AN OVERVIEW OF THE NAWURI VERBAL SYSTEM[1]

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This article gives an overview of the phonological, morphological, and syntactic characteristics of verbs in Nawuri, a Kwa language of Ghana. Phonologically, verb roots are maximally trisyllabic. Non-initial syllables are usually drawn from a very restricted set. Historically, these syllables may have been separate morphemes.

Verbal affixes include a causative suffix, a (largely fossilized) derivational suffix roughly similar in meaning to the English prefix /**un-**/, and an incompletive aspect prefix. There is also some limited compounding.

Syntactic phenomena of interest include subject-verb agreement, pre-verbal auxiliaries, and serial verbs. While virtually any verb can occur in a serial construction, there are certain verbs that are especially common in serial constructions. These include the verbs /**sa**/ 'give' and /**taa**/ 'take' as well as certain motion verbs.

Cet article donne un aperçu des caractéristiques phonologiques, morphologiques et syntaxiques du verbe en Nawuri, langue Kwa parlée au Ghana. Du point de vue phonologique, les racines verbales sont au maximum trisyllabiques. Les syllabes pouvant apparaître en position non-initiale sont limitées. Historiquement, ces syllabes ont pu être des morphèmes séparés.

Les affixes verbaux comprennent un suffixe causatif, un suffixe de dérivation sémantiquement analogue au préfixe **un-** de l'anglais, et un suffixe marquant l'imperfectif. Il existe également un nombre limité de composés.

Du point de vue syntaxique, les phénomènes tel que l'accord sujet-verbe, les auxiliaires pré-verbaux, les constructions sérielles, sont parmi les points intéressants de cette langue. Virtuellement, n'importe quel verbe peut apparaître en construction sérielle, pourtant certains verbes y sont particulièrement fréquents, par example les verbes /**sa**/ 'donner' et /**taa**/ 'prendre', ainsi que certains verbes de déplacement.

0. INTRODUCTION

Nawuri is a Guang (Kwa) language spoken by about 10,000 people in the Northern Region of Ghana. This article describes certain aspects of Nawuri verbal morphology and syntax, with particular emphasis on subject and aspect marking, serial verbs, and auxiliaries.[2] It is based on field work carried out in Ghana from June 1985 to May 1988 and from August 1989 to February 1991. Most of the examples in this article are drawn from a corpus of texts (primarily folktales and historical narratives) which were elicited from a variety of Nawuri speakers from several villages.

This article is organized as follows. Section 1 provides some general background information on Nawuri phonology, morphology, and syntax. Section 2 discusses the basic phonological and morphological structure of verb stems. Verbal affixation is the topic of §3, while subject-verb agreement is treated in §4. Section 5 gives a basic overview of VP structure, treating in particular the relative positions of verbal arguments, adverbs, and negation. In §6 I discuss the status of a number of common pre-verbal morphemes which I analyze as auxiliaries, while §7 describes some characteristics of serial verb constructions.

1. BACKGROUND

The segment inventory of Nawuri is given in and (1) and (2). Segments in parentheses are extremely rare.

[1] I would like to thank the numerous Nawuri speakers who supplied the narrative texts from which most of the data in this study is drawn. Special thanks are due to Chris Okumtey-Oklas and Adams Nwumele of Kitare for checking the acceptability of many of the examples used in this article. I would also like to thank Peggy MacEachern, Keith Snider, and especially Hilda Koopman for their helpful comments and suggestions. Any deficiencies which remain are my own responsibility.

[2] Several studies have been done on the phonology of Nawuri, either in isolation or in connection with Guang languages more generally. These include Casali (1988, 1990, forthcoming a,b) and Snider (1989a,b,c, 1990). Aspects of the nominal morphology are discussed in Snider (1988). Nawuri syntax and morphology are treated in Sherwood (1982).

(1) Consonants:

labial		alveolar		palatal		velar/laryngeal		labiovelar
p	p^w	t		tʃ	($tʃ^w$)	k	k^w	kp
b	b^w	d		dʒ		g		gb
f	f^w	s	s^w			h		
m	(m^w)	n		ɲ		ŋ		ŋm
		l						
		r						
				y		w		

(2) Vowels:

	i		u	
	ɪ		ʊ	
	e		o	
	ɛ		ɔ	
		a		

Nawuri has an [ATR] vowel harmony system of the type found in Akan (cf. Clements 1981, 1984, Stewart 1983) and many other Kwa and Gur languages. Within phonological words, non-low vowels generally agree in their value of [ATR]. The language also displays a variety of roundness harmony (Casali forthcoming b). Vowel length is contrastive.

There are two contrastive tone levels in Nawuri, high and low. Falling and rising contours also occur; these may be analyzed as sequences of level tones. There are restrictions on the distribution of both falling and rising tones; rising tones in particular are rather rare. Both downdrift (automatic downstep) and (non-automatic) downstep occur in the language. The tone system is discussed in more detail in Casali (forthcoming a).[3]

The basic word order in Nawuri is SVO. Adjectives, numbers, and determiners follow the head noun; possessive pronouns (identical in form to the corresponding direct object pronouns) precede the head noun. The language has postpositions rather than prepositions.

Subject pronouns in Nawuri are clitics rather than independent words, as evidenced by the fact that several of them do not meet the normal length requirement of independent words, which are minimally CV in Nawuri. Moreover, in contrast to direct object pronouns, they may not occur in isolation as minimal utterances. Finally, those subject pronouns which contain non-low vowels undergo obligatory [ATR] harmony with the following verb stem. (Across word boundaries, [ATR] harmony is optional and gradient.)

With most person/number combinations, there are distinct pronouns for completive and incompletive aspects. This will be discussed in greater detail below.

Nawuri has an extensive system of singular and plural noun class prefixes. For a discussion of the noun class system of Nawuri and Guang languages in general, see Snider (1988).

[3] A large number of the examples in this article have been drawn from texts originally written in the Nawuri orthography. Since this orthography does not represent tone and since I do not presently have access to a Nawuri speaker from whose pronunciation I could systematically check the tones of the examples, I have not generally indicated tones in my transcriptions except in cases where tone is directly relevant to the point under discussion.

2. VERB STRUCTURE

2.1 PHONOLOGICAL STRUCTURE OF VERB ROOTS

Verb roots in Nawuri consist of from one to three syllables. Syllables in Nawuri have the form CV, CV:, or CVN. Onsetless V(N) syllables are permitted exceptionally in word-initial position; in most cases these are identifiable as prefixes. The most common prefixes of this type are certain subject pronoun clitics and noun class prefixes. Native nominal, verbal, and adjectival roots are almost always consonant-initial.

While more than 30% of monosyllabic verb roots have the shape CVN, only about 5% of two- and three- syllable verb roots contain CVN syllables. Nearly all three-syllable verbs consist entirely of light (CV) syllables. In two- and three-syllable verb roots, the vowel of a non-initial syllable is usually /**a**/, /**ɪ**/, or /**i**/. (In final syllables of two-syllable verb roots these vowels may be either short or long.) In three-syllable verb roots, the onset of the second syllable is usually /**l**/, and the onset of the final syllable is usually one of the consonants /**l**/, /**ɾ**/, /**t**/, /**s**/ or /**g**/. These five consonants also account for a sizable majority of the onsets in final syllables of two-syllable verb roots, although /**ŋ**/ is fairly common in this position as well. These facts mean that most non-initial syllables in Nawuri verbs are drawn from a small number of common types. In fact, the syllable types /**la**/ and /**li**/~/**lɪ**/ (with the choice of /**i**/ or /**ɪ**/ determined by vowel harmony processes) account for about 67% of the medial syllables in three-syllable verb roots in my data, while the seven syllable types /**la**/, /**li**/~/**lɪ**/, /**gi**/~/**gɪ**/, /**ɾi**/~/**ɾɪ**/, /**ti**/~/**tɪ**/, /**si**/~/**sɪ**/, and /**ni**/~/**nɪ**/ account for about 64% of the final syllables in two- and three-syllable verb roots.

A rather similar state of affairs exists in the closely-related language Chumburung; this led Hansford (1988) to analyze the common non-initial syllables in Chumburung verbs as separate morphemes, which he termed extensions. In only a few cases, however, was he able to associate a constant meaning with a given extension.

