

RESTRICTIONS ON SERIAL VERBS IN ANYI¹

Hélène Van Leynseele

Department of African Linguistics,
Rijksuniversiteit, Leiden

O. Introduction.

The dialect studied in this paper is Anyi-Sanvi², a dialect of Anyi-Baule, a Western Kwa language spoken mainly in Ivory Coast. Stewart (1971) classifies Anyi-Baule together with Nzema-Ahanta to form the Bia group. The next closest related language is Akan, which is much better documented than any language in the Bia group. Comparison with Akan will be made as necessary.

The traditional view has been that serial verbal constructions (SVC's) include a category of reduced sentence conjunctions called the "accidental

-
- 1 An earlier version of this paper was read at the 13th West African Languages Congress in Freetown, April 1978. I am greatly indebted to my supervisor, Prof. J. M. Stewart, for his insight, advice, and stimulating help. All errors are, however, my own responsibility. I am equally grateful to my patient and enthusiastic assistant, Mr. A. Moussa from Ayamé, Ivory Coast, who is currently a student in Belgium, and to Mr. J. Burmeister of S.I.L., Ivory Coast. I express thanks to my colleagues and friends in the Department of African Linguistics in Leiden, and in particular, to Dr. P. Newman and Dr. R. Ma-Newman for having commented on earlier versions of the present paper, and to Prof. J. Voorhoeve for his ideas and encouragement. A special word of thanks should be addressed to the late Prof. A. E. Meeussen, who gave me the first impulse for the analysis presented here; without his help, the project could not have been started. We will miss him very much. The study of serial verbs in Anyi-Baule is a 3-year project, begun in May 1977, of the Department of African Linguistics at the Rijksuniversiteit, Leiden. I wish to acknowledge the additional support provided by the Museum for Central-Africa, Tervuren, Belgium, and by the African Studies Center, Leiden, the Netherlands.
- 2 The version of Anyi-Sanvi described here is spoken around Ayamé and presents at some points more similarities with the Indenié dialect to the North than with central Anyi-Sanvi spoken South of Ayamé and on which J. Burmeister is currently working.

combinations" by Christaller (1875:144) and the "linking type" by Bamgboṣe (1974). For strategic purposes, this view implies that the properties of SVC's can be determined by studying the coordination of strings of sentences having identical subjects. In Anyi, however, it soon becomes clear that only very few such coordinations can be "reduced" to serial constructions, particularly if cases involving a change of meaning were rigorously excluded. Obviously, there are more restrictions on Anyi verbs appearing in serial constructions than the simple condition that they express consecutive or simultaneous actions and the additional condition, stressed by Welmers (1973:366 ff.), that they have the same subjects.

In the first section of this paper, serialization is distinguished from coordination and two major types of Anyi SVC's are described. In section 1.1., formal grounds will be established for a distinction between a type of sentence conjunction which will be called "consecutive coordination" and a superficially similar subtype of "serial verbal construction". Although it is easier to apply formal criteria for this distinction in Anyi than in Akan, the same distinction will have to be made in Akan. In 1.2. this subtype of SVC is then compared to certain other serials that have long been recognized as idioms; the two sets are considered together as a category named "verb complexes". In section 1.3., the properties of "relational" SVC's, i.e. those constructions which generally receive case labels such as dative, instrumental, etc. will be described. It will be shown that these SVC's have the same grammatical behavior as the verb complexes. The grammatical function of the verbs in relational SVC's and their restrictions are then examined. In section 1.3., an attempt is made to relate verb complexes and relational SVC's and arguments are given in support of the hypothesis that both types of Anyi SVC's have the same underlying structure.

In section 2, two proposals will be briefly discussed for the derivation of these two types of Anyi SVC's from one underlying simple sentence. In the first proposal (2.1.), a SVC is derived from a single verb in underlying structure to which an 'epenthetic' verb is added by transformation. In the second proposal (2.2.), multiple verbs are generated in underlying structure. The discussion of the relative merit of each proposal points to the second proposal as most promising for the analysis of the Anyi SVC's described in

this paper. Several variants of the second proposal are then briefly discussed.

1. Description of two types of Anyi serial constructions.

1.1. Consecutive coordination versus serialization.

Compare the following sentences which on the surface are very similar and might appear to express similar consecutive actions:

Type A (1) cùá cì ákó òkù í³

dog catch-HAB chicken he-kill-HAB him

'the dog catches a chicken and kills it'

(2) mí, cùá, mícì ákó-mó míkù bá

me, dog, I-catch-HAB chicken-PL I-kill-HAB them

'Me, Dog, I catch the chickens and kill them'

Type B (3) cùá cì ákó ídí

dog catch-HAB chicken eat-HAB

'the dog eats (catch-eats) a chicken'

(4) mí, cùá, mícì ákó-mó ídí

me, dog, I-catch-HAB chicken-PL eat-HAB

'Me, Dog, I eat (catch-eat) the chickens'

There are crucial differences between A and B. One difference is that in A one of the verbs may be in the affirmative and the other in the negative, whereas in type B both verbs necessarily agree in polarity:

3 ' = high tone; ` = low tone; ^ = falling tone; ˇ = rising tone; ˩ = downstep; ~ = nasal; * = vowel length (one of the ways to mark a noun for definiteness). i and u are tongue root retracted high vowels. HAB = habitual present tense; PAST = simple past tense; NEG = negative; DEF = definite; INDEF = indefinite. This version of Anyi-Sanvi has a 9-vowel system with cross-height vowel harmony. ə is a subphonemic vowel in ultrashort syllables separating consonant sequences of plosive + ɭ/ɮ/nasal. In NC sequences, the nasa' is homorganic. Root-initial consonants mutate in morphologically conditioned environments: voiceless C's become voiced after a homorganic nasal prefix; voiced C's become nasal in the same environment. k → ɠ and d → ɗ in the simple past. (Other environments for mutation are not relevant here.) The transcription is systematic phonetic. No nasalization and tongue root harmony are shown across word boundaries. The tones are surface tones, their analysis is very complicated and not yet worked out. A sketch of the phonology of Anyi-Sanvi is found in Retord (1972).

