OBJECT-SHARING AS SYMMETRIC SHARING: PREDICATE CLEFTING AND SERIAL VERB CONSTRUCTIONS IN KUSAAL

LING 3990

by

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To my lovely son, Mufaddal Suleman and my husband Suleman Braimah

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LIST OF ABBREVIATIONS

1Sg. = First person singular

2Sg.= Second person singular

3Sg. = Third person singular

Adj. = Adjective

Asp(P) = Aspectual(Phrase)

ATB=Across The Board

C = Complementizer

Conj. = Conjunction

CLLD = Cletic Left Dislocation

CP = Complementizer Phrase

DEF = Definite Deternimer

Dem.= Demonstrative

DemP = Demonstrative Phrase

DP = Determiner Phrase

Emph.= Emphatic

F/Foc (P)= Focus (Phrase)

Fut.= Future

Gen.= Genirative

IMPERF. = Imperfective

Int.= Interpretation

INTENS.= Intensifier

LCA= Linear Correspondence Axiom

LF= Logical Form

N (P)= Noun (Phrase)

Neg. (P) =Negative (Phrase)

Nml. = Nominalised

Nom.= Nominative

Num(P) = Number(Phrase)

OBJ.= Object

P = Postposition

Pl. = Plural

PCC (s) = Predicate Cleft Construction(s)

PERF. = Perfective

PF = Phonological Form

Poss(P) = Possessive (Phrase)

Prog. = Progressive

Pst.= Past

PTVP = Postverbal Particle

PVP = Preverbal Particle

Q = Quantifier

REL = Relative word

Sg. = Singular

Spec. = Specifier

SV = Subject Verb

SVC(s) = Serial Verb Construction(s)

SVIO = Subject Verb Indirect object Direct Object

SVO= Subject Verb Object

T (P) = Tense(Phrase)

TAMP = Tense Aspect Mood Polarity

V(P) = Verb(Phrase)

√rP = root Phrase

ABSTRACT

This research investigates object-sharing in Serial Verb Constructions in Kusaal, a Gur language spoken in Ghana. In an attempt to investigate whether the object in object sharing SVCs in the said language can be said to be symmetrically shared as in the case of Dagaare, (Hiraiwa and Bodomo 2008), it is observed that the object in object sharing SVCs interacts with Predicate Cleft Constructions in a way similar to what happens in Dagaare. Data from this language reveals several patterns of predicate cleft constructions alongside object pied-piping. All the patterns observed are again realised to be consistent with what happens in Dagaare. As a result, it is argued that the object in object sharing SVCs in Kusaal is symmetrically shared. Building on the works of Citko (2005), and Hiraiwa and Bodomo (2008), symmetric sharing in Kusaal is argued to be an instance of Parallel Merge. This, as indicated by Hiraiwa and Bodomo, "provides support to Baker's (1989) insight of Double-Headedness and against Collins' (1997) VP-shell structure with a *pro*". Instances of object sharing as symmetric sharing are quite rare in languages. Kusaal is therefore argued to provide further evidence to the observation of Hiraiwa and Bodomo (2008) with data from Dagaare "for a permissible structure of object sharing SVCs and the availability of symmetric structure in UG" Hiraiwa and Bodomo (2008).

Keywords: Kusaal, Predicate Cleft, Serial Verbs, Object-sharing, Pied-piping, Double-Headedness, Symmetry, Parallel Merge, Multi-dominance.

<div align="center">**CHAPTER ONE**</div>

<div align="center">**GENERAL INTRODUCTION**</div>

1.0.   Introduction

Although Bodomo (1993) argues that Kusaal, alongside several other Gur languages, is an example of a serial verb construction (SVC) language, no formal account has been rendered on this. This thesis aims at establishing Kusaal as a true serialising language and at providing a formal analysis of the patterns found. The following are some illustrations of SVCs in Kusaal:

(1) Bupuŋ la   da'a mui di

   Lady DEF buy   rice eat

   'The lady bought rice and ate it.'

(2) O   sa   bo   nwa' gotuŋ   la   bas

   s/he past neg   break mirror DEF   leave

   'S/he did not break the mirror.'

From (1 and 2), both V_1 and V_2 share identical NP arguments (both subject and object). The verbs in (2) also share identical particles marking tense and polarity. A detailed description of occurrences such as these constitutes a significant section of the third chapter of this thesis.