2.2 VERBAL MORPHOLOGY

While it is quite likely that the common non-initial syllables of polysyllabic verbs roots in Nawuri and Chumburung (and other Guang languages) were historically suffixes, it is not clear that they are analyzable as separate morphemes synchronically. In Nawuri, perhaps the strongest case for suffixal status can be made for the syllable /**gi**/~/**gɪ**/, which occurs finally in many two- and three-syllable verbs. An exhaustive list of occurrences in my data is given in (3).

(3)

a.	**bugi**	open	n.	**sugɪ**	put down a load
b.	**tʃigi**	uproot	o.	**sugɪ**	lodge with
c.	**puligi**	dig out	p.	**sugɪ**	remove from fire
d.	**tigi**	open	q.	**wʊrɪgɪ**	pour
e.	**fugi**	fly	r.	**yɛɛgɪ**	stop
f.	**baragɪ**	share	s.	**bagɪ**	give way
g.	**dɪlɪgɪ**	undress	t.	**kpalagɪ**	vomit
h.	**fɔgɪ**	sweep	u.	**kpɪlɪgɪ**	dismount
i.	**fɔlagɪ**	peel (fruit)	v.	**ŋalagɪ**	melt
j.	**kʊʊgɪ**	give birth	w.	**ŋɛlɪgɪ**	shine
k.	**tʃɛɛgɪ**	change	x.	**yɛlagɪ**	be broad
l.	**mɛɛgɪ**	scrutinize	y.	**yɔlɔgɪ**	grow weak
m.	**mɔlɔgɪ**	save			

Many of these verbs refer to events which involve the removal of something or the reversal of a state or condition. This is transparently so in the case of (3a,b,c,d,g,i,n,p,q,r,t,u) and arguably so in the case of a few others, notably (3h,y). This suggests analyzing /**gi**/~/**gɪ**/ as a suffix with a function similar to the **un-** or **re-**

prefixes in English. What makes this analysis somewhat less attractive is that the roots it implies (i.e., the mono- or bisyllabic portions preceding /gi/~/gɪ/) do not generally exist as independent forms capable of occurring without /gi/~/gɪ/. The sole exception of which I am aware is (3d), which appears to be related to the verb root /tii/ 'close'. Even in this fairly convincing case, however, a synchronic analysis of /gi/~/gɪ/ as a suffix would need to account for the difference in vowel length between the 'root' /ti/ in /tigi/ and the verb /tii/, for which there is no general independent explanation. It appears then that while there is strong evidence for analyzing /gi/~/gɪ/ as a morpheme, at least historically, it is not a productive suffix synchronically.

Reduplication, which is common in nouns and adjectives, is almost non-existent in verbs.[4] There is however limited evidence of a type of reduplication which may have been formerly productive, in that two- and three-syllable verbs of the form C_iIC_iVX (where the two consonants labeled C_i are identical and **I** is a high vowel whose values of [ATR] and [round] are determined by regular harmony processes) are unexpectedly common. Some examples are given below.

(4)

a.	**tʃɪtʃaa**	shiver
b.	**sʊsʷaa**	grease
c.	**dɪdɛɛ**	go steadily
d.	**kukʊɾi**	lift up
e.	**tʃʊtʃʊʊ**	suck

These examples could be explained as due to a reduplication process which prefixes a CV syllable consisting of a copy of the first consonant of a root plus a high vowel, whose values of [round] and [ATR] are determined by regular harmony processes in the language.[5] It should be noted however that there are no indications that the process is synchronically productive: the hypothetical roots from which the reduplicated forms would have been derived are in general unattested in the present-day language.

A similar reduplication process plays a limited role in deriving adjectives from verbs. In this case there are actual morphological alternations:

(5)

ADJECTIVE		VERB	
kʊkʷɪ	be different	**kʷɪ**	differ
fufuli	white	**fuli**	be white[6]
dɪdaa	old	**daa**	surpass in years

Although the morphological relatedness in these examples is clear, the process is of very limited productivity, as the words in (5) constitute the only clear examples I have found.

Compounding is also rare in verbs, though common in nouns. One type of compounding which does occur involves the combination of a copula-like element /**bʊ**/[7] with a nominal or adjectival root, as in (6).

(6)

a.	**bʊ-lʊŋ**	be strong	(cf. **ɔ-lʊŋ** strength)
b.	**bʊ-kɔŋ**	be sweet	(cf. **ɔ-kɔŋ** sweetness)
c.	**bʊ-sɪŋ**	be difficult	(cf. **a-sɪŋ** controversy)
d.	**bʊ-yɛɛ**	be sharp	

4 Reduplication is not a productive morphological process in nouns or adjectives, i.e., there are no morphological distinctions that are encoded by reduplication. It is quite common, however, to find nouns and adjectives which contain adjacent segmentally identical CV, CVN, or CVCV sequences, e.g.,/**tɔlɪtɔlɪ**/ 'smooth', /**yoliyoli**/ 'fresh', /**lala**/ 'big', /**kpaŋkpaŋ**/ 'type of fish', /**kɔŋkɔŋ**/ 'bat'. The repeated half in these cases is not isolable, i.e., it cannot occur as an independent word or in combination with other morphological elements. There does not seem to be any stem /**tɔlɪ**/ 'smooth' for example that occurs in other contexts. There are also a few instances (see below) where adjectives are derived from verbs via reduplication.

5 Hansford (1988) posits a reduplication process of this type in Chumburung. This type of reduplication occurs productively in Nupe (Smith 1969).

6 The word /**fuli**/ 'be white' does not occur in my own data, but is found in Snider (1989a).

7 /**bʊ**/ also occurs commonly as a locative verb, as in **ɔ bʊ ndɔɔ** 'he is at the farm', **ɔ maŋ bʊ tɔ** 'he is not there'.

e. **bʊ-nsʷɪɪ** be tall/long (cf. **nsʷɪɪ** length)
f. **bʊ-dʒa** be hot
g. **bʊ-lɪlɪɪ** be bitter (cf. **lɪlɪɪ** bitter)

This process is of limited productivity; it is restricted to a small number of lexical items like those in (6).

3. AFFIXATION

As in many languages, it is not always obvious whether certain morphemes in Nawuri should be regarded as affixes or independent words. There are a number of "quasi-aspectual" verbal morphemes, for example whose phonological behavior (i.e., the fact that their non-low vowels undergo obligatory [ATR] harmony with a following verb root) suggests that they are prefixes, although in other respects they behave as independent words. These particular morphemes, which I analyze as auxiliary verbs, will be discussed in detail in §6. In the present section, I consider two morphemes which are more readily analyzable as bound affixes: a causative suffix **/a/~/aa/~/la/** and an incompletive aspect prefix **/i/~/ɪ/**.

3.1 CAUSATIVE SUFFIX

There are a number of intransitive verbs in Nawuri which have corresponding transitive forms that end in a sequence **/a/~/aa/~/la/**. The transitive form generally stands in a causative semantic relationship to the intransitive form. Some examples are shown in (7). These examples represent most of the clear cases of this type of transitive-intransitive pair in my data. I have not yet attempted to systematically elicit pairs of this type, however, and it is therefore not yet clear to me how productive this suffixation process is in present-day Nawuri.[8]

(7)

	INTRANSITIVE	TRANSITIVE	GLOSS
a.	**yɪlɪ**	**yɪlaa**	stand / set
b.	**kʊsʊʊ**	**kʊsʷaa**	arise / lift up[9]
c.	**bʷii**	**bʷiiaa**	return
d.	**biliŋi**	**biliŋaa**	turn
e.	**dii**	**diiaa**	climb / raise
f.	**dɪ**	**dɪɪla**	sleep / put to sleep
g.	**dɛɛ**	**dɛɛla**	burn / light (fire)
h.	**pɔɔ**	**pɔɔla**	be soft / soak
i.	***pɛɛ**	**pɛɛla**	be red / make red

The asterisk preceding [**pɛɛ**] in (7i) indicates that this form is not attested synchronically as an independently occurring verb, the present-day form of 'be red' being [**pɛy?**].[10] There is however an adjective **/pɪpɛɛ/** 'red', in which the initial syllable **/pɪ/** is almost certainly the result of the type of reduplication discussed in §2.2 above. The obvious relatedness of **/pɪpɛɛ/** and **/pɛɛla/** would seem to justify recognizing **/pɛɛ/** 'be red' as a (bound) morpheme in present-day Nawuri, which may have existed in the past as a free form. The pairs in (7) seem to be related by a suffixation process. Although predicting the form of the suffix is not entirely straightforward, the following generalizations account for most of the data (taking the root to be identical to the intransitive form):

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[8] The transitive form of (7a) also appears in my data as [**yɪla**], with a short final vowel. I believe that this is not a transcriptional error, but that both forms actually occur. I am unable to say at present, however, what factors govern the variation.