Type A (5) cùá cì ákó óngú í
 dog catch-HAB chicken he-NEG-kill-HAB him
 'the dog catches a chicken and does not kill it'

Type B (6) cùá híj í ákó í-í ní
 dog NEG-catch-HAB chicken NEG-eat-HAB
 'the dog never eats a chicken'

Admittedly, however, one may argue about the semantic naturalness of a change in polarity in examples such as (5).

The more significant difference is that in construction A, on the one hand, a subject pronoun (o-/mí) precedes the second verb, V_2 , and an object pronoun (i/bé) follows it. The pronouns refer respectively to the subject and object of the first verb, V_1 . In construction B, on the other hand, V_2 has neither a subject nor an object pronoun. It should be noted that an object pronoun for V_2 cannot be present without a subject pronoun being also present in Anyi, which differs in this respect from Akan-Twi (cf. (9) below). If subject and object pronouns are deleted in (1) and (2), the sentences become ungrammatical. On the other hand, if we insert them in example (3), we obtain an altogether different meaning:

(7) cùá cì ákó òdì í
 dog catch-HAB chicken he-eat-HAB him
 'the dog catches a chicken and copulates with it'

That is, (7) is a type A construction consisting of two separate parts in each of which the verb has separate meaning. Thus the verb dí means 'copulate' when it is followed by an animate object.

Another example of an Anyi type A construction is the following:

(8) òfà bàtrá', òblà í, òkpòkpà í
 she-take-HAB child she-wash-HAB him she-anoint-HAB him
 'she takes the child, washes it, and anoints it'

According to the informant, the actions expressed follow each other "as in a film". As in (1) and (2), subject and object are repeated in pronominal form with subsequent verbs. It is impossible to leave these pronouns out.

To summarize the preceding discussion, we can now see that, in spite of the superficial resemblance between type A and type B, there are compelling

reasons to distinguish between these two constructions. This distinction is based on the following criteria:

Type A

1. Obligatory presence of subject pronoun referring to subject of V_1 .
2. Obligatory presence of object pronoun referring to object of V_1 , where the objects are identical in reference.
3. ---
(Polarity disagreement depending on semantic compatibility.)

Type B

-
- (absence is not criterial⁴)
- Impossibility of occurrence of any object pronoun referring to object of V_1 .
- Obligatory polarity agreement.

Type A belongs to a category of consecutive coordination. This type of coordination is not further reduced in Anyi. The term serial verbal construction will henceforth be used to apply to those Anyi constructions which show the kind of behavior of type B. It should be noted that, on the basis of the above Anyi data, the term SVC is used here to refer to a more restricted range of constructions than has been usual in Western Kwa studies, i.e. excluding type A consecutive coordinations which were included by Stewart (1963) for reasons which will become clear in the course of the following comparison of the Anyi material with Akan.

For Akan and also for Ewe, it has been stated that in juxtaposed coordinations expressing consecutive actions and having the same subject, the subject is deleted before verbs other than the first (Christaller 1875:144; Westermann 1930:126)⁵. The result of this conjunction reduction would then be an "accidental combination" in Christaller's terminology, or a "serial verbal construction" (Stewart 1963). In addition, a rule deleting identical objects in the same context has been noted by Westermann for Ewe and by

4 Surface subject agreement does occur in Anyi, and is not illustrated in this paper.

5 A well known exception is the first person singular.

Stewart (1963:145) for Akan-Twi.

However, the Twi situation is more complicated. It now appears that the same distinction as in Anyi is found in Twi between type A and type B constructions. Only, the formal grounds for this distinction have been more difficult to establish in Twi than in Anyi. Stewart (personal communication) recently discovered that Twi equivalents to the above Anyi examples also show a difference in the appearance of the object pronoun, although the V_2 subject pronoun seems to be absent in both types in Twi.

Twi, type A (9) akoroma no kyeree akoko no kumm no
hawk the catch-PAST chicken the kill-PAST him
'the hawk caught the chicken and killed it'

type B (10) akoroma no kyeree akoko no wee
hawk the catch-PAST chicken the chew-PAST
'the hawk caught the chicken (and) ate it'
(cf. Stewart 1963:145; brackets and slightly
adapted glosses HVL)

V_2 in (10) cannot be followed by an object pronoun. It follows that Twi appears to have the same distinction between type A and type B constructions as Anyi. The difference is that in Twi, consecutive coordinations, e.g. (9), are reduced by the deletion of identical subjects in subsequent conjuncts, whereas in Anyi this type of coordination only involves pronominalization of identical NP's in subsequent underlying sentences.

It is significant that the distinction between consecutive coordination and serialization is thus not restricted to Anyi.

This distinction implies of course that not every string (in fact only very few strings) of verbs expressing consecutive or simultaneous actions and having the same subject can appear in serial constructions in Anyi. In section 1.4. below, some arguments will be suggested for an alternative hypothesis concerning the restrictions on verbs occurring in Anyi type B SVC's, which will be labeled "verb complexes" in the next section.

1.2. The "verb complex" type of serial construction.

Some other examples of series of verbs occurring in type B constructions are:

tira.....di	'catch-eat/eat'
kũ.....di	'kill-eat/eat'
ci.....mĩ	'catch-swallow/swallow'
kũ.....mĩ	'kill-swallow/swallow'

As has been shown in the preceding section, these cannot be considered as consecutive coordinations. Rather they appear to be related to constructions long recognized as idiomatic SVC's. In order to demonstrate that these idiomatic SVC's also have a type B behavior, we have chosen an idiom in which both verbs, at least in their literal senses, could supposedly have the same semantic object if they were to be analyzed as coordinate sentences:

(11a) Kàsí dè Kòfí 'dĩ

Kasi grab-HAB Kofi eat-HAB
'Kasi trusts (believes) Kofi'

Negation: (11b) Kàsí ñ-¹né Kòfí ñ-¹nĩ

Kasi NEG-grab-HAB Kofi NEG-eat-HAB
'Kasi does not trust Kofi'

When one of the rules applying to type B constructions is broken, the resulting sentences are either ungrammatical (11c) or the verbs revert back to their individual meanings (11d).

