressions of the type X kɛ̀ Y 'X and Y' (where X and Y stand for NP's) one can form a parallel expression X lɔ̀ò Y 'X or Y' (the formative (à)lɔ̀ò, which stands between alternatives, can be glossed satisfactorily enough by 'or').⁴

In this paper we shall restrict ourselves to a discussion of these two forms *kɛ̀* which are characterized in all previous work on the Gã language as "auxiliary verb" and "conjunction" respectively, and shall try to suggest for what reasons their analysis as subclasses of the same general category "verb" may be more appropriate.

The different constructions into which *kɛ̀* enters would have to be stated on the lines of subclassification, and it must be pointed out that there are still other uses of (undoubtedly verbal) *kɛ̀*, at least one of which will occur in some of the examples to follow. This is the (serial, "dative") construction kɛ̀ X há Y (where *há* 'to give' is the main verb) meaning 'give X to Y'. Other (serial, "directional") constructions like kɛ̀ X bà Y (using *bà* 'to come' and other semantically related verbs as main verb), meaning 'come to Y with X/bring X to Y', would be similarly treated in terms of subclass membership.

Such an analysis will have a slight advantage in terms of greater overall economy of description, but a more important motivation is that it enables us to get rid of certain anomalies in pronominalization, which would otherwise be unavoidable.

⁴ Note that (in this respect quite different from *kɛ̀*) (à)lɔ̀ò is used not only for connecting NP's, but also for VP's and sentences.

1.2. Having given this brief outline of constructions involving three alternative analyses suggest themselves:

- (1) One sets up two separate forms $k\acute{e}$, one "verbal", the other "conjunctival", and claims that these are accidentally (and trivially) homophonous formatives of the language.
- (2) One sets up two separate forms $k\acute{e}$ and postulates that their homophony is not accidental, but rather reflects a common origin (diachronically) of these formatives.
- (3) One sets up one form $k\acute{e}$ which functions in the different ways outlined above. In this case an explanation would have to be required to show how the so-called "conjunctival" and "verbal" uses of it are arrived at.

Many Gã speakers feel that there is a close semantic relationship between the $k\acute{e}$ forms we are focusing on: this is reflected in the possible "unified meaning" type of gloss: 'take, join with, together with'.

If this semantic association were to be formally justifiable, our alternative (1) would turn out to provide the least insightful analysis, and alternative (3) the most highly valued hypothesis. If (3) were acceptable, the historical relationship postulated in (2) could be most plausibly incorporated into this hypothesis.

We shall try to show that a case can be made for a transformational relationship to in fact exist between the so-called "conjunctival" and the verbal appearances of one underlying formative $k\acute{e}$.

2. In order to establish such a relationship we have to discuss in some detail a constraint on pronominalization in Gã.

2.1. In this language, while any and all nominals can be replaced in the "subject" position (which in Gã typically precedes the verb) by the appropriate member of the (subject-) pronoun series,⁵ there is a restriction

⁵The "subject" series consists of six "personal" pronouns and an "impersonal" one; for the singular forms "reduced-form" variants differing slightly from the "full" (citation and emphatic) form are used:

on the pronominalization of "object" NP's (which in Gã typically follow the verb). In the latter position only nominals having the feature [+animate] are overtly pronominalized by the appropriate member of the (object-) pronoun series.⁶ For obvious semantic reasons this restriction on object pronominalization only comes to the surface in third-person reference, with the result that in objective position English "it" is not overtly expressed in Gã (glosses can and should be made to express this by enclosing the word (it) in parentheses). We shall henceforth refer to this phenomenon briefly as "zero pronominalization" of it and employ the conventional \emptyset -symbol to mark its occurrence.⁷

	<u>Personal</u>		<u>Impersonal</u>
	<u>Singular</u>	<u>Plural</u>	
1	mi ~ homorganic nasal	wɔ	
2	o	nyɛ	
3	e	amɛ	a

(The possessive pronouns have the same form as these, with low tones, except for the first and second person singular, which take high tones.)