In our analysis of object-sharing in Kusaal SVCs, *mui* 'rice' in example (1) for instance is argued to be an instance of symmetric sharing. This analysis provides evidence with new data from Kusaal to support the claim of Hiraiwa and Bododmo (2008) that the object in object-sharing SVCs (in Dagaare) is symmetrically shared. In this thesis it is observed that the object in object sharing SVCs in Kusaal can be pied-pied with V_1 or V_2 or V_1+V_2 in Predicate Cleft Constructions. This possibility is what provides the evidence that the object is symmetrically shared between the two verbs.

1.1. The Data and Research Area

The data used in this work come from the language Kusaal. Kusaal is a West African language spoken in Ghana, Burkina Faso and Togo by the group of people called the Kusaasis. The language, according to Greenberg (1963a), Bendor-Samuel (1971), belongs to the Gur or Voltaic language family which in turn belongs to the Niger-Congo language family. Other relevant Gur sister languages that will be mentioned in this work are Dagaare, Buli, and Dabgani.

Kusaal in particular has attracted relatively little study by both its speakers and outsiders. In Ghana, Kusaal is spoken in the North- Eastern part of the country: Zebila, Bawku, Pusiga, Garu and their environs. There are basically two dialects in this language: Tonde and Agole. This research work will use examples mainly from the Tonde dialect.

Data to be used are gathered from native speakers of the language. Though Kusaal is my mother tongue, it is not my first language and as such every example used is from people who are native speakers and who have Kusaal as their first language. It must also be indicated that even though Kusaal is a tonal language, this work does not mark tone on the data that is used since this is irrelevant for our discussion.

1.2. Objectives of the Research

The main objectives of this research work are as follow:

a. To give an overview of the syntactic structure of Kusaal.
b. To give an account of the manifestation of serial verb constructions (SVCs) in Kusaal with particular emphasis on object sharing SVCs with the view to establishing whether object-sharing SVCs are true SVCs and not (c)overt coordinate constructions.
c. To examine predicate cleft construction (PCCs) and their interaction with SVCs in Kusaal.
d. To propose an analysis of object-sharing as symmetric sharing in Kusaal.

1.3.   Previous Analysis of Object-Sharing SVCs

Baker (1989) proposes a double headed VP with a ternary–branching structure for the analysis of object-sharing SVCs using data from the Yoruba language. Even though this analysis correctly predicts the pied-piping of the object with both V_1 and V_2, the ternary-branching structure makes it unacceptable under the minimalist approach and difficult to explain the V_1-object and V_2-object constituencies.

Using data from Kpeli, a dialect of Ewe, where the postposition *yi* is argued to be able to assign oblique/ default case, Collins (1997) claims that argument sharing is mediated by the presence of empty categories contrary to Baker (1989), where SVCs are analysed as involving a double-headed VP. Collins (1997) indicates that SVCs should be analysed as involving control structures where the second verb incorporates into the first verb at LF.

Hiraiwa and Bodomo (2008) on the other hand, propose an analysis of object-sharing SVCs in Dagaare as an instance of symmetric sharing. Both V_1 and V_2 are considered to have merged with the object symmetrically, following the work of Citko (2005) where such instances of merge are called parallel merge.

Though Dagaare is a sister Gur language to Kusaal and the two are considered to have a lot of things in common, there are still peculiarities that make each language unique. Lord (1993) points out that even within a single language, one group of serial verb constructions may show a certain property while another group may not. Therefore generalisations of object-sharing SVCs of Gur languages based on studies on Dagaare may not be entirely right. This study therefore analyzes object-sharing SVCs in Kusaal with the view to establishing whether object-sharing SVCs in the said language can be argued to be an instance of symmetric sharing, thereby providing further evidence in support of the claim made by Hiraiwa and Bodomo (2008). The work also proposes alternative analyses in areas where Kusaal differs from Dagaare in this area of research.