[9] This form also appears in my data as [**kʊsaa**]. I am not sure whether there is inter-speaker variation or whether one of the forms is simply due to a transcriptional error.

[10] The phonemic representation of this and a number of other words ending in [**y?**] is not entirely clear. In Casali (1988), I argued for an underlying representation **/payɪɪ/**. Although it is supported by several pieces of indirect evidence, this analysis is by no means the only one possible.

1. If the root is polysyllabic, its final vowel is replaced by **/aa/**.[11]
2. If a monosyllabic root ends in **/ii/**, the transitive suffix takes the form **/aa/**.
3. Other monosyllabic roots take the suffixal form **/la/**.

Left unaccounted for by these rules are the labialization on the transitive form in (7b) and the vowel length change in the root in (7f).

3.2 INCOMPLETIVE ASPECT PREFIX

Nawuri does not mark a distinction between past and present tense; instead, there is a distinction between COMPLETIVE and INCOMPLETIVE aspects. With full NP (as opposed to pronominal) subjects, incompletive aspect is marked with a prefix which is realized phonetically as **[i]** if the following vowel is [+ATR] and **[ɪ]** if the following vowel is [–ATR]:

(8) a. **tʃaapaa i-kpe gali**
spider INC-go[12] funeral
Spider is going to the funeral.

b. **ɪmalɪfa i-su**
guns INC-cry
The guns are firing.

c. **mampaŋ ɪ-baa**
Mampaŋ INC-come
Mampaŋ is coming.

d. **kɪtɪ ɪ-dʒa mʊ**
lizard INC-chase 3s^OBJ
The lizard is chasing him.

In contrast, completive aspect is signaled by the absence of an overt prefix:

(9) a. **yaa ba anaatu asɪ**
Yaa come Anatu near
Yaa came near Anatu.

b. **fʊlɪ loo mʊ gadɔɔ tɔ**
antelope enter 3s^OBJ farm at
An antelope entered his farm.

c. **owura mʊ tɪɪ mʊ tʃɛmɪnɛɛ**
chief the call 3s^OBJ friend
The chief called his friend.

The prefix **/i/~/ɪ/** does not occur with incompletive verbs that have pronominal, rather than NP, subjects. Instead, incompletive aspect with pronominal subjects is marked by using a different form of the subject pronoun clitic, as shown in the examples in (10):[13]

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[11] The disappearance of the final root vowel before **/aa/** actually has an independent phonological explanation, since short vowels are regularly elided before another vowel in Nawuri (Casali 1988, forthcoming a). The morphological process may therefore be limited to suffixation of **/aa/**.

[12] The abbreviations used in this article are: CNRD - concord; COMP - completive; EMPH - emphatic; INC - incompletive; INTS - intensifier; OBJ - object; Q - question marker; SUB - subordinate; TOP - topicalization.

[13] It should be noted that although the incompletive forms in (10) (and (8)) seems to imply present tense, this is purely an artifact of the way they have been glossed. In an appropriate context, incompletive aspect can also be used with reference to a past (or future) event (relative to the time of the utterance), as for example in the following sentence:

ba bʊ tɔ ba nu mʊ, e su
they be there they listen SUB 3s-INC cry
As they were there listening, she was crying.

(10)

	COMPLETIVE ASPECT	INCOMPLETIVE ASPECT
a.	**o fugi**	**e fugi**
	3s fly	3s fly
	He flew.	He is flying.
b.	**ba kpe**	**bee kpe**
	3p go	3p go
	They went.	They are going.

The full set of pronouns used with the completive and incompletive aspects is given in (11). (**N** represents a nasal consonant that is homorganic with an immediately following consonant. The alternate forms of some pronouns are due to the existence of [ATR] harmony: the pronoun vowels harmonize with the first vowel in a following verb.)[14]

(11) Forms of subject pronouns with completive and incompletive aspects:

	COMPLETIVE	INCOMPLETIVE
1st person singular:	**syllabic N**	**syllabic N**
2nd person singular:	**fu/fʊ**	**fii/fɪɪ**
3rd person singular:	**o/ɔ**	**e/ɛ**
1st person plural:	**aN**	**aN**
2nd person plural:	**faN**	**faN**
3rd person plural:	**ba**	**bee/bɛɛ**

Clearly, it would be satisfying if the form of each incompletive pronoun could be derived by regular phonological rules from a combination of the corresponding completive pronoun plus the same prefix /**i**/~/**ɪ**/ which marks the incompletive aspect with full NP subjects. In the case of the 3rd person plural, this would in fact be possible. Since there is a regular process in the language which converts a sequence of vowels /**a**+**i**/ to [**ee**] and a sequence /**a**+**ɪ**/ to [**ɛɛ**] when these sequences arises across a word boundaries, we would expect pronunciations like the following, which are in fact attested:

(12)

a.	**ba**	**i-kpe**	→	**beekpe**
	3p	INC-go		They are going.
b.	**ba**	**ɪ-ba**	→	**bɛɛba**
	3p	INC-come		They are coming.

I can see no way of making this kind of analysis work in general however. Consider for example the derivations which would have to be posited in the case of the second person singular pronoun:

(13)

a.	**fu**	**i-kpe**	→	**fiikpe**
	2s	INC-go		You are going.
b.	**fʊ**	**ɪ-ba**	→	**fɪɪba**
	2s	INC-come		You are coming.

Elsewhere in the language, /**u**/ and /**ʊ**/ are regularly converted to [**w**] before a non-round vowel (with compensatory lengthening of the latter), e.g., /**fʊ ɪpʊ**/ 'your soup' surfaces as [**f^{w}ɪɪpʊ**]. A rule which simply deletes /**u**/ or /**ʊ**/ before another vowel (with compensatory lengthening) would have no precedent, and would apply only in the case of these particular pronouns. Similarly, in the case of the third person singular pronouns, a rule converting /**o**/+/**i**/ to [**e**] and /**ɔ**/+/**ɪ**/ to [**ɛ**] would have no precedent in the language: elsewhere these sequences are realized as [**^{w}ee**] and [**^{w}ɛɛ**] respectively.

14 The third-person pronouns given in (11) are the forms used with *animate* subjects. Other pronouns are used for inanimate subjects; these are generally identical in form to the class prefix of the noun class to which the referent belongs. (See §4 below).

While it would of course be possible to formulate minor morphological rules applying only in the specific context desired, it is not clear that anything would be gained by this. Note moreover that such an analysis could not in any case apply to the remaining persons, since in these persons the forms of the completive and incompletive aspect pronouns are simply identical.[15] With the possible exception of the third person plural forms, then, it seems necessary to analyze the incompletive subject pronouns as portmanteau morphemes, at least synchronically.

The difference between completive and incompletive aspects is marked not only by differences in the segmental forms of the subject pronouns used with each aspect, but by tonal differences as well. Although the pronouns themselves are uniformly low-toned in both aspects, there are differences in the tonal patterns of verbs in the two aspects. The most common set of verbs, which has a LH citation tone melody (realized as LLH on three-syllable verbs, as LH on two-syllable verbs, as a L-H rise on monosyllabic, bimoraic verbs, and as level H on CV verbs), for example, displays a level H pattern in the completive aspect but a H↓H pattern in the incompletive aspect, as in the following data:

(14) a. **ʧ ìŋí** wake up
b. **ò ʧíŋí** (s)he woke up
c. **è ʧí↓ŋí** (s)he is waking up

d. **lòó** weave
e. **ò lóó** (s)he wove
f. **è ló↓ó** (s)he is weaving

Although the matter has not been systematically investigated, these same tonal differences apparently apply with full NP subjects as well, cf. **[gìdʒìmb^{w}í fúgí]** 'vulture flew (completive)', **[ànáá↓tú í-sú↓lá]** 'Anatu is carrying it (incompletive)', where **[fugi]** 'fly' and **[sula]** 'carry' are verbs in the same tonal class as **[ʧíŋi]** 'wake up' whose behavior is exemplified in (14).