⁶The "object" pronoun series consists of six ("full-form") personal pronouns:

	<u>Singular</u>	<u>Plural</u>
1	mi	wɔ
2	bo	nyɛ
3	lɛ	amɛ

⁷Occasionally the pronominalization of a [-anim] object NP may be heard from Gã speakers; but in all cases I personally came across they corrected themselves, either spontaneously, or when they saw what they had said being written down by me. (One cannot altogether discount some interference from the grammar of English, cf. Wilkie [1930] page v: "the increasing use of an Anglicized-Gã by many of the younger generation which should be discouraged. It is spoiling the beauty of the language, and grates on the ear...")

A similar zero-pronominalization of 'it' was pointed out for Twi by J. M. Stewart [1963]; cf. esp. the discussion on page 149, where it is argued that "one should postulate a zero object pronoun" for the language, as "it is subject to the same restrictions as other objects"; in this language similar restrictions on "specific" objects hold as will be pointed out for Gã. My colleague L. Boadi points out orally to me that in Akan in the environment of an adverb his "pron-3-object deletion" does not take place, which observation covers Gã also. Cf. Boadi [1971] and [forthcoming], neither of which was seen.

To give some examples:

- (6) kòfí kè è nyè-mí-nùú lè yí dzù-lí lè
 Kofi with his brother the beat thief the
 'Kofi and his brother beat the thief.'

can be pronominalized:

- (7) è kè lè yí lè
 he₁ with him₂ beat him₃

if the appropriate context of discourse or conversation is established beforehand, making the references clear.⁸

- (8) kòfí kè tsò yí dzù-lí lè
 Kofi with stick beat thief the
 'Kofi beat the thief with a stick.'

is pronominalized:

- (9) è kè ø yí lè
 he₁ with (it) beat him₂
 'He beat him with it.'

- (10) òtò kè è ñà tèè òsú
 Oto with his wife went (to) Christiansborg
 'Oto went to Christiansborg with his wife.'

is pronominalized:

- (11) è kè lè tèè ø
 he with her went (there)
 'He went there with her.'

⁸This is of course a condition on all pronominalization and must always be kept in mind when trying to elicit forms: failure to elicit certain forms has often been found to be due to the linguist's not taking the trouble to outline a plausible situation (in which that form would be appropriate) to the native-speaker informant, and can easily result in false statements about non-occurrence of forms. We shall henceforth take this condition for granted and not repeat it with every example.

- (12) kɔfí kɛ ɛ dzàtsú lɛ tèè òsú
 Kofi with his load went (to) Christiansborg
 'Kofi went to Christiansborg with his load.'

is pronominalized:

- (13) ɛ kɛ ø tèè ø
 he with (it) went (there)
 'He went there with it.'

2.2. Now let us compare these examples featuring supposedly "conjunctival" kɛ with cases where traditional Gã grammar would call the kɛ an auxiliary verb.

To begin we shall take a simple transitive verb with two objects:

- (14) òtò há ɛ bí lɛ tsò-bí
 Oto gave his child the (a) wood-child
 'Oto gave his child a doll.'

As long as the second ([-animate]) object is also [-specific] (not being followed by the "article" lɛ), the Gã sentence is quite similar in surface structure to the English translation. But as soon as one makes the [-anim] object [+spec] by referring to a particular doll, known to the interlocutors, or referred to earlier in the conversation or discourse, one finds that the language will not permit an object⁹ which is both [-anim] and [+spec] to follow the main verb. This will have to be introduced by means of a serial verbal construction, employing kɛ as the (introducer-) verb, to precede the (main) verb, as follows:

⁹The two verbal elements can indicate comitative ('(together) with'), instrumental ('with/by means of'), and directional ('to') etc. relationships. Usually the context makes clear which "reading" is appropriate. Extensive tests made on this point show that Gã speakers readily tolerate ambiguities, but when an ambiguity is undesirable, an alternative expression will (in the form of some kind of paraphrase) be employed.

Thus mɪ kɛ yòó lɛ tèè dzàà nò would usually be understood to mean 'I with the woman went to market.' If one needed to make quite clear that one did not go there together, one might say: mɪ tèè dzàà nò nì yòó lɛ (hú) bà dzé-méí 'I went to market and the woman (also) came there', or use still other alternatives.