1.4. Theoretical Framework

The structural representations of syntactic categories in this work will be implemented using the Minimalist Programme of Chomsky (1995). One basic assumption of this programme is that anytime movement has to take place, it must take place for a particular reason which must in itself be a formal one. According to the Minimalist Programme, the features that trigger syntactic movements of elements are grouped into [± interpretable], [±strong]. Interpretable features are features that play some role in the meaning or the interpretation of an expression. Uninterpretable features on the other hand are those that do not play any semantic role in the interpretation of a linguistic expression but are in a way necessary in the formal derivation of a sentence (Adger 2003:84). It is also claimed in the Minimalist Programme that movement of syntactic elements happens in order to check the uninterpretable features of the attractor. Once a feature gets checked it is eliminated before LF (Logical Form). In line with this explanation, the syntactic representations of both the nominal and the verbal phrases in Kusaal, most especially in chapter two of this work, are analysed on the basis of the principles of the Minimalist Programme. For concreteness reasons, I use notations from Adger (2003) but I depart where necessary.

Another important issue in minimalism that is relevant to this research is the hierarchical organization and linear ordering of representations. Bošković and Lasnik (2006) point out that Generative Syntax places much importance on the hierarchical organization of representations of which the great majority of syntactically and semantically significant structural relations are hierarchical: dominance, c-command and sisterhood. They further point out that none of these structural relations above involve linear order though linear order obviously plays a role in phonological representation. Kayne (1994) makes the hypothesis that Linear order is established through his Linear Correspondence Axiom (LCA) which states that asymmetric c-command is mapped on to linear order. This poses a challenge to the theory of parallel merge (Citko 2005) which forms an integral part of this work. The LCA cannot order elements in a parallel merge structure as illustrated below:

(3)   Parallel Merge (Citko 2005:478)
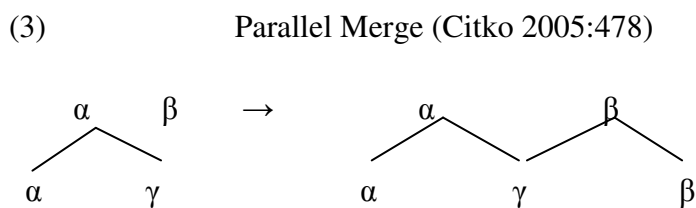
The problem in this representation has to do with γ which is shared by both α and β. With the prediction of the LCA that α c-commands β and β also c-commands α, it will end up that γ will precede itself which is impossible. Chomsky (1995) extends Kayne's idea by proposing that linear order established via the LCA only takes place at PF (Phonological Form). This means that the ordering of the structure in (3) is not necessary since it will be modified at Spell-Out. This discussion is central to this work as it is used in determining the order of precedence in the hierarchical organization of representations most especially in cases involving object-sharing SVCs in our subsequent chapters.

1.5. The Organisation of the Thesis

This thesis is organised in six chapters. Beyond this first chapter which forms the general introduction to the whole work, the others are as follows: the second chapter provides a discussion on the structure of the syntax of Kusaal. This is necessary because it gives an insight into the language we are dealing with since Kusaal has very little published materials on it.

Since serial verb constructions constitute an integral part of this research, it is significant to lay out the properties that characterize Kusaal as a true serializing language. The third chapter therefore looks at the syntactic structure of SVCs in Kusaal. The test for coordination is carried out to further ascertain whether SVCs in Kusaal are true SVCs and not instances of covert coordinating constructions.

The fourth chapter examines predicate cleft constructions in Kusaal. The formation of focus constructions and predicate cleft constructions constitute the main issues for discussion in this chapter. It will be observed that PCCs and SVCs interact in several interesting ways in this language.

In Chapter five a proposal for the analysis of object-sharing SVCs is carried out. It is argued in this chapter that object-sharing SVCs are instances of symmetric sharing. This provides further support to the observation made by Hiraiwa and Bodomo (2008) with data from Dagaare. However, since Kusaal is not entirely similar to Dagaare, revisions to the analysis are proposed in areas where the two languages differ.

The sixth chapter, the final one, constitutes the summary of the issues discussed in this research.

THE SYNTACTIC STRUCTURE OF KUSAAL

2.0.   Introduction

In this chapter, a discussion of the syntactic structure of Kusaal is presented. This will provide us with some basic information on the structure of the language in question as a background for the following discussion. This chapter is aimed at using simple declarative sentences to talk about the structure of both the nominal and verbal phrases. An attempt is also made to formalise this structure using the Minimalist Program of Chomsky (1995).