Subject and object pronoun for V_2 :

(11c) *Kàsí dè Kòfí òdì ÿ

Kasi grab-HAB Kofi he-eat-HAB him

(11c) is ungrammatical because the verb dè cannot by itself take a human object, whereas dè...di 'trust' can only take a human object phrase.

(11d) Kàsí dé Kòfí ñ-¹nĩ

Kasi grab-HAB Kofi NEG-eat-HAB
'Kasi grabs (it) and Kofi does not eat (it)'

In fact, the high tone on the verb dé in (11d) already indicates that there is no surface object NP following this verb. Kofi is thus the subject of n-ni. If dé in (11d) is pronounced with low tone, which means that Kofi would be its object, the sentence is ungrammatical.

It is reasonable to assume, therefore, that the type B constructions and the idiomatic serials belong to the same category.

It is quite obvious that idioms such as de...di 'trust, believe' constitute one single lexical item. This is less obvious in the case of serials such as cj...di 'catch-eat, eat' discussed earlier. However, the phenomenon here looks very similar to what happens in morphological derivation and compounding where certain words that are easily recognized as morphologically complex have nevertheless developed a specific meaning which can no longer be interpreted as the sum of the meanings of the composing morphemes, whereas with others the meaning of the word is transparent. We will use the label "verb complex" to refer to the subcategory of SVC's which includes both idiomatic and type B serial constructions. This label is meant to indicate that in this type of SVC, although the verbs are involved in a complex predicate and can, therefore, not be considered as compound verbs, yet they probably constitute one single entry in the lexicon.

1.3. "Relational" serial constructions.

The best known SVC's are those that are commonly qualified as "dative, benefactive, instrumental, comitative, directional", etc. and which could be described together under the quite informal name of "relational" SVC's. In these constructions, the sequence of verbs and NP's rather indicate the grammatical relations between them whereas in verb complex constructions the verbs seem engaged primarily in a lexical relationship to one another.

A sample of Anyi relational SVC's is given below.⁶ The general linguistic labels do not necessarily imply that each forms a distinct or unique grammatical category in this language.

Dative (12) Kòfí fà bùlókò fá-¹má Kàsí

Kofi take-HAB book take-give-HAB Kasi

'Kofi gives the book to Kasi'

6 Where possible, the examples are in the habitual tense (the unmarked present tense in Anyi) in order to avoid phonological and sequential complications. Often, however, the habitual is semantically unnatural and may cause confusion with the imperative. In these cases either a past tense is used or the subject NP is replaced by a pronoun.

(13a) Kòfí fàlì l{kè· cèlì Kàsí
Kofi take-PAST thing share-PAST Kasi

(13b) Kòfí fàlì l{kè· fa-¹célì Kàsí
- - - take-share-PAST -

(13a) and (13b) 'Kofi gave the present to Kasi'

(14a) Kòfí fàlì bùlúkú h(è)lèlì Kàsí
Kofi take-PAST book show-PAST Kasi

(14b) Kòfí fàlì bùlúkú fá-¹h(é)lèlì Kàsí
- - - take-show-PAST -

(14a) and (14b) 'Kofi showed the book to Kasi'

(15) Kòfí yì èsìkàè fá-¹má Kàsí
Kofi take out-HAB money take-give-HAB Kasi
'Kofi reimburses Kasi'

Benefactive

(16a) ʔájó tᵑ àlìé má Kàsí
Ajo cook-HAB food give-HAB Kasi

(16b) ʔájó tᵑ àlìé fá-¹má Kàsí
- - - take-give-HAB -

(16a) and (16b) 'Ajo cooks food for Kasi'

(17a) Kàsí sllì sùá mǎnᵗ Kòfí
Kasi build-PAST house give-PAST Kofi

(17b) Kàsí sllì sùá fá-¹mǎnᵗ Kòfí
- - - take-give-PAST -

(17a) and (17b) 'Kasi built a house for Kofi'

Instrumental

(18a) Kòfí fà dàdìé kpè nyámá
Kofi take-HAB knife cut-HAB string

(18b) Kòfí fà dàdìé fá-¹kpè nyámá
- - - take-cut-HAB -

(18a) and (18b) 'Kofi cuts a string with a knife'

Manner-instrumental

(19a) Kòfí fà òglɛ̀ dɪ̀ jùṁṁá
Kofi take-HAB intelligence eat-HAB work

(19b) Kòfí fà òglɛ̀ fà-¹dí jùṁṁá
- - - take-eat-HAB -

(19a) and (19b) 'Kofi works intelligently'

Directional

(20a) òfà mwǎ-¹mó kò sùá-¹nú⁷
he take-HAB sheep-PL go-HAB house inside

comitative reading: 'he goes with the sheep in the stable'

factitive reading: 'he takes the sheep into the stable'

(20b) òfà mwǎ-¹mó fà-¹kó sùá-¹nú
- - - take-go-HAB - -
'he takes the sheep into the stable'

(21a) Kòfí fà mwǎ-¹mó wùllỳ sùá-¹nú
Kofi take-HAB sheep-PL enter-HAB house inside

comitative reading: 'Kofi enters the stable with the sheep'

factitive reading: 'Kofi enters the sheep into the stable'

(21b) Kòfí fà mwǎ-¹mó fà-¹wùllỳ sùá-¹nú
- - - take-enter-HAB - -
'Kofi enters the sheep into the stable'

(22a) Kòfí kǎ mwǎ-¹mó kò sùá-¹nú
Kofi touch-HAB sheep-PL go-HAB house inside

(22b) Kòfí kǎ mwǎ-¹mó fà-¹kó sùá-¹nú
- - - take-go-HAB - -

(22a) and (22b) 'Kofi drives the sheep into the stable'

(23a) Kòfí fà kpákpá kò 'Abíjǎ
Kofi take-HAB parcel go-HAB Abidjan

7 A paraphrase for the comitative reading is a construction with NP-conjunction; a paraphrase for the factitive reading is a causative construction.