(15) ɔ̀tò kɛ̀ tsò-bí lɛ̀ há ɛ̀ bí lɛ̀
 Oto took doll the gave his child the
 'Oto gave the doll to his child.'

(16) ɛ̀ kɛ̀ ∅ há lɛ̀
 he gave (it [doll]) (to) it [child]

Topicalizing the two object NP's we were focusing on we obtain:

(17a) tsò-bí lɛ̀ dzí nɔ́-ní ɛ̀ kɛ̀ ∅ há ɛ̀ bí lɛ̀
 doll the was what, he took (it) gave his child the
 'It was the doll that he gave to his child.'

By pronominalizing the object NP of (17a) one obtains:

(17aa) tsò-bí lɛ̀ dzí nɔ́-ní ɛ̀ kɛ̀ ∅ há lɛ̀
 doll the was what, he took (it) [doll] gave (to) it [child]
 'It was the doll that he gave it.'

(17b) ɛ̀ bí lɛ̀ dzí mò-ní ɛ̀ kɛ̀ tsò-bí lɛ̀ há lɛ̀
 his child the was (to) whom he took doll the gave
 'His child was the person he gave the doll to.'

By pronominalizing the "thing-object" NP of (17b) one obtains:

(17bb) ɛ̀ bí lɛ̀ dzí mò-ní ɛ̀ kɛ̀ ∅ há lɛ̀
 his child the was (to) whom he took (it [doll]) gave
 'His child was the person he gave it to.'

We see that the topicalization necessarily implies "specificness" of the topicalized constituent; this is attested by the fact that the serial verbal construction which we saw to be required to introduce [-anim, +spec] objects is retained in topicalization.

2.3. After this excursion into the importance of the feature of specificity, let us return to verbs with two objects.¹⁰ These are by no means restricted to cases of "person-object" followed by "thing-object".

¹⁰Pace J. Zimmerman [1858], Volume I, p. 49: "The language generally does not connect two objects with one verb"; the facts are by no means as simple as that, and it is most unlikely that it has changed in this respect since his day.

Consider the following examples:

- (20) è kè pètróí lè wò tsòné lè mǐíí
 he took petrol the put of-machine the inside
 'He put the petrol in the machine.'

(The verb here is followed by a "completive" NP.¹¹) Pronominalization produces, as expected:

- (21) è kè wò ø mǐíí
 he took (it [the petrol]) put (of-it [of-machine]) inside
 'He put it in.'¹²

The Gã language has no "prepositions" like English; its equivalents of these we shall call "postpositional relational" items, a subclass of nouns (e.g. mǐíí in the preceding pair of sentences). Like other nouns they enter into a genitival relationship (always with the noun preceding them), as in (20) above. And because of their relational function the members of this subclass of nouns are not allowed to be pronominalized (see (21), for example). Topicalization of the objects in the same sentence results in:

- (22a) tsòné lè dzí nǒ-ní è kè pètróí lè wò ø mǐíí lè
 machine the was what, he took petrol the put (of-it) inside the
 'It was the machine that he put the petrol into.'

Pronominalized, this gives us:

- (22b) nò dzí nǒ-ní è kè ø wò ø mǐíí lè
 that [the machine] inside the
 'That was what he put it into.'

¹¹For more detail on the "completive" (or "genitival") noun phrase, see Trutenau [1970:166ff.].

¹²Note that in è kè ø wò è mǐíí the è mǐíí literally means 'his inside'; the sentence means (idiomatically): 'he kept (it) [eg. sorrow, or anger] to (ie. within) himself.'

(22c) pètró! lè dzí nǒ-ní è kè ø wò tsǒné lè mlíí lè
 petrol the was what, he took (it [the petrol]) put of-machine inside the
 'It was the petrol that he put in the machine.'

Pronominalized this gives us exactly the same sentence as (22b), this being ambiguous; the appropriate reading now is:

that [the petrol] was what, he took (it [the petrol]) put (of-it
 [machine]) inside the
 'That was what he put into it.'