2.1.   The syntactic structure of Kusaal

Under normal circumstances in Kusaal, a nominal phrase precedes the verbal phrase and it functions as the subject of the sentence. Another noun phrase follows the verb and it functions as the object of the sentence, in cases where the verb is a transitive verb. Kusaal is predominantly SVO just as are most other Gur languages such as Mampruli, Dagaare, and Dagbani. Examples (1-3), which are SV, SVO, and SVIO respectively, are used as illustrations of the unmarked word order sequences in the language.[2]

(1)   Ba   kiŋya
         3Sg. go-PERF
         'They have left.'

(2)   Biig   la bo baa   la
          child-Sg DEF beat dog   DEF
          'The child has beaten the dog.'

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[1] This chapter providing background on the Syntax of Kusaal, is based on a paper submitted for the course HIF-3011, Syntax II.

[2] There are two ways of expressing the perfective in this language. This can be carried out using a zero morpheme (in which case the root form of the verb is used) as in examples (2,3). The other option is using the perfective suffix morpheme-*ya* as in (1). The differences will be discussed below.

(3)   Bupuŋ   la   tis   biis   la   ligir
        Woman DEF give child-Pl DEF money
         'The woman has given the children money.'

2.1.1.   The nominal phrase

Our discussion on the noun phrase in this section will consider issues such as the distributional properties of elements that form the noun phrase and the noun class system in this language. Starting with the distribution of grammatical elements that co-occur with the nominal phrase, the following illustrations constitute the basic observations:

(4) Biig la   ε giŋ

    child DEF is short

    'The child is short.'

(5) Biis   la   bor diib

    Child-PL DEF like food

    'The children like food.'

(6) Pua   giŋ   ka   o   bɔr

     Woman short C 3Sg. like

     'It is a short woman he wants.'

(7) O   di Amina biig   diib

    3-SG eat Amina   child   food

    'She ate Amina's child's food.'

(8) Amina   biig   diib   malse   tutua

    Amina   chlid food   taste-good INTENS

    'Amina's child's food tastes very good.'

From examples (4-6), the grammatical categories number and definiteness are overtly marked on the noun phrases. The noun *biig* exhibits both its singular and plural forms in examples (4) and (5) respectively. Furthermore, whereas example (4) shows the definite form of the noun by virtue of the article *la* which follows the noun, indefiniteness is not overtly marked as in example (6). The word order in the DP *biig la* 'child DEF' indicates straight away that the DP in this language is head final.

On the issue of case and gender in the Kusaal language, it is observed that personal pronouns do not inflect for gender. A typical example is *o* 's/he' which shows no difference between masculine and feminine forms. The nominal phrase *Amina biig diib* 'Amina's child's food' in both examples (7) and (8) does not show any morphological difference in the nominative/subjective, the accusative/objective and the genitive forms of the noun phrases. Case and gender are therefore assumed to lack any form of overt marking within the Kusaal noun phrase.

The adjective is another grammatical category that occurs as a post modifying element with the DP in Kusaal. The root form of the noun is what is used any time a noun is modified by an adjective. The table below is an illustration of the full forms of nouns and adjectives which are subsequently used in the examples after it.

(9)

Word	biig	biis	gban	gbana	sabil	sabila	tita'r	Titada
Gloss	'child'(sg)	'children'	'book'(sg)	'book'(pl)	'black'(sg)	'black'(pl)	'big'(sg)	'big'(pl)

(10)   gban-sabil

         book-black

         'black book'

(11)   gban-sabil-a

          book-black-pl

         'black books'

(12)   bi-tita'r

child-big

'fat child'

(13)   bi-titada

child-big-pl

'fat children'

The plurality or otherwise of a head noun is realized on its modifying adjective. In other words, adjectives agree in number with the nouns they modify. The DP can take as many as four adjectives after the head noun. The plural suffix in a string of adjectives occurs on the last one:

(14)   wi   zin'a wok titar   venliŋ   la

horse red tall   big   beautiful DEF

'The big red tall beautiful horse'

(15)   wi   zin'a wok titar venliŋa   banna

horse   red   tall   big   beautiful –PL those

'Those big, red, tall, beautiful horses'

Other classes of post modifying elements include quantifiers, demonstratives and numerals as illustrated in the following examples:

(16)   Gban titada anu   bama

book big(Pl) five these

'These five big books'

(17)   Bi   wok sabila   ata   la   wusa

Child tall   black (Pl) three   DEF all

'All the three black tall children'

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In these examples it can be inferred that the head noun is always phrase initial with all its modifying elements following it. The determiner *la* 'the' or demonstrative *bama* 'these' is final. The quantifier is the only identified element so far that occurs after the determiner or the demonstrative pronoun.