As for (30c) below, this sentence is not accepted by the main informant for this paper, but it was found to be grammatical in central Anyi-Sanvi:

(30c) ? Kòfí kpè nyámá dàdǎ́é

Kofi cut-HAB string knife

'Koficuts the string with a knife'

The interpretation of this dialectal variation which might, by the way, provide important analytical clues, needs more study and, therefore, the instrumental SVC will not be further discussed in this paper.

Turning to the internal structure of the above relational SVC's, some important observations can be made on the restrictions on the verbs occurring in them and on their grammatical function.

Firstly, all the above constructions except the benefactive can have the verb fa 'take' or other "handling" verbs such as 'touch', 'push', 'roll', 'grab', 'chase', etc. in the V_1 slot.

Secondly, whereas all the handling verbs (e.g. in (22), (24), (25)) other than fa transmit their individual, basic or derived, meanings to the global meaning of the sentence, the verb fa does not necessarily carry its literal meaning 'to take' (see (20), (21), and (23) in their factitive readings and also (12)-(14), where there is not necessarily an action of "taking" involved). In these relational SVC's, fa 'take' thus appears to be a semantically empty or dummy verb.⁸ (It is not, however, a verbid,⁹ being fully inflected.)

It would seem then that, wherever there is a 2-place verb in the V_2 slot (cf. (18)-(20) and (23)), the essential function of fa in the V_1 slot is to supply the sentence with the possibility of a third argument slot.

In the case of a 3-place verb in the V_2 slot (cf. (12) (13), and (21)), fa does not necessarily carry a 'take' meaning either. Example (21) does not normally imply that the actor actually picked up the sheep.

In answer to the question of why then a serial construction is used rather than a monoverbal sentence, it is noted that the occurrence of both complements of 3-place verbs in monoverbal sentences in Anyi seems to be subject

8 The notion of "semantic emptiness" in this context has first been used by Stewart (1963:147).

9 See Ansre (1966) for the notion of verbid.

to important restrictions. For so-called "dative" 3-place verbs the restriction is clear and identical to Twi (cf. Stewart 1963:147). Whereas (28) above is grammatical, the following sentence containing a definite direct object NP (marked by final ǝ, variant of the definite marker ni¹⁰) is ungrammatical:

- (31) *Kofi mǝ Kasi bulukuǝ
Kofi give Kasi book-DEF

In the case of a definite direct object, the only construction allowed in Anyi as well as in Twi is a serial construction:

- (32) Kòfí fà bùlúkúǝ fá-^Imǝ Kàsí
Kofi take-HAB book-DEF take-give-HAB Kasi
'Kofi gives the book to Kasi'

The restrictions for 3-place verbs such as wulu 'enter' (cf. (27)) are still under study, but there are indications that there is not always free variation between monoverbal and serial constructions for these verbs either.

Therefore, in the case of 3-place verbs, the verb fa can equally be considered as a dummy verb carrying a complement NP that, obligatorily or optionally, does not follow the main verb.

As for the semantically full verbs that can fill the "take" slot in these constructions (cf. (15), (22), (24)), it may be argued that they are merely substitutions for the unmarked, dummy fa 'take' and that they have the same grammatical function as the latter in addition to their semantic impact on the sentence.

One argument in favor of this suggestion is the occurrence of the root fa 'take' prefixed to V_2 not only in examples (12), (13), and (18b)-(23b) containing the verb fa in V_1 , but also in examples (15)-(17) and (22b) which contain a semantically full handling verb in the V_1 slot. Anyi seems to have

10 The definite marking in this dialect is quite complicated. The variant ǝ may be further reduced to lengthening of the root-final vowel with low tone or to a simple low tone which, combined with a preceding high, gives a falling tone which in its turn is subject to sandhi tone rules.

a rule, whatever the nature or further implications of such a rule may be, prefixing fa to a subsequent verb when there is a handling verb in the V_1 slot. This rule would be obligatory in this dialect in the case of certain dative SVC's and optional in others.¹¹ It would account for the fact that a fa-compound may be present in the V_2 slot of above SVC's even if V_1 is a handling verb other than fa 'take', but that it is absent in the corresponding monoverbal sentences containing 3-place verbs ((27) and (28)).¹²

The following general picture emerges from the preceding discussion. In dative, directional, and instrumental SVC's, the V_1 slot is filled by verbs of the same subclass, here called "handling" verbs, of which the semantically empty one, fa 'take', clearly has only a grammatical function of providing another NP argument slot, whereas the semantically full ones contribute additional semantic information.

Or we may phrase this observation differently, because V_2 is not necessarily followed by a complement:

- (33) Kòfí fà èsíkà wàndí
 Kofi take-HAB money run-HAB
 'Kofi runs away with the money'

The handling verb in V_1 thus has a transitivizing function in the sense that the combination of V_1 and V_2 in a complex predicate behaves as a 3-place verb. (On the transitivizing function of 'take' in directionals, see also Stewart 1963:148-149.)