4. SUBJECT-VERB AGREEMENT

Nawuri displays a type of subject-verb agreement in which a noun in subject position may have its noun class prefix repeated as the initial element of the verb phrase. There are seven different singular-plural noun class pairings; the prefixes for these noun class pairings are as shown in (15). (**/gɪ-/** is realized as **[gi]**, **[gɪ]**, **[gu]**, or **[gʊ]**, depending on [ATR] and roundness harmony. **/O/** is realized as **[o]** or **[ɔ]**, while **/I/** is realized as **[i]** or **[ɪ]**, subject to [ATR] harmony. **/N/** represents a nasal consonant homorganic with the initial consonant of the stem.)

(15)

SINGULAR	PLURAL
gI-	**a-**
O-	**I-**
ga-	**N-**
gI-	**I-**
O-	**a-**
Ø	**a-**
Ø	**I-**

As is commonly the case in languages with noun classes, there is a strong, though far from exceptionless, correlation between some of the noun classes and certain semantic groupings. For example, nouns referring to animate beings tend to belong to the **/O-/**

15 It is possible that at least some speakers have a distinct incompletive second person plural form **ɲɛɛn/ɲɛɛŋ** (depending once again on vowel harmony). I have only mimimal data bearing on this issue, however, and further investigation is definitely needed.

singular and /**a-**/ plural classes, while nouns referring to liquids usually take /**N-**/. (These nouns, being mass nouns, generally do not have distinct singular forms.)

Agreement occurs with the singular noun class prefixes /**ga-**/ and /**gI-**/, and with the plural noun class prefix /**a-**/. This is illustrated in (16), where the noun class prefixes and their concordial copies are italicized.

(16) a. ***gɪ*-naansɪ *gɪ* ɲɛ agbʊ**
snake CNRD get anger
The snake got angry.

b. ***gi*-buu mʊ *gɪ* tɛɛ gasɪ**
stone the CNRD fall ground
The stone fell to the ground.

c. ***ga*-b^{w}ɪ *ga* ɪ-ba**[16]
goat CNRD INC-come
The goat is coming.

d. ***ga*-bii mʊ *ga* kpe**
child the CNRD go
The child went.

e. ***a*-tʃembee *a*-nɪmʊʊ *a* waa gaa**
corn these CNRD do much
This corn grew plentifully.

Example (16e) shows, incidentally, that demonstratives also display noun class agreement with a head noun: the corresponding singular sentence is **gi-tʃembee gɪnɪmʊʊ gɪ waa gaa**. Unlike many languages with this type of concord, numerals in Nawuri do not show agreement however, nor does the determiner /**mʊ**/, as shown by examples (16b,d).

Subject-verb agreement is not obligatory; the sentences in (16) have well-formed counterparts without the noun class concord markers, as in the following examples:[17]

(17) a. **gɪ-naansɪ ɲɛ agbʊ**
snake get anger
The snake got angry.

b. **gi-buu mʊ tɛɛ gasɪ**
stone the fall ground
The stone fell to the ground.

c. **ga-b^{w}ɪ ɪ-ba**
goat INC-come
The goat is coming.

For reasons that are not clear, agreement is more marginal with the other noun class prefixes. In the case of /**N-**/, some speakers I have spoken to find sentences like (18) odd at best:[18]

16 The sequence /**ga ɪba**/ in this example undergoes a regular process and is realized phonetically as [**gɛɛba**].

17 A native speaker I consulted did not accept **a-tʃembee a-nɪmʊʊ waa gaa** as a well-formed counterpart of (16e), although he accepted the sentences in (17). I am not sure what the reason for this might be, although the fact that he unequivocally accepted the same sentence with the determiner /**mʊ**/ in place of /**a-nɪmʊʊ**/, i.e., **a-tʃenbee mʊ waa gaa** suggests a preference for subject-verb agreement in sentences which have agreement within the subject NP (in this case between /**a-tʃenbee**/ and **a-nɪmʊʊ**).

18 The same sentence with /**ba**/ 'they' used in place of /N/ is fine however: **m-baa ba bʊ ndɔɔ tɔ**. It may be that /**ba**/ is replacing /**N**/ as the agreement marker for this class. (NP-internal agreement is never marked by /**ba**/, however, but only by /**N**/, cf. **m-bwɪɪ lɪbɪ ŋ-kʊʊ** (spirits bad some) and not ***m-bwɪɪ lɪbɪ ba-kʊʊ**).

(18) **m-baa m bʊ ndɔɔ tɔ**
wasps be farm at
There are wasps at the farm.

With /**i-**/~/**ɪ-**/ and /**o-**/~/**ɔ-**/, concord seems to be possible but infrequent. Some examples in which it does occur are given in (19):

(19) a. **kpe gɛ o-wuɾa o wu fʊ gɪwɛɛ**
go so^that chief see 2s^OBJ pity
Go so the chief will have pity on you.

b. **mɪmʊʊ ɪ daŋ i tiɾi paa**
these CNRD INTS CNRD be^important very
These things are very important.

5. OVERVIEW OF VP STRUCTURE

In this section the inventory and distribution of the elements which occur in the Nawuri VP are characterized briefly. This will set the stage for the more detailed discussion of verbal auxiliaries and serial VP constructions in §§6 and 7.

5.1 ARGUMENTS OF V

Intransitive, transitive, and ditransitive verbs all occur in Nawuri, although the latter are few in number. A few of those which do occur are listed in (20).

(20) a. **sa** give
b. **paala** loan
c. **dʒaga** place
d. **kaapʊ** show
e. **ka** pay
f. **yii** stab

Sentences illustrating some of these verbs are given below:

(21) a. **ba sa lɔŋɔ adʒitɔ**
3p give rabbit food
They gave the rabbit food.

b. **paala mɪ ɔdʒaŋ**
loan 1s^OBJ thigh
Loan me a thigh (meat).

c. **ba yii mʊ giŋambi**
3p stab 3s^OBJ needle
They stabbed him with a needle.

There are also verbs which take sentential complements. Common among these are verbs expressing psychological states, as illustrated in the sentences in (22), and speech verbs as in (23). The former type of verb generally takes a complementizer /**fɛɛ**/, while the latter generally takes a complementizer /**yɛ**/.[19]

19 It is not entirely clear whether /yɛ/ is to be regarded as a complementizer or a speech verb. The sentences in (23) would also be grammatical without the verb /**tɔwɪ**/ 'speak', e.g., **ɔ yɛ n suŋ gabii** is acceptable as an alternate form of (23a). This same sentence is not grammatical without /**yɛ**/ however: ***ɔ tɔwɪ n suŋ gabii**. /**yɛ**/ is apparently restricted to contexts in which it is followed by a direct or indirect speech quotation, e.g., it is not acceptable to say something like ***ɔ yɛ bileŋ** 'he speaks quickly'. (Contrast this with **ɔ tɔwɪ bileŋ** 'he speaks quickly', which is acceptable.) It would seem plausible, then to regard /**yɛ**/ as a verb roughly equivalent in meaning to English 'say'. Constructions involving the sequence **tɔwɪ yɛ X** would then be regarded as serial verb constructions (see §7 below) translatable as 'speak saying X'.

(22) a. **n tamaa fɛɛ ɔ ba**
1s hope COMP 3s come
I hope that he came.

b. **o nu fɛɛ m ba**
3s hear COMP 1s come
He heard that I came.

c. **k^{w}amɪ kɪɪ fɛɛ ɔ maŋ kɪɪrɪ**
Kwame look COMP 3s not be^fat
Kwame observed that he wasn't fat.

(23) a. **ɔ tɔwɪ yɛ n suŋ gabii**
3s say COMP 1s send child
She says I should send a child.

b. **ba taasɪ mʊ yɛ ɔ sʊ afulee**
3p ask 3s^OBJ COMP 3s have money
They asked him if he had money.

There are also verbs which take a sentential complement with a semantically empty subject pronoun /**i**/~/**ɪ**/:

(24) **ɪ dagaa fɛɛ ba kpe tʊtɔ**
it be^necessary COMP 3p go there
They need to go there.