2.1.2. The Noun Class System in Kusaal

The formation of singular and plural forms of nouns in Kusaal leads to the identification of different classes of nouns in the language. From the data below, seven groups have been identified. These groups are represented using their singular and plural suffixes alongside some example of nouns in each identified category.

(18)   Kusaal noun class system

Class 1:G/S	Singular:- G	Plural:-S
	nuug – hand	nuus – hands
	nwiig – rope	nwiis – ropes
	tiig- tree	tiis – trees

Class 2: ø/ S	Singular: - ø	Plural: - S
	baa – dog	baas – dogs
	nii – bird	niis – birds

Class 3:R/YA	Singular: -R	Plural: - YA
	yir – house	yiya – houses
	niŋgɔr – neck	niŋgɔya
	yur – name	yuya – names

Class 4: NASAL,GLIDES-/A	Singular:	Plural: A
	zilim	zelima
	gel – egg	gela – eggs

	gban – book	gbana – books

Class 5: Ø/ NAM	Singular: Default	Plural: nam
	ba – father	banam – fathers
	ma – mother	manam – mothers
	saam –father	saamnam – fathers

Class 6:D,DA,DI/B/BA/BI	Singular: Ø, D,DA,DI	Plural:B,BA,BI
	poa – woman	puaba – women
	nid – person	nidiba- persons/people
	sid – husband	sidiba – husbands

Class 7: F/I	Singular: F	Plural: I
	naaf – cow	niigi – cattle
	waaf – snake	wiigi – snakes
	weif – horse	widi- horses

 The method used in classifying these nouns into their various groups is purely morphological. The stems of the various nouns are identified alongside their singular and plural affixes. The stems of some classes of nouns also serve as the singular forms. Using the nouns in class one for instance, the stems for the words 'hands', 'ropes' and 'dogs' are *nuu, nwii* and *baa* respectively. In forming the singular the suffix /-g/ is added. The same explanation can be extended to the formation of the plural forms where the plural suffix/-s/ is added to the stem. In class 2, the base form of the noun serves as the singular form and the plural suffix /-s/ is added. Class 4 also has a representation of stems that end with glides and nasal and at the same time serving as the singular forms. The plural is realised by adding the suffix /-a/ to the stems. In class 7, the suffix vowel /i/ causes the alternation of all the vowels in the stem to its kind /i/.

The next section considers the derivation of the word order of the DP in Kusaal in connection with the data discussed so far.

2.1.3. The Derivation of the DP in Kusaal

From the ongoing discussion, it can well be attested that the DP in Kusaal is strictly head final on the surface: (Poss) N Adj Num Dem (Q). It is only the quantifier that occurs after the demonstrative or determiner as the case may be. Within the NP, the head noun, apart from cases involving the possessor, is the initial element with all modifiers occurring as postnominal elements. The postnominal elements in Kusaal correspond to one of the orders allowed by Greenberg's (1963b) Universal 20. It will be assumed following the work of Cinque (2005) that the word order of the DP in this language is derived by movement of the NP. The NP is assumed to undergo successive movement to the specifier position of its dominating node and pied-piping the entire category that dominates it to the next Spec. This continues successively until the desired order is derived. The structure below is used as an illustration following Cinque (2005:318).