- 11 In this dialect, fa-prefixing seems obligatory in dative sentences containing the verb má 'give' in all tenses, except the imperative.
 12 There is one exception to the absence of fa compounds in monoverbal sentences. In the case of a pronominal direct object, the clearly serial dative and directional constructions have a variant with only one fa 'take', if it is clear from the context what the object is:

- ex. serial: Kási fà bé wùlù lè
 Kasi take them enter there
 'Kasi enters them there'
- variant: Kási fá-^I wùlù lè
 - take-enter -
 'Kasi enters them/him/it there'

The V_2 slot in dative and benefactive constructions is filled by the verb mā 'give' in (12), (15), and (16) or by "give"-like verbs such as ce 'share' in (13) and kle 'show' in (14). Again, mā 'give' clearly is semantically empty in (17) and presumably also in (16), the two benefactive examples. In (12), however, mā 'give' clearly carries its full meaning. The "give" verbs also precede NP's which the other verb, V_1 , cannot take as a complement. However, a significant difference with handling verbs is that semantically empty 'give' does apparently not occur in dative SVC's where the other verb is a handling verb, but only in benefactives where the other verb does not seem subject to restrictions.

This leads to the observation that in benefactive and manner-instrumental SVC's (cf. (16), (17), and (19)) there is an unrestricted choice for one of the verbs, V_1 in benefactives, V_2 in manner-instrumentals. In dative and directional SVC's, on the other hand, there are restrictions on both verbs, i.e. one could say that a combination of a handling verb and a "give" verb gives a dative construction; a combination of a handling and a motion verb gives a directional construction. (Instrumental (18) is not discussed.)

Moreover, the restricted verb V_2 in benefactive SVC's is always "empty" mā 'give' and can apparently not be replaced by another 'give' verb, whereas the restricted verb V_1 in manner-instrumentals is always "empty" fa 'take' and never a full handling verb.

On the surface, the above SVC's contain a string of similar VP's in each of which a finite verb is followed by a complement. There is no apparent difference in status between the surface VP's or their constituent verbs and NP's. The above study of the restrictions on the verbs occurring in relational SVC's has shown, however, that there is a difference in syntactic function between the verbs in these constructions. Secondly, the observed difference between dative and directional constructions on the one hand and benefactive and manner-instrumental ones on the other, might point towards a difference in underlying structure between these two sets of SVC's. In section 2 of the present paper, an attempt will be made to show how these observations may be interpreted in the analysis.

1.4. Relationship between verb complexes and relational serials.

The observation that verb complex constructions and relational SVC's have the same grammatical behavior, confirmed by native speaker intuition in classing both sets of constructions together,¹³ could merely reflect their surface resemblance. However, at the deep level it also appears that the verbs in both types of SVC's share certain lexical restrictions.

In section 1.1. above it was shown that Anyi as well as Twi serial constructions of the verb complex type are not merely reduced consecutive coordinations. On the other hand, the discussion in 1.3. about the restrictions on the subclasses of verbs that can appear in relational SVC's has shown that datives and directionals contain a handling verb in V_1 and a dative and motion verb in V_2 position, respectively.

In fact, when unmarked or dummy verbs in relational SVC's are replaced by semantically fuller ones, the constructions become very similar in meaning to the non-idiomatic verb complexes ("type B" in 1.1.). That is, they somehow express consecutive or simultaneous actions.

Verb complexes:	ci....di	'catch-eat'
	kũ....mĩ	'kill-swallow'
dative:	de....mã	'grab-give'
directionals:	kundu...ko	'push-go/push away, to...'
	kpũnzũ...ko	'roll-go/roll away, to...'
	fũã....ko	'chase-go/chase away, to...'
	fa.....wãndi	'take-run/run away with., ' etc.

The distinction between relational SVC's and idiomatic verb complexes is also often minimal. Compare:

- (34) ðfà ísá klè ðòkté sũlã
 he-take-HAB his-hand show-HAB doctor man
 'he shows his hand(s) to the doctor'
- (35) ðtĩndĩ ísá klè blã
 he-stretch-HAB his-hand show-HAB man
 'he points at the man'

13 A. Moussa invariably classes them all together under the label "expressions".

(36) ðkǎ ndǎ klè biǎ

he-touch-HAB matter show-HAB man

'he says something to the man'

The meanings of (34) and (35) are still transparent, whereas the meaning of (36) cannot be inferred any more from the individual meanings of the component verbs. It can be seen, however, that the main difference between the above sentences is that (35) and (36) have a semantically full handling verb in the V_1 slot as compared to (34) which has dummy fa 'take' in V_1 .

This point leads to two hypotheses which need to be checked for a large number of Anyi verb complexes. First, a number of verb complexes seem to contain a handling verb in the V_1 slot as in the verb complexes above and in idioms such as:¹⁴

kǎ.....kle	'touch-show/tell something to someone'
de.....di	'grab-eat/trust, believe'
tu.....flɛ	'pull-call/call'
fa.....sie	'take-keep/look after someone'
ju.....tɿ	'carry-throw/throw'
kǎ.....tɿ	'touch-throw/throw over, down'
kũnzũ...gua	'push-throw/push down (several objects)'
kũnzũ...tɿ	'push-throw/push down (one object)'
bɔ.....nɿǎ	'hit-look/taste (liquid)'
kǎ.....tia	'touch-step on/blaspheme, speak against'
yɿ.....kle	'take out-show/reveal'

As for the V_2 in above examples, kle 'show' belongs to the class of "give"-like verbs (cf. (14) and (34) above); tɿ 'throw', gua 'pour', nɿǎ 'look', and tia 'step on' take locative complements and may, therefore, belong to the same class as motion verbs. Awaiting further investigation, it is difficult to say whether di 'eat', mɿ 'swallow', and sie 'keep' might also belong to the class of "give" verbs and flɛ 'call' to the class of the motion verbs,

14 I thank John Stewart for the original hunch. Very recently, he has found confirmation of this point by checking a large number of Twi idioms.

unless these classes contain a "reflexive" subcategory. (cf. Lyons 1968: 361 for English reflexive verbs such as 'shave', 'wash'.)

Secondly, the examples above as well as (35)-(36) seem to indicate that the verbs in verb complexes tend to be semantically full verbs. It is possible, in these cases at least, that the interaction of the meanings of two semantically strong verbs accounts for the observation that in the verb complex type of SVC emphasis seems to be on the lexical relationship between the verbs rather than on the grammatical relations in the sentence.