3. From the examples it emerges clearly that (on the surface) our "zero-pronominalization" usually brings the verbal kè next to the immediately following (main) verb.¹³ Combined with the fact that kè is one of the small number of Gã verbs that are never inflected,¹⁴ this may be assumed to have first earned it the label of "auxiliary verb", which kè has had ever since the days of Basel missionary J. Zimmermann, over a century ago.¹⁵ Other minimally inflected verbs are found, for instance,

¹³A long list of Gã verb sequences might be drawn up, which occur with the uninflected kè immediately preceding a main verb, as if they were expressions "with a meaning of their own". This makes them appear like a distinct set of verbal idioms (thus kè ø bà (lit. 'join/with come') = 'bring') deserving the status of distinct lexical items. This is the treatment that Zimmermann appears to have had in mind when in his Vocabulary (1858, Volume II) he gives approximately one hundred such entries.

We hope to have made clear that these sequences do not in fact deserve a separate listing as so many distinct verbal idioms, as they regularly have a transformational origin from pronominalization of inanimate object nominals.

¹⁴Cf. Kropp Dakubu [1970:74]: "It is not marked for any of the systems of the simple [verbal: H. T.] group."

¹⁵See his Vocabulary [1958, Volume II] under "ke". Note also that he joins "ke" (our kè) by a hyphen to the immediately following verb (eg. in Volume I, p. 48), a practice which has characterized Gã orthography for a long time, but which must be firmly rejected as overmuch surface-oriented and misleading about the underlying syntactic structure involved.

'dzí 'to be' (which has one other form, the negative dzéé), yé 'to be (somewhere)' with its habitual form yóó, and its negative form bé(é).

That kè is a verb is brought out by its parallel use to an undoubted full verb ɲò 'to take', which is not in any way "defective".¹⁶ Consider the following sentences:

(23) è kè nèké ʃiká néé wò mí nyòmò
he with certain money this pay me debt
'He paid me with this money.'

(24) è ɲò nèké ʃiká néé (è kè ∅) wò mí nyòmò
he take/handle certain money this (he with it) pay me debt
'He used (handled) this money to pay me.'

The difference between these two lies in the first verb and hinges on kè being a much more predictable and "colorless" verb here than the (nowadays) less usual ɲò, which more "concretely" indicates the handling or carrying of the money.

4. Having examined the verbal status of kè, we shall now turn our attention to the supposedly "conjunctival" use of kè, to try and

¹⁶Further examples can be found in Wilkie [1930], where a whole section (§ 131ff., pp. 70-75) is devoted to parallels in the use of the verbs kè and ɲò; though it must be pointed out here that in modern (contemporary) Gã a semantic differentiation of the two verbs is in evidence which appears to be greater than it may have been in the past. Also, Wilkie was not a native speaker of the language, and may have emphasized similarities at the expense of nuances of semantic difference apparent to Gã's.

An even closer relationship between the two verbs was postulated by Zimmerman [1858]. In Vol. II, p. 143 he writes "kè, auxiliary verb, ...without inflection...originally to take, to hold =ñō, with which it changes [does he mean 'alternates'? H. T.] and which must be used, if an inflection of the auxiliary is necessary...It expresses generally the relation of connection, instrumentality, etc. as the prepositions 'with, by, through' or the conjunction 'and' as far as the latter connects subjects and objects, but not verbs (for these see 'ni'...)." Note that the last remark anticipates the hypothesis of this paper!

It is Zimmermann's own examples (Vol. I, p. 49) of parallel use of the two verbs (note that he gives one and the same gloss for both sentences!) that we have adapted (in its modern form) to illustrate the semantic difference between kè and ɲò.

demonstrate in what way the restriction on pronominalization outlined in section 2 can be said to be relevant to its interpretation.

4.1. We have already mentioned in passing (cf. footnote 4) that while (à)lòò (which is used to express alternatives and can--herein superficially like kè--stand between NP's) can link not only NP's, but also VP's and sentences, kè on the other hand is interestingly restricted to the linking of NP's. We shall try to argue that this is not a trivial observation, but a significant fact which has to do with the inherent verbal nature of kè.

When one pronominalizes the NP's preceding and following kè (in its supposedly "conjunctival" use as NP-linker), an interesting fact comes to light. Consider some examples:

- (25) kòfí kè àkúá é-dzò¹⁷ fòì
'Kofi and Akua have run away.'

may be pronominalized:

- (26) è kè lè é-dzò fòì
'He and she have run away.'