(19)
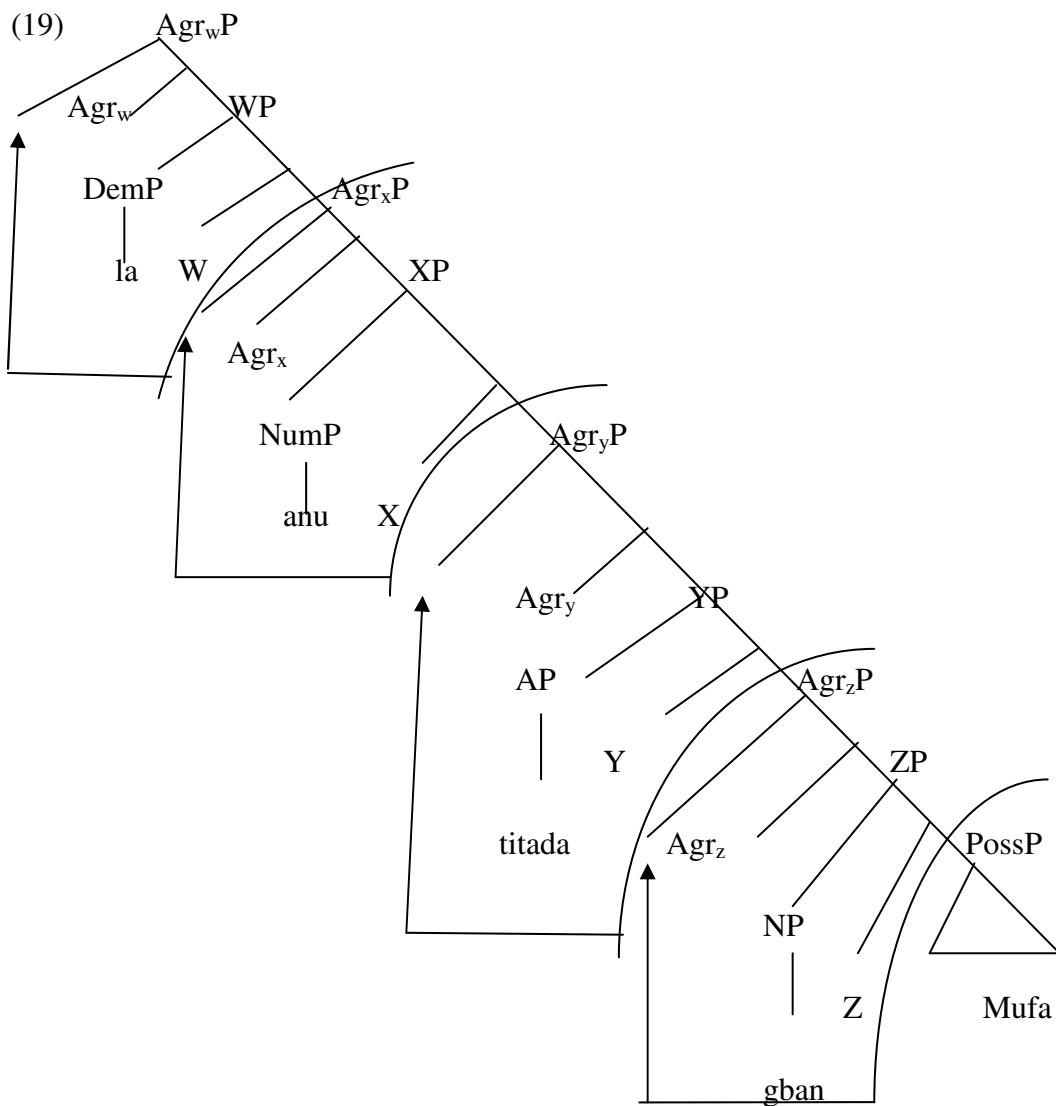
PossP '*Mufa*' moves to Spec Agr$_z$P to derive '*Mufa gban*'. Agr$_z$P moves to Spec Agr$_y$P to derive '*Mufa gban titada*'. The entire Agr$_y$P '*Mufa gban titada*' also moves to Spec Agr$_x$P to form '*Mufa gban titada anu*' Then Agr$_x$P also moves to Spec Agr$_w$P deriving the order '*Mufa gban titada anu la*' "Mufa's five big books". This derivation corresponds to the order Poss N A Num Dem.