Predicates expressed in English using a single ditransitive verb are often expressed in Nawuri instead by means of serial verb constructions, as in the examples in (25). This is of course a common feature of Kwa languages.

(25) a. **taa deebi ba**
take knife come
Bring a knife.

b. **taa mfɔlɪ waa ɲtʃu mʊ tɔ**
take salt do water the in
Put the salt in the water.

As stated previously, the basic word order in Nawuri is SVO; NP and PP arguments follow the verb in almost all circumstances. The only significant exception involves VP's which are nominalized through the prefixation of a singular noun class prefix /**gi-**/~/**gɪ-**/ to the verb; in such cases, an NP object precedes the verb, as in the examples in (26).[20]

(26) a. **o ɲi tʃeetʃee gi-dii**
3s know bicycle climbing
She knows how to ride a bicycle.

b. **o ɲi ɔkɪŋ gɪ-kɪta**
3s know fish catching
He knows how to catch fish.

5.2 ADVERBS

There are comparatively few adverbs in Nawuri. Some examples of those which do occur are listed in (27).

[20] I have no examples of nominalized ditransitives.

(27) a. **bileŋ** quickly
b. **tʃɛɛtʃɛɛ** correctly
c. **gɪyaŋ** uselessly

Adverbs always follow the verb and its arguments, as in the examples in (28).

(28) a. **ɔ waa bileŋ**
3s do quickly
She went quickly.

b. **ba tʃɔɾɔɔ tʃɛɛtʃɛɛ**
3p write correctly
They wrote correctly.

c. **fʊ ba mfɪɪ gɪyaŋ**
2s come here uselessly
You came here for no reason.

d. **e kpe ɲtʃu mʊ tɔ bileŋ**
3s-INC go water the at quickly
She is going to the water quickly.

Some adverbs are commonly reduplicated; this has the result of intensifying the meaning of the original adverb:

(29) **ɔ sɪlɪ bileŋ bileŋ**
3s run quickly quickly
He ran very quickly.

5.3 NEGATION

There are two negation markers in Nawuri: a morpheme **/maŋ/** and a morpheme **/mee/~/mɛɛ/** (with the choice of allomorph of the latter determined, as in so many other cases, by vowel harmony with a following morpheme). Examples of these morphemes are shown in (30) and (31).

(30) a. **ɔ maŋ sa bamʊ adʒitɔ**
3s not give 3p^OBJ food
He didn't give them food.

b. **ba maŋ wu bamʊ ɲii**
3p not see 3p^OBJ mother
They didn't see their mother.

c. **ɔ maŋ bʊ tɔ**
3s not be there
She isn't there.

d. **maŋ dʒɪ falɪ**
not be thus
It's not like that.

e. **gɪtʃaŋ mɔɔ maŋ sʊ ɪɲini**
guinea^fowl CONTRAST not have hair
For his part, Guinea Fowl doesn't have hair.

(31) a. **ɔ mɛɛ taalɪ wɪ gunuŋ gɪnɪmʊʊ lʊwɪ mʊ ŋkuŋ**
3s not be^able chew meat this finish 3s^OBJ alone
He is not able to finish eating the meat alone.

b. **ɛ wɪ ɔ mɛɛ sa mʊ dʒoonɔ**
3s^INC chew 3s not give 3s^OBJ dog
When she ate she didn't give (food to) her dog.

c. **ɔ mɛɛ tɔwɪ**
3s not speak
He doesn't speak. (of dumb person)

d. **saamʊ ba mɛɛ ɲɛ mfɔlɪ bee dʒi**
then 3p not get salt 3p^INC eat
At that time they couldn't get salt to eat with.

e. **dʒabʊwa mɛɛ tʃɪna gatɪŋ kʊlʊŋ**
dʒabʊwa not sit place one
Dʒabʊwa doesn't stay in one place (very long).

Both negative morphemes always precede the verb and occur in absolute initial position in the verb phrase, before any auxiliaries which precede the main verb. (Examples involving negation and auxiliaries are shown in §6.)

While I have not systematically investigated the differences between **/maŋ/** and **/mee/~/mɛɛ/** with the help of a Nawuri speaker, the distribution of these morphemes in text material suggests that the former is used to indicate negation alone, while the latter is a portmanteau morpheme that marks both negation and incompletive aspect. Thus nearly all of the instances of **/mee/~/mɛɛ/** in the approximately 36 pages of text material I looked at were used in environments where either incompletive aspect was marked on adjacent (non-negated) verbs referring to the same discourse situation (cf. (31b)) or else it was clear from the surrounding context that the state of affairs described by the verb was a continuing one. The morpheme **/maŋ/** (which is much more common), on the other hand, seems to be useable either where a punctilear interpretation of an event (or non-event) is specifically intended (cf. (30b), which describes a situation in which children had just rushed into a room anxiously hoping to see their mother) or else where the continuing or non-continuing nature of a state of affairs is obvious from the context and/or of little importance. It also seems to be the case that certain stative verbs (and copulas) require **/maŋ/** rather than **/mee/~/mɛ/**, e.g., **/sʊ/** 'have', **/ɲi/** 'know', **/dʒɪ/** 'be (non-locative)', **/bʊ/** 'be (locative)', although this requires further investigation.

The claim that **/mee/~/mɛɛ/** is a portmanteau morpheme marking both negation and completive aspect is supported by the fact that the contrast between incompletive aspect pronouns and ordinary (unmarked) pronouns is neutralized before negation markers: only the ordinary subject pronouns occur in this context. The prefix **/i/** which marks incompletive aspect with full NP subjects also fails to surface in negation contexts. (***dʒabʊwa mɛɛ ɪ-tʃɪna gatɪŋ kʊlʊŋ**, corresponding to (31e), for example, is ill-formed.) This is easily explained if we assume that aspect in negation contexts is signaled instead by marking (or absence of marking) on the negation morpheme itself. Note also that the phonological difference between **/maŋ/** and **/mee/~/mɛɛ/** is formally nearly parallel to that between the ordinary (aspectually unmarked) third person plural pronoun **/ba/** and its incompletive aspect counterpart **/bee/~/bɛɛ/**. In fact, just as there is some justification for regarding the latter as derived by phonological rule from **/ba/** + **/i/~/ɪ/** (where **/i/~/ɪ/** is the incompletive aspect prefix), it is also tempting to derive **[mee]~[mɛɛ]** from **/maŋ/** + **/i/~/ɪ/**. Such a source would of course entail the deletion of the final nasal of **/maŋ/** as well as the coalescence (amply attested in other contexts) of **/a/+/i/** to **[e]** or **/a+ɪ/** to **[ɛ]**. There is a precedent for positing this deletion, in that final nasals in some other grammatical morphemes are sometimes deleted intervocalically, as in (32).

(32) **ɪmɪmʊʊ ɪ daŋ i tiri paa**
these CNRD INTS CNRD be^important very
These things are very important.

→ **[ɪmɪmʊʊ ɪ dee tiri paa]**

In the case of (32), however, coalescence may be blocked in sufficiently careful speech and native speakers are clearly aware of the original morphemic composition of **[dee]**. In the case of **[mee]**~**[mɛɛ]**, on the other hand, I have seen no indication that speakers consciously regard this as derived from **/maŋ/** + **/i/**~**/ɪ/**. Regardless of whether such a derivation may be regarded as synchronically productive, however, it is entirely plausible as a historical source of **/mee/**~**/mɛɛ/** and provides support for the hypothesis that the difference between this morpheme and **/maŋ/** involves aspect-marking.

6. VERBAL AUXILIARIES

There are a number of common morphemes in Nawuri which are found preceding the main verb and serve a kind of aspectual function, modifying or further specifying the temporal or pragmatic properties of a predicate (e.g., degree of speaker commitment to the truth of a proposition). Some examples are in (33).

(33) a. **tee/tɛɛ** already
b. **bɪla** again
c. **wʊlaa** already
d. **naa** (expresses intention)
e. **daŋ** (intensifier)
f. **pɪɪ/pii** yet[21]
g. **kaŋ** (lack of speaker commitment to factuality of proposition)

None of these morphemes can occur as an independent verb in the language, i.e., sentences like those in (34) (in which **/ɔ/** is the animate third-person singular subject pronoun) are ill-formed:[22]

(34) a. ***ɔ wʊlaa**
b. ***ɔ bɪla**
c. ***ɔ naa**

Each auxiliary must be directly followed either by an independent verb, as in (35), or by another auxiliary, as in (36):

(35) a. **o tee dʒi**
3s already eat
She already ate.

b. **fʊ bɪla ba**
2s again come
You came again.