On the other hand if the second NP is [-anim]

- (27) kòfí kè wòlò é-dzò fòì
Kofi with book has run away

is pronominalized

- (28) è kè ø é-dzò fòì
he with (it) has run away

(Note that this will be pronounced: [èkédzòfòì], due to the total (tonal and segmental) "fusion" of kè with the é following.)

¹⁷ The high-tone é-prefix is the past-marker of the verb and has nothing to do with the third person singular subject pronoun.

4.2. Examples like these (which could readily be multiplied) show that though superficially $k\acute{e}$ may appear to act as a conjunction, whenever a [-anim] NP follows the $k\acute{e}$ and we pronominalize, this NP is given the same "zero pronominalization" that it would have had if it were the inanimate object of a verb, resulting in the structures familiar from the preceding sections.

The power to cause the tell tale "zero pronominalization" gives the $k\acute{e}$ away as a verb even in its "conjunctival" disguise as an NP-linker.

Not only does its interpretation as a conjunction fail to explain its peculiar restriction to liking NP's, and NP's only (while $n\acute{t}$, the "true conjunction", must be used to conjoin VP's and sentences); but it further creates an (unnecessary) exception to the rules of pronominalization: if both the NP's which are linked by a $k\acute{e}$ were to be "subject" NP's why should the one following the $k\acute{e}$ be subject to "zero pronominalization" (like all "object" NP's) whenever it had the feature [-anim], rather than being pronominalized (unaffected by this feature) like all other "subject" NP's?

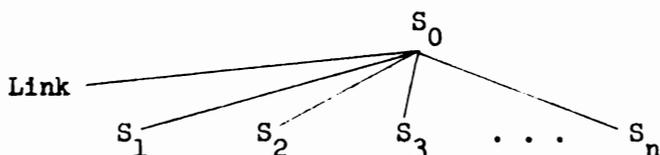
By assigning the $k\acute{e}$ verbal status throughout, such "anomalies" are removed from the grammar and explained insightfully as the regularities they are.

5. Rather than following the phrase structure rule hypothesis for generating conjunction structures we shall (with Tai [1969]) adopt the transformational hypothesis.

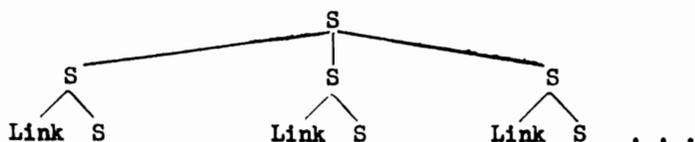
5.1. We propose to derive our input phrase marker in accordance with Ross' rule schema for conjunction (see f.i. Ross [1968] 4.2.2, which we slightly modify):

$$S \rightarrow \text{Link } S^n \quad \text{where } n \geq 2$$

This generates:



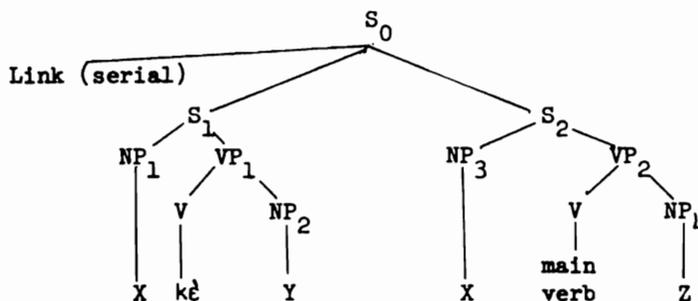
Through a (universal) principle of Conjunction Copying this becomes:



and if the Link element has been rewritten as a "true conjunction", its first instance (in Gã as in English) will be deleted. When the link element is rewritten as "serial", the Conjunction Copying principle is not applied.