Since the grammatical behavior of SVC's of the verb complex and the relational types is the same, and since we may advance the hypothesis that the restrictions on the verbs in series are similar for both verb complex and relational SVC's, and among the latter perhaps in particular dative and directional constructions, it seems reasonable, even at this early stage of the study, to suggest that verb complex type SVC's and relational ones have the same construction type. In a sense, they may both be considered as "verb complexes" having at the same time a grammatical and a semantic dimension.

2. Towards the analysis of Anyi serial verbal constructions.

The aim of the research project of which the first findings are reported in the present paper is a general analysis of Anyi-Baule serial constructions. This entails a detailed and careful study of these constructions in Anyi-Baule dialects. At this point, I do not intend to give an all-encompassing analysis of Anyi serial verbs. I shall rather suggest what seems to be the neatest and most promising analytical approach in the light of the foregoing description of the available Anyi material.

Having demonstrated above that Anyi has a distinct consecutive coordination construction and that Anyi SVC's cannot be analyzed as reduced coordinate sentences (cf. 1.1.), the most promising approach to Anyi SVC's seems to be in terms of one underlying simple sentence. And so far, no contradictory evidence for such an analysis has been found in Anyi, whether in the surface structure or in the behavior and function of SVC's (cf. 1.3.).

There are basically two ways to derive SVC's from an underlying simple sentence: one is to posit a traditional, monoverbal underlying structure and obtain a multiverbal structure by transformation. Such an approach has

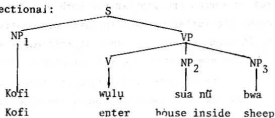
been suggested for Twi directional SVC's by Stewart (1963:148). The other is to provide for two or more verbal slots in the phrase structure rules.

2.1. Monoverbal underlying structure: transformational approach.

In an unpublished paper, Stewart (1977) has recently worked out a fuller and modified version of his 1963 proposals. He bases his analysis on the syntactic function of dummy 'take' in serial constructions and treats this verb as an epenthetic verb inserted by transformation. The rules for this insertion would be similar to those for English 'do' in negation and questions.

The following examples of derivation are adapted to Anyi:¹⁵

(37) Directional:



The following transformations would apply to the above P-marker:

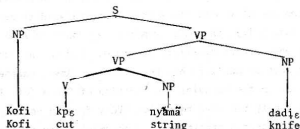
a) optional fa-epenthesis: + *Kofi wuly sua nni fa bwa

b) obligatory fa-phrase intraposition: + Kɔfɛ fã bwa wɔlɔ sua¹ nni⁴ (cf.(21)).

A locative (NP₂) extraposition rule would apply in the absence of a), giving the monoverbal variant: Kɔfɛ wɔlɔ bwa sua¹ nni⁴ (cf. (27))

'Kofi enters a sheep into the stable'

(38) Instrumental:



15 For the purposes of the present paper, the diagrams have been adapted

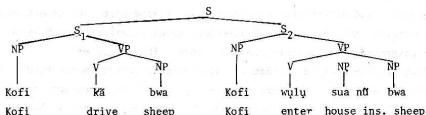
In this case fa-insertion is obligatory:

- a) obligatory fa-epenthesis: + *Kofi kpɛ nyāmā fa dadjɛ
 b) oblig.fa-phrase intraposition: + Kòfí fà dàdìtɛ kpɛ nyāmā (cf. (18))
 'Kofi cuts a string with a knife'

(Note that the instrumental NP is treated as a VP-adjunct and that the PS rule: VP → VP + NP is recursive.)

The replacement of dummy 'take' by a semantically full verb is then handled by means of two different underlying sentences or clauses.

(39) Directional:



The necessary transformations are:

- a) fa-epenthesis: + *Kofi kɛ bwa Kofi wɔlɔ sua nɔ fa bwa
 b) fa-phrase interposition: + fa bwa wɔlɔ sua nɔ
 c) optional fa-recapitulation: + (fa)wɔlɔ sua nɔ
 d) equi-NP subject deletion: + ∅
 e) equi-fa-phrase deletion: + ∅ ∅

Output: (39a) Kòfí kɛ bwa wɔlɔ sua. I nɔ

or if c) is chosen: (39b) Kòfí kɛ bwa fá-!wɔlɔ sua. I nɔ

'Kofi drives a sheep into the stable'

(Note that c) applies also optionally to both (37) and (38).)

It may be more attractive to set up S_1 in (39) as a modal clause instead of a coordinate sentence. This choice is, however, secondary to the issue as a whole because, in addition to clause raising, essentially the same transformations would apply. Also, the nature and ordering of copy rule c) may be

to Anyi as well as simplified in order to avoid side issues and complications. In fact, Stewart does not have a VP node and he uses case labels.

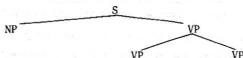
set up differently.

In some ways to be discussed in 2.2., Stewart's proposal is very attractive. There are, however, certain disadvantages. A general disadvantage is the very heavy appeal to transformational rules and the nature of some of them. However attractive the idea of epenthetic verbs may be, it is always awkward to have to delete an item (epenthetic fa 'take') which has been inserted transformationally at an earlier stage (see c) and e) above). An argument against inserting epenthetic verbs based on the English do-support model is that do appears in typically transformational contexts, negation and question, while this is not so clear in the case of dummy fa 'take'; at least not in dative and directional constructions. Furthermore, one cannot escape the impression that the number of deletions point towards too much waste material generated by a possibly too heavy underlying apparatus.

Another disadvantage is that transformational insertion can handle relational SVC's, but not the verb complex type serial construction, in which the verbs have to be inserted before the T-rules apply. Since it has been suggested above (1.4.) that these two types of SVC's have the same structure in Anyi, it then becomes desirable to have the same analysis for both. I, therefore, propose an alternative analysis which takes Stewart's views further by generating the handling verbs in underlying structure.