---

21 **/pɪɪ/**~**/pii/** is a negative polarity item which must be preceded (and presumably c-commanded) by the negative marker **/maŋ/**.

22 The auxiliary **/naa/** is segmentally homophonous with a verb **/naa/** 'walk'. Although Sherwood (1982) analyzed these as the same morpheme, I do not find this analysis very plausible. To begin with, there are tonal differences: while the **/naa/** 'walk' bears a high tone in completive contexts and a II to ↓H falling contour in incompletive contexts (like a great many other independent verbs in Nawuri), the auxiliary **/naa/** seems to be generally low-toned, though it may bear a H to L falling contour after a preceding high-toned word, in accordance with a general rule of high tone spreading that exists in the language. (The tonal behavior of the auxiliary **/naa/** has not however been throughly investigated, and I am not completely certain that this is the whole story.) While one might try to attribute these tonal differences to the different syntactic contexts in which **/naa/** occurs, it is not clear to me that this can be done in a principled way. Also, while the extension of generic motion verbs like 'go' and 'come' to use as auxiliaries or aspect particles is well-attested cross-linguistically, such a development from a rather specific verb like 'walk' is not. Finally, I have observed no evidence to suggest that Nawuri speakers regard these as the same morpheme.

c. **daŋ waa falɪ**
INTS do that
Just do that!

d. **ba maŋ pɪɪ ba**
3p not yet come
They haven't come yet.

(36) a. **kpaaraa tɛɛ bɪla lɪɪ**
squirrel already again came^out
The squirrel went out again.

b. **ɔ bɪla naa taa kpaasi**
3s again go^to take rat
He went and took the rat again.

c. **ɔ daŋ bɪla kpe mʊ**
3s INTS again go SUB
If he goes again, . . .

This restriction raises the question of whether these morphemes might better be treated as prefixes rather than independent words. An additional point in favor of this suggestion is the fact that the auxiliary /**tee**/~/**tɛɛ**/ undergoes obligatory [ATR] harmony with a following morpheme, as shown in (37). (Recall that obligatory [ATR] harmony normally applies only within words in Nawuri.)

(37) **o tee dʒi** (S)he already ate.
ɔ tɛɛ ba (S)he already came.

Note that this particular auxiliary is the only one which is potentially subject to [ATR] harmony, since it is the only one whose final vowel is non-low. (The low vowel /**a**/ is opaque to [ATR] harmony in Nawuri, as in many other [ATR] languages.)

There is other evidence, however, which argues that the auxiliaries are independent words rather than affixes. In an auxiliary plus verb sequence, it is possible for both the auxiliary and the verb to be preceded by pronoun clitics or concord markers. These must agree in person and number, but may in some cases differ in aspect. Examples involving the auxiliaries /**bɪla**/, /**naa**/, /**daŋ**/, /**kaŋ**/ and /**tee**/~/**tɛɛ**/ are given in (38).

(38) a. **ɔ maŋ bɪla ɛ taalɪ ɛ waa gusuŋ**
3s not again 3s^INC able 3s^INC do work
He is no longer able to work.

b. **ɔ maŋ bɪla ɔ ba gawu**
3s not again 3s come home
He won't come home again.

c. **ɔ bɪla ɛ kɪɪ**
3s again 3s^INC look
She is looking again.

d. **ba naa bɛɛ tɔ ɪbatʃaga**
3p go^to 3p^INC burn ɪbatʃaga
They go around burning ibachaga (a type of plant).

e. **ɛ daŋ e loo kotoku mʊ tɔ**
3s^INC INTS 3s^INC enter sack the in
Just as he was entering the sack, . . .

f. **ɛ daŋ ɛ sawo**
3s^INC INTS 3s^INC cry
He is crying.

g. **ɔ daŋ ɛ dɪ obu-to**
3s INTS 3s sleep room-in
She is sleeping in the room.

h. **ɔ kaŋ ɛ ba mʊ n biti n sa mʊ afulee**
3s if 3s^INC come SUB 1s want 1s give 3s^OBJ money
If she comes, I'll give her money.

i. **ɔ kʊmaa tee e dʒi**
3s every already 3s^INC eat
Everyone was already eating.

j. **ɔ tɛɛ ɛ kɪɪ**
3s already 3s^INC look
She already was looking.

k. **tʃaapaa nɪɪ gɪtʃaŋ gɪ daŋ gi dʒi**
spider that guinea^fowl CNRD INTS CNRD eat
It was spider that guinea fowl ate.

Not only would treating these auxiliaries as prefixes result in words of considerably greater length than generally occurs in the language (e.g., we would have **/ɔmaŋbɪlaɛtaalɪ/** 'he is no longer able' in (38a)), but, more significantly, it would force us to admit cases where person/number and aspect are marked twice within the same word. Also, it is surely significant that every auxiliary consists of enough phonological material to qualify as an independent phonological word (the minimal phonological word in Nawuri being a CV syllable). Many prefixes in the language, on the other hand, consist of onsetless V(C) syllables which could not qualify as well-formed phonological words in isolation.

When several auxiliaries occur in sequence, the order conforms to the schema in (39):

(39) **(tee/tɛɛ) (daŋ) (bɪla) (naa) V**

(As stated above, negation markers precede all auxiliaries.) Examples illustrating this ordering are given in (40). (I have found no examples involving the full expansion of this schema.)

(40) a. **amɔɔ fʊ mɛɛ daŋ bɪla tɔwɪ**
Q 2s not INTS again speak
Won't you speak again?

b. **ba daŋ naa loo mʊ**
3p INTS go^to enter SUB
Just as they entered . . . .

c. **ba tɛɛ bɪla naa dɪŋa adʒitɔ**
3p already again go^to cook food
They went and cooked food again.

d. **ɔ tɛɛ daŋ bɪla taa mʊ malɪfa**
3s already INTS again take 3s^OBJ gun
He already went to take his gun again.

I do not have sufficient data to state the positions of **/kaŋ/** and **/wʊlaa/** with respect to the other auxiliaries precisely; it appears, however that **/kaŋ/** must follow **/daŋ/**, and that **/wʊlaa/** must follow **/tee/~/tɛɛ/**. The morpheme **/pii/~/pɪɪ/** is most likely analyzable as an allomorph of **/tee/~/tɛɛ/** after the negative particle **/maŋ/**:

(41) a. **ba tee dʒi** **(*ba pii dʒi)**
3p already eat
They already ate.

b. **ba maŋ pii dʒi** **(*ba maŋ tee dʒi)**
3p not already eat
They haven't eaten yet.

When two or more auxiliaries occur in sequence, a subject pronoun generally appears only before the first auxiliary. Sentences like the following, with repeated subject pronouns, are ill-formed for example:[23]

(42) a. ***fʊ mɛɛ fʊ daŋ fʊ bɪla tɔwɪ**
2s not 2s INTS 2s again speak
You won't speak again.

b. ***ba tɛɛ ba bɪla dɪŋa adʒitɔ**
3p already 3p again cook food
They already cooked food again.

c. ***ba tɛɛ ba naa dɪŋa adʒitɔ**
3p already 3p go^to cook food
They already went to cook food.

7. SERIAL VERBS

7.1 BASIC OVERVIEW

As in many Kwa languages, it is extremely common to find a sequence of two or more adjacent verbs:

(43) TWO VERBS IN SEQUENCE:

a. **ɔ sʊla ba gawu**
3s carry come home
She carried it home.

b. **ɔ ba taa mʊ malɪfa**
3s come take 3s^OBJ gun
He came and took his gun.

c. **n taa ba**
1s take come
I brought it.

d. **ɔ sɪlɪ loo**
3s run enter
She ran and entered.

e. **bɛɛ kʊsʊʊ taa adʒitɔ**
3p^INC arise take food
They get up and take food.

---

23 The prohibition against repeated subject pronouns within the auxiliary complex may not be absolute, however. The following sentence, involving /**bɪla**/ and /**naa**/ was accepted by both of the native speakers with whom I checked it:

ɔ bɪla ɔ naa fwaala He went to greet again.