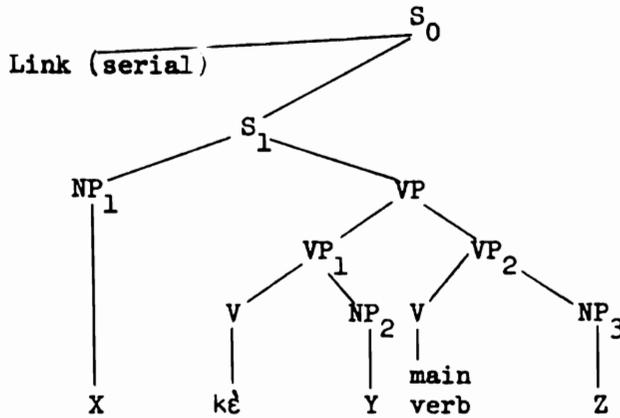
Ross interestingly says [1968:92]: "the semantic interpretation of conjunctions, under this analysis, is much more in line with the traditional logical analysis of conjunctions, which treats them as n-place predicates."

In contrast to Bamgboṣe [1972] we consider the underlying structures we are concerned with here to be of the following kind, closely akin to coordination (the relationship with which may be further documented by the shared requirement of Equi-NP deletion), except that the link element is identified as "serial" and associated with *kè*, and will not have any surface-structure mapping apart from the latter:

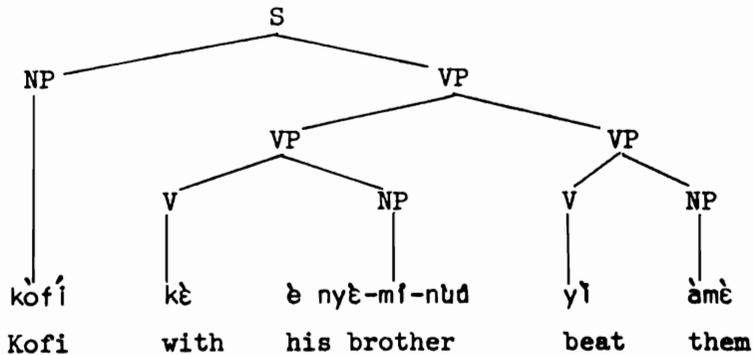


5.2. NP_1 and NP_3 in the tree must have a common reference, which brings about (obligatory) Equi-NP deletion, which erases the NP_3 in S_2 (the directionality of deletion is as postulated by Ross in his Gapping Hypothesis, and by Wang [1967]: namely that in VP-conjunction if NP's have identity of reference we delete all but the first one).

After deletion Ross' metarule which prunes a labelled node S whenever no branching takes place any more is invoked to prune S_2 (cf. Ross [1969]). Following this VP_2 is attached to VP_1 by Chomsky-adjunction, an elementary transformation, by the creation of a new node VP to dominate both VP_1 and VP_2 , giving the following structure:



As nothing depends from the node Link (serial) in serial verbal constructions, this will be pruned, and then the non-branching node S_0 . We thus obtain the following surface structure (for a possible example):



5.3. As has been mentioned above, $kè$ is marked in respect of its inflective potential (cf. footnote 14). We suggest that it is also marked in involving particular semantic interpretation rules to account for different reading of $X \text{ } kè \text{ } Y \text{ } vb \text{ } Z$ as (a): 'X together with Y vb Z', (b): 'X vb Z in presence of Y', (c): 'X use Y to vb Z', etc.

6. To conclude: there were two possible solutions to the third alternative interpretation outlined in Section 1.

Solution (3a) would have to re-interpret the "conjunctival" use of $kè$ as verbal:¹⁸ this interpretation we have attempted to motivate in this paper.

Solution (3b) would have to re-interpret the verbal use of $kè$ as being, in fact, "conjunctival". Nobody has ever attempted to show this for Gã, and we hope to have made clear that this would indeed be an improper interpretation. The form $kè$ is not inflected, to be sure, but neither are several other frequently used verbs. And the fact that $kè$ "causes" pronominalization in all its uses makes its interpretation as a verb much more plausible, as this is something that conjunctions "do not do".

¹⁸ George Clements points out [personal communication] that in the Añlo dialect of Ewe (another language of the "Western Kwa" group) $kplé$, the NP-linker, takes pronouns from the object series and can be shown to have verbal characteristics (though it cannot be used as a main verb).

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