2.2. Generating multiple verbs in underlying structure.

Proposals for generating more than one VP in underlying structure have been made by Bamgbose and Schachter. Bamgbose (1974:35) proposes the following structure for his category of "modifying" verbs:



Two VP's are thus juxtaposed but dominated by a single VP node. The combinations of verbs which may be inserted in the structure above is determined by the lexicon, i.e. one of the verbs should belong to a category of verbs which, when inserted in this structure, merely have the property of modifying the meaning of the other verb rather than carrying their own full meaning.

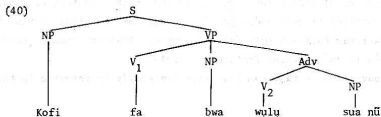
Schachter (1974:257) sees no reason to have a node dominating the string of VP's in SVC's and proposes a concatenation of VP's by a base-rule schema:

S → NP AUX VP VP*

Schachter then outlines (1974:267) how the correct semantic interpretation of such a string of VP's may be obtained either by the sum of the meanings of the verbs or by assigning to some verbs syntactic and semantic lexical features which give to their combination a proper meaning.

In both analyses, the verbs in series thus have identical status in underlying structure and any semantic implications of their appearing in series are handled in the lexicon.

Stahlke (1974), however, in his reply to Schachter(1974), suggests the possibility of the following P-marker in which there is a hierarchy between the surface VP's. His example being a directional SVC, we may adapt it to an Anyi equivalent:



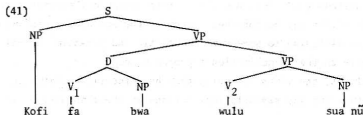
'Kofi enters a sheep into the stable'

In this P-marker, fa 'take' is the higher verb and wuly 'enter' is dominated by an adverbial node. Moreover, the above sentence is one of the examples in which fa can be said to be semantically empty.

We have argued above (1.3.) that the syntactic function of the class of handling verbs is to provide the sentence with another NP-slot. This function is particularly evident when the slot of the handling verbs, V_1 , is filled by semantically empty fa as is the case in (40). On the other hand, the V_2 slot in this construction can only be filled by a semantically full verb, which seems to be a sufficient reason to assume that V_2 has a higher status in the sentence than V_1 . Therefore, (40) does not seem very satisfactory, although there is no major theoretical objection against having the

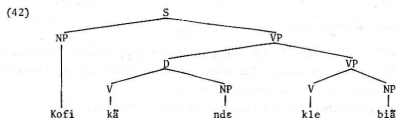
main verb under a lower node.

However, in order to account for the syntactically dependent status of the *fa bwa* phrase, I would suggest creating a node labeled $\bar{D}^{16}$ dominating this dependent phrase:



One advantage of this type of approach over Stewart's proposal (cf. 2.1.) is that semantically full handling verbs may be inserted directly under V_1 (see (44)-(46) below) without positing other underlying sentences or clauses, thus avoiding the epenthetic verb insertion rule as well as equi-NP and equi-*fa*-phrase deletion rules. *fa* 'take' may in this context be considered as the unmarked or even underspecified member of the class of handling verbs. The *fa*-recapitulation rule (step (c) under (39)) can then be handled transformationally as a partial feature copy rule.

Another advantage is that complex verbs can easily be inserted in this structure:

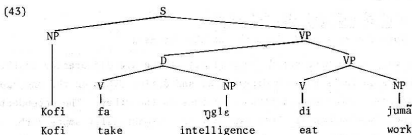


'Kofi says something to the man' (cf. (36) above)

So far, I have treated every string of two surface VP's in the SVC's described in this paper indiscriminately, i.e. one of the VP's as the main

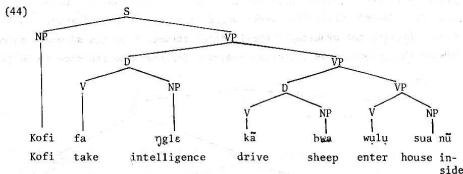
16 For the time being, I leave open what might be a more appropriate label for this node.

one and the other as a dependent phrase according to the function of the verbs. A manner-instrumental construction would thus have the following P-marker:



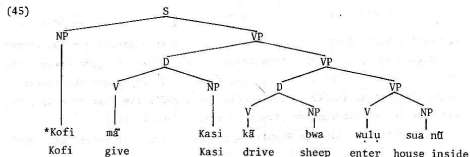
'Kofi works intelligently' (cf. (19) above)

And as it stands now, the above structure is iterative and can thus take care of all the surface VP's of more complex SVC's in the same way by having one main phrase and several dependent phrases:



'Kofi intelligently drives a sheep into the stable'

The following example contains a benefactive phrase:

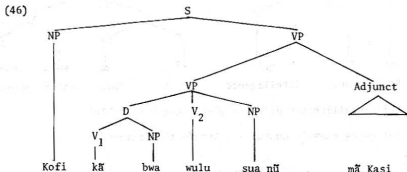


The phrase mã Kasi is then transformationally moved to sentence final position giving:

Kòfí fà bwa wùlù sua. I nù mã Kàsí

'Kofi drives a sheep into the stable for Kasi'

However, as we have noted above (1.3.), there are differences in the restrictions on verbs between directional and dative SVC's on the one hand and benefactive and manner-instrumental ones on the other. The dependent verb in benefactive/manner SVC's can only be a semantically empty verb, whereas the dependent verb in dative/directional ones can be any handling verb. This may be an indication that the dependent phrases have a different status in these two sets of SVC's, which does not necessarily mean that the underlying structure must be different. However, if further research shows that it is preferable to treat benefactive and manner phrases as adjuncts, probably to the VP, then there could be no more than two NP's under the lowest VP node and, therefore, there would be no need for an iterative structure. Leaving the problem of the internal structure of the adjuncts aside, we may then propose the following P-marker for the same sentence as in (45):



The verb dominated by D, V_1 , would thus always be a handling verb, whereas the higher verb, V_2 , must either belong to the class of "give"-like verbs or to the class of motion verbs. The terminal string under the lowest VP being the same as in (42), verb complex type SVC's can just as easily be inserted in the alternative structure exemplified in (46).