This is clearly a matter that requires further investigation. At present, I note that sentences involving pronoun repetition within the auxiliary complex are absent in the text data which forms the basis of this study, and that both speakers rejected the sentences in (42).

THREE OR MORE VERBS IN SEQUENCE:

f. **ɔ ba taa sa mʊ gɪbʊ**
3s come take give 3s ^OBJ family
He came and gave it to his family.

g. **ɔ tɪŋ taa waa ɪpʊ sa bamʊ**
3s cut take do soup give 3p^OBJ
He cut it and made soup for them.

h. **ba kɪta nɪŋ tʊʊ fʊlʊŋ tɔ**
3p catch push throw fire in
They grabbed it and pushed it into the fire.

i. **fʊlɪ sɪlɪ ba loo lɪɪ tɔ**
antelope run come enter river in
The antelope ran and entered the river.

j. **aŋ kʊsʊʊ faa kpe bembe**
1p arise cross go opposite^shore
We got up and crossed to the opposite shore.

The term SERIAL VERB is something of a misnomer, however, since what we find are not just sequences of adjacent verbs, but adjacent VPs which may contain direct and indirect objects, as in (44):

(44) a. **taa deebi sa mɪ**
take knife give 1s^OBJ
Bring me a knife.

b. **ba taa mfɔlɪ waa ɲtʃu mʊ tɔ**
3p take salt do water the in
They took salt and put it in the water.

c. **ɔ kʊsʊʊ yɛ mʊ ɪkpatʃaa taa sa mʊ mbii**
3s arise sharpen 3s^OBJ machetes take give 3s children
He got up and sharpened his machetes and gave them to his children.

d. **ba maŋ ɲɛ gunuŋ waa gapalɪ ɪpʊ**
3p not get meat do fufu soup
They didn't get meat to make soup for the fufu.

It is also possible for each verb in the sequence to have its own auxiliaries. This is illustrated in (45), where the auxiliaries are underlined:

(45) a. **ɪtʃamɪsɪ tɔ bɪrɛɛ nɪɪ ba daŋ dʒi daŋ s^{w}ɪɪ ɪpʊ**
headpans in EMPH that 3p INTS eat INTS sip soup
They ate (food) and sipped soup from headpans.

b. **fɪɪ daŋ tʃaa naa lɪɪ mfɪɪ maa akra**
2s^INC INTS dance go^to leave here and Accra
You will dance from here to Accra.

c. **ɔkpampʊ bɪla b^{w}ii kʊsʊʊ bɪla b^{w}ii kpe**
hunter again return arise again return go
The hunter got up again and went.

d. **tʃaapaa tɛɛ waa bileŋ bileŋ naa fʊ owʊra ayɪ**
spider already do quickly quickly go^to arrive chief house^at
Spider had already hurried and went to the chief's house.

As is typically the case in languages with serial verb constructions, when two verbs have the same object, the object occurs only after the first verb:

(46) a. **anaatu sɔɔ nta sa mo saa**
Anatu buy drink give 3s^OBJ in^law
Anatu bought drink for his father-in law.
(*anaatu sɔɔ nta sa mo saa nta)

b. **ɔ too fuli mo mɔɔ**
3s shoot antelope the kill
He shot and killed the antelope.
(*ɔ tɔɔ fuli mo mɔɔ fuli)

c. **yaa taa gife mo mɛɛ**
Yaa take medicine the swallow
Yaa took the medicine and swallowed it.
(*yaa taa gife mo mɛɛ gife)

In all of the serial constructions we have seen so far, the subject of the verb sequence appears only once, before the first verb. Alongside these prototypical serial verb constructions, we also find sequences in which a pronominal copy of the subject (or in some cases a concord marker) is repeated before one or more of the subsequent verbs. In these constructions, the verbs may bear the same aspect, as in (47), or different aspects, as in (48).

(47) ALL VERBS COMPLETIVE ASPECT:

a. **ɔ yili ɔ kii**
3s stand 3s look
He stood and looked.

b. **gab^{w}i daŋ ɔ su ɔ naa**
goat INTS 3s have 3s walk
Goat is walking with it.

c. **tʃaapaa sii ɔ yili tutɔ**
spider remain 3s stand there
Spider remained and stood there.

d. **tʃaapaa wu ɔ di**
spider die 3s lie
Spider lay dead.

ALL VERBS INCOMPLETIVE ASPECT:

e. **ɲimesa ɪ-tʃɛ ani ɲii ɛ sa ani**
person INC^heal 1p mother 3s^INC give us
A person is healing our mother for us.

f. **tʃaapaa daŋ ɛ tuu ɛ f^{w}i**
spider INTS 3s^INC shoot 3s^INC miss
Spider kept shooting and missing.

g. **bee kpe bee biri tɔ**
3p^INC go 3p^INC wrestle at
They were going to wrestle.

h. **gakɛ kumaa e kpe ɛ kii gikpaalaa ɛ da inuŋ**
day every 3s^INC go 3s^INC look trap 3s^INC catch meat
Every day he was going and checking his trap and catching meat.

(48) COMPLETIVE ASPECT BEFORE INCOMPLETIVE ASPECT:

a. **owura maa mo bi ba kusuu bee kpe ndɔɔ**
chief and 3s child 3p arise 3p^INC go farm
The chief and his child arose and were going to the farm.

b. **ɔ bɪla o muu ɛ dɔɔ**
3s again 3s bend 3s^INC farm
She bent down again and farmed (hoed).

c. **ɔ yɪlɪ e dʒee**
3s stand 3s^INC bathe
He stood there bathing.

d. **ɔ daŋ ba ɔ tɛ mʊ lembu tɔ ɛ sawʊ ɛ sawʊ**
3s INTS come 3s sit 3s^OBJ hall in 3s^INC cry 3s^INC cry
He came and sat crying in his hall.

INCOMPLETIVE ASPECT BEFORE COMPLETIVE ASPECT:

e. **ɛ natɪ kpe ɔ yɪlɪ**
3s^INC walk go 3s stand
He was walking and (then) he stood there.

f. **e kpe ɔ naa taa gɪnɪmʊʊ**
3s^INC go 3s go^to take this^one
She was going to take this one.

Instances where a verb in the incompletive aspect precedes a verb marked for completive aspect, as in (48e,f), are relatively rare, at least in the narrative texts on which this study is largely based.

For many linguists, the sequences in (47) and (48) would not qualify as serial verb constructions. On the strictly terminological level, it is of relatively minor importance whether one chooses to extend the label SERIAL VERB CONSTRUCTION to constructions involving repeated subjects; within reasonable limits, one is free to define one's terms however one chooses. Beyond terminology, however, there is a substantive question to be dealt with, i.e., whether or not the sequences in (47) and (48) involve essentially the same structure as the more prototypical serial verb constructions looked at earlier. At this point, I am unable to suggest an answer to this question.

Some linguists have drawn a distinction between cases in which the two verbs in a sequence refer to independent events and those in which both verbs refer to different aspects of a unitary event and/or one verb in some sense modifies the event described by the other. Christaller (1875) for example refers to Akan (Twi) constructions of the former type as "accidental combinations" and the latter as "essential combinations". Sebba (1987) cites Christaller's distinction approvingly, stating that it corresponds roughly to his own distinction between coordinate and subordinate serialization.

It is easy enough to find serial verb constructions corresponding to both of these types in Nawuri. Examples in which the two verbs refer to independent events are given in (49), while cases where the two refer to a single event are given in (50).

(49) a. **ba kɪta bamʊ tii obu-to**
3p catch 3p^OBJ shut room-in
They caught them and locked them in the room.

b. **sɔɔ gʊtɔ kʊʊ bɪyaa mɪ**
buy thing some bring 1s^OBJ
Buy something for me.

c. **ɔtʃɪɪ mʊ wɔtɪ dʒaŋɛɛ waa ɪpʊ mʊ tɔ**
woman the pound pepper do soup the in
The woman pounded the pepper and put it in the soup.

(50) a. **ɔ tʃɪna dʒoo mʊ**
3s sit wait 3s^OBJ
She waited for her.

b. **ba natɪ kpe owuɾa ayɪ**
3p walk go chief house^of
They walked to the chief's house.

c. **ɔ sʊla ba gawu**
3s carry come home
He carried it home.

The distinction is not always entirely clear-cut, however, as there are cases where the events described by the two verbs overlap partially but not completely in time. Consider for example the utterance in (51).

(51) **kpaasi sɪlɪ loo ɔbɔ tɔ**
rat run enter hole in
The rat ran into the hole.

Here the action described by **/loo/** 'enter' clearly overlaps with the action described by **/sɪlɪ/** 'run'. Nevertheless, the overlap is only partial, i.e., the rat was presumably running before it entered the hole.

It is also possible to distinguish between serial verb constructions in which the meaning of the entire construction is straightforwardly composed of the lexical meanings of the individual verbs and their arguments and those in which it is not. Many of the examples we have seen already belong to the former type. Among the more extreme cases in the latter group are the combinations in (52).

(52) a. **waa kɪɪ** try
do look
b. **kɔɔlɪ dʒi** believe
receive eat

Each of these pairs has an idiomatic meaning not directly determined by the meanings of the individual verbs in the sequences. Other instances of non-compositionality, of a less extreme sort, will be seen in the next section.

7.2 SOME COMMON VERBS IN SERIAL VERB CONSTRUCTIONS

While almost any verb in Nawuri can occur in a serial verb construction in the right context, there are some which occur very commonly as serial verbs. In many cases these modify a preceding or (more commonly) following verb by further narrowing its meaning or by specifying further thematic information. In this section I discuss a few of the more common verbs of this sort, without making any claim to comprehensive coverage.

7.2.1 sa 'give'

A verb which commonly occurs as the final verb (V_f) in serial verb constructions is the verb **/sa/**. In non-serial contexts, this verb simply means 'give', as in the following examples:

(53) a. **ba sa lɔŋɔ adʒitɔ**
3p give rabbit food
They gave food to the rabbit.

b. **sa mɪ afulee**
give 1s^OBJ money
Give me money.

When it occurs as V_f, however, **/sa/** often has a benefactive meaning, indicating that the action expressed by the preceding verb (V_i) is performed for someone (referred to by the object of **/sa/**):

(54) a. **ɔ waa gusuŋ sa mʊ ɲii**
3s do work give 3s^OBJ mother
He is working for his mother.

b. **ɔ tʃɛ bamʊ ɲii sa bamʊ**
3s heal 3p mother give 3p^OBJ
She healed their mother for them.

c. **anɪmʊ i biti ɔ wɪ gunuŋ gɪnɪmʊʊ sa mɪ**
who TOP want 3s chew meat this give 1s^OBJ
Who will eat this meat for me?

This is the normal way of expressing benefactive meaning in Nawuri, which has no pre/postposition or other morpheme meaning 'for'.

7.2.2 taa 'take'

Sebba (1987:162) notes that constructions involving a verb meaning 'take' are among the most common serial verb constructions cross-linguistically. In Nawuri, the verb **/taa/** 'take' is certainly among the most common verbs found as V_i in this type of construction. Its contribution to the meaning of a serial verb construction in which it occurs is more variable than that of **/sa/** 'give'. In some cases, as in the examples in (55), **/taa/** expresses an instrumental meaning, i.e., its object is used to carry out the action expressed by V_f:

(55) a. **ɔ taa deebi tɪŋ gɪmʊ**
3s take knife cut 3s^OBJ
She took a knife and cut it.
/ She cut it with a knife.

b. **ba taa ɔfɛ ŋmina mʊ**
3p take rope tie 3s^OBJ
They took rope and tied him up.
/ They tied him up with rope.

In many other cases, **/taa/** appears to contribute little meaning at all to the overall serial verb construction. The sentences in (56), for example, have nearly the same meaning as the corresponding sentences in (57).

(56) a. **ɔ taa sa mʊ mbii**
3s take give 3s^OBJ children
He (took it and) gave it to his children

b. **tʃaapaa taa waa mʊ gukotii tɔ**
spider take do 3s^OBJ claw in
Spider (took it and) put it in his claw.

c. **ɔ taa mʊ saga oyu sʊsʊ**
3s take 3s^OBJ hang tree above
He (took him and) hung him in a tree.

(57) a. **ɔ sa mʊ mbii**
3s give 3s^OBJ children
He gave it to his children

b. **tʃaapaa waa mʊ gukotii tɔ**
spider do 3s^OBJ claw in
Spider put (it) in his claw.

c. **ɔ saga mʊ oyu sʊsʊ**
3s hang 3s^OBJ tree above
He (took him and) hung him in a tree.

It must be noted in particular that **/taa/** in sentences like those in (56) need not refer to a separate activity in which its object is literally 'taken' (e.g., picked up). It is easy to find constructions of this type in which the context makes it clear that the object is already in the actor's possession at the time the event described by the serial verb construction occurs. It appears then, that the use of **/taa/** in these constructions verges on being purely stylistic.

7.2.3 Motion Verbs

Many serial verb constructions involve the motion verbs **/kpe/** 'go' and **/ba/** 'come'. These may occur as either V_i or V_f, with different effects.

Examples illustrating the verb **/ba/** 'come' as V_i are shown in (58).

(58) a. **ɔ ba tʃɪna**
3s come sit
She came and sat.

b. **ɔ ba f^{w}aala fʊ**
3s come greet 2s^OBJ
He came and greeted you.

c. **ba dʒi**
come eat
Come eat!

In most cases, the meaning of a serial verb construction with **/ba/** as V_i seems to be more or less compositional, i.e., it involves two separate events of which the first is a literal coming of someone to a particular location. There sometimes seems, however, to be an additional component of intent that is not part of the ordinary lexical meaning of **/ba/**, i.e., there is the implication that the coming was for the purpose of accomplishing the second event.

In contrast to **/ba/**, the verb **/kpe/** 'go' never ~~seems to occur~~ immediately before another verb. The reason for this is that **/kpe/** as V_i is always directly followed by **/naa/**, an auxiliary verb indicating purpose (cf. §6 above). This is illustrated in the sentences in (59), where the corresponding sentences without **/naa/** are ill-formed.

(59) a. **ba kpe naa mɔɔ akpatarɪ**
3p go go^to kill monkeys
They went and killed monkeys.

b. **o kpe naa biti inuŋ**
3s go go^to want meat
She went to look for meat.

As can be discerned from the free translations, the presence of **/kpe naa/** in these constructions contributes a sense of purposeful action.

The verbs **/kpe/** and **/ba/** can also occur as V_f, following a variety of other verbs. In many such cases the overall meaning appears to be straightforwardly compositional Here I will just describe one of the more common cases, in which **/kpe/** or **/ba/** is preceded by a more specific motion verb such as those listed below:

(60) a. **sɪlɪ** run
b. **natɪ** walk
c. **fugi** fly

In this type of serial verb construction, the two verbs refer to a single event, the first verb specifying the manner in which the event referred to by the more generic V_f **/kpe/**

or **/ba/** is carried out. Some examples of this type of serial verb construction are given below:

(61) a. **ɔ sılı ba gawu**
3s run come home
He ran home.

b. **ɔ natı kpe totɔ**
3s walk go there
She walked there.

7.3 SUMMARY OF §7

Like many Kwa languages, Nawuri permits sequences of adjacent verb phrases. Where two verbs in a series share the same object, the object occurs only after the first verb, as is typical in verb serializing languages. Each verb in a series may have its own auxiliaries. There are also series in which a pronominal copy of the subject is repeated before one or more of the subsequent verbs. In these constructions, the verbs may bear either the same aspect or different aspects.

In some cases, verbs in a serial construction refer to independent events, while in others they both describe the same event. There are also cases of partial temporal overlap between the events described by two verbs in a serial verb construction. While in many cases the meaning of the overall construction is determined straightforwardly by the lexical meanings of the individual verbs and their arguments, there are also cases where a particular combination of verbs has an idiomatic meaning.

Although virtually any Nawuri verb can occur in a serial verb construction under appropriate circumstances, there are some which occur quite commonly in constructions of this sort. Semantically, these typically serve to further specify aspects of the event described by the other verb(s) in the construction. Among these are the verbs **/sa/** 'give', **/taa/** 'take', **/ba/** 'come', and **/kpe/** 'go'.

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