If we compare (46) to Stahlke's structure (40), we notice more basic

differences this time. Stahlke's Adv. node probably corresponds to the Adjunct node in (46), which does not dominate the directional phrase as in (40). In Stahlke's proposal, presumably all surface VP's in series except one would be treated as adjuncts.

In this aspect, (46) corresponds to Stewart's underlying structure outlined in the preceding section. Both structures agree with an observation made for Twi in Brown (1972:422) about the complementarity of the NP's in dative and directional phrases, to which he gives the case labels "dative" and "locative", and about their status as opposed to adjuncts:

It will be clear that there are close syntactic parallels between some datives and some locatives, there are also some semantic similarities. [...] and indeed, as we have already noted, dative and locative are considered, at least at the level of functional structure, to be in complementary distribution. This complementarity is within in the nucleus,

Stewart's derivation and (46) also agree on the hierarchy between the verbs in directional and dative SVC's. This hierarchy is accounted for by Stewart by having only one verb in the underlying structure and by inserting the 'take' verb by transformation. In (46), this hierarchy between the main verb and the transitivizing verb (cf. 1.3.) is obtained by adding an extra D node.

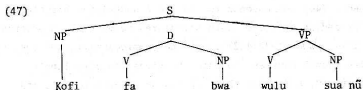
In the above P-markers (41) - (46), I have followed Stahlke (1974) in assuming that there is one VP node dominating all surface VP's in series. However, Schachter (1974:278) maintains that this highest VP node has not been "earned" by Stahlke's argumentation. And as yet, no clear evidence for such a node has turned up in the Anyi material.¹⁷ Therefore, the

17 At least notif the proposed D node is accepted. E.g. the study of Anyi nominalizations has so far not given evidence for such a node. Moreover, in order to derive a surface sentence in which a 3-place verb is followed by its two complements (cf. (27) and (28)) it is probably preferable to have a bi-verbal underlying structure and, subsequently, delete the dependent verb by transformation, because the occurrence of both complements of 3-place verbs in monoverbal context seems highly restricted in Anyi (cf. 1.3., ex. (31) and (32)). (And even more so in Twi where directional SVC's have no monoverbal variant in which verbs such as 'enter' take three arguments.) There would, therefore, be no rule:

following rule may turn out to be superior to the preceding proposals:

$S \rightarrow NP (D) VP$

giving (47) as the P-marker for a directional SVC:



As compared to (46), (47) has the same advantages:

- 1) verb complex SVC's may easily be inserted in this structure;
- 2) the hierarchy provided for by the D node accounts for the syntactic function of handling verbs in dative and directional SVC's;
- 3) benefactive and manner phrases may be added under additional adjunct nodes whose place in the P-marker should be further determined.

Awaiting further research, (47) thus seems to be the most promising underlying structure to account for the observations made on the basis of the available Anyi material.

In conclusion, it is hoped that this paper, in spite of its shortcomings, nevertheless provides a few more insights into serialization in Anyi-Baule and closely related languages. First, it has been shown that sentence conjunction is clearly distinct from serialization in Anyi and apparently also in Akan-Twi and, therefore, that coordination is not a likely source for deriving a serial construction from one underlying sentence.

Secondly, the restrictions on verbs occurring in relational SVC's as well as the verb complex type, the latter including idiomatic SVC's, have been stated in general terms of restrictions on the semantic subclasses of verbs which may appear in these constructions. All but one of the verbs in

VP $\rightarrow$ V NP NP, generating two NP's following one verb, which would be in an "either ... or" relationship with the rule generating multiple verbs. Therefore, the D-phrase can simply be optional.

these SVC's have been shown to have the syntactic function of providing the sentence with another NP-slot. It is because of this important syntactic function of SVC's that an attempt has been made to explain them in syntactic rather than in lexical/semantic terms.

The disadvantages showing up in the course of the derivation of SVC's from a monoverbal underlying sentence have led us to search in the direction of a multi-verbal underlying structure with some kind of hierarchy built in.

References

- Ansre, G. 1966. "The verbid - a caveat to 'serial verbs'", Journal of West African Languages, 3(1):29-32.
- Bamgbose, A. 1974. "On serial verbs and verbal status", Journal of West African Languages, 9(1):17-48.
- Brown, E. K. 1972. Towards a case grammar of Twi, Ph.D. thesis, University of Edinburgh.
- Christaller, J. G. 1875. A grammar of the Asante and Fante language called Tshi, Basel. Republished 1964, Ridgewood: Gregg.
- Lyons, J. 1968. Introduction to theoretical linguistics, Cambridge: Cambridge University Press.
- Retord, G. 1972. L'Agni, variété dialectale Sanvi. Annales de l'Université d'Abidjan, série H-V, fasc. 1.
- Schachter, P. 1974. "A non-transformational account of serial verbs", Studies in African Linguistics, Supplement 5: 263-270.
- Schachter, P. 1974. Reply to Stahlke, Studies in African Linguistics, Supplement 5:278-282.
- Stahlke, H.F.W. 1974. "Serial verbs as adverbs: a reply to Paul Schachter", Studies in African Linguistics, Supplement 5:271-277.
- Stewart, J. M. 1963. "Some restrictions on objects in Twi", Journal of African Languages, 2(2):146-149.
- Stewart, J. M. 1971. "Niger Congo, Kwa" in Sebeok, T. A. (ed.) Current trends in linguistics, 7:181-212. The Hague: Mouton.
- Stewart, J. M. 1977. "Serial verbs in Akan, with special reference to the billiard ball fallacy", Seminar paper, Department of African Linguistics, Leiden.
- Welmers, W. 1973. African Language Structures. Berkeley: University of California Press.
- Westermann, D. 1930. A study of the Ewe Language, London: Oxford University Press.