2.2. The Verbal Phrase in Kusaal

2.2.1. Preverbal Particles (PVP)

Previous researches such as Bendor-Samuel (1971) and Bodomo (1993) have identified the existence of items which precede the verb in all the Gur languages. These are called preverbal particles and are used to express tense, aspect, mood and polarity. Bodomo (1993) explains the difference between these particles and auxiliary verbs in the Indo-European languages such as English, French and Norwegian as follows. Whereas auxiliary verbs such 'to be', 'to have, and 'to be able to, (English), 'être', 'avoir' and 'pouvoir' (French), and å være' and 'å ha' (Norwegian) are lexical verbs since they can be used independently and inflect for tense and aspect, preverbal particle in Gur languages are not independent lexical items and they cannot inflect for tense, and aspect. The table below gives the list of identified preverbal particles in Kusaal.

(20)   Preverbal Particles (PVP) and Postverbal particle (PTVPin Kusaal

	Particles	gloss	
Tense (Past)	pa'a	immediate past	Preverbal Particles
	sa	past (yesterday)	
	daar	past (two days ago)	
	da	remote past	
	ɛɛnti	used to	
Future	nan	yet to	
Polarity	bo	negative	
Tense+ Polarity	po	past negative	
	na	future positive	
	ku	future negative	

Mood	ya'a	if/when	
Mood + Polarity	da	negative imperative	
Others	sid	actually, really	
	pon	already	
	lɛm	again	
Aspect	nɛ	-	Postverbal Particle

Even though preverbal particles in the Gur languages have been identified to play the function of tense, aspect, mood and polarity, research has also indicated the difficulty in identifying single functions for these preverbal particles; Bodomo (1993). This situation is no different in the case of Kusaal. This is true because some of these particles can perform several functions simultaneously. This will be seen in the following discussion which looks at the functions of these particles.

2.2.2. Time Depth and Tense Particles

One distinctive feature about Gur languages compared to Indo-European and even Kwa languages is the ability of the former to express tense by showing the depth of remoteness of the action being described.

The particle *'pa'a'* is used to describe an action that is in the immediate past. It marks an event that just took place. *'Sa'* describes an action that is a day (24 hours) old. *'Daar'* on the other hand is used to express an action that is two or more days old. *'Da'* is used to talk about an action which is in the remote past, an event which took place a year and more ago.

(21)　　　Zaba da be Bawku.

　　　　　Fight Past exist Bawku.

　　　　　'There was conflict in Bawku sometime ago'

2.2.3. Polarity and Tense Particles

Tense and polarity are expressed simultaneously in some single particles. The particles *ku* and *na* carries both tense and polarity at the same time.

(22)   N   daar kiŋ tuma
         1Sg. past   go   work
         'I went to work.'

(23)   N   nan   bo   kiŋ tuma
         1Sg. Fut   neg go   work
         'I have not yet gone to work (but will go)'

(24)   *N nan kiŋ tuma
          1Sg. Fut. go work

(25)   N   na kiŋ tuma
         1Sg. Fut go work
         'I will go to work.'

(26)   N   ku   kiŋ tuma
         1Sg. Fut+neg go work
         "I will not go to work."

(27)   N   po   kiŋ tuma
         1Sg. Past+neg go work
         'I did not go to work.'

The particle *nan* is used to express an action which is yet to take place. It cannot be used in isolation without the negative marker *bo*. *na*, on the other hand, expresses an action which is in the future and at the same time positive. Its direct opposite is the particle *ku* which expresses future negative. *nan* is different from *na* and *ku* even though all of them express the future. Whereas *nan* uses an overt negative polarity marker the others do not.

Po is used for an action which is in the past and is negative.

2.2.4. The main verb

The main verbs of Kusaal can be identified by the various morphological forms shown on the table below.

(28)

ROOT	PERFECTIVE		IMPERFECTIVE		NML.VERB	GLOSS
	PERF A	PERF B	IMPERF A	IMPERF B		
dug	dug	dugya	dugud	dugudnɛ	dugub	'cook'
bu'	bu'	bu'uya	bu'ud	bu'udnɛ	bu'ub	'beat'
gbis	gbis	gbisya	gbisid	gbisidnɛ	gbisib	'sleep'
da'at	da'at	da'aya	da'ad	da'adnɛ	da'aug	'buy'
but	but	butya	but	butnɛ	budi	'sow'
kuos	kuos	kuosya	kuosid	kuosidnɛ	kuosug	'sell'
di	di	diya	dit	ditnɛ	diib	'eat'
tu	tu	tuya	tuud	tuudnɛ	tuub	'dig'
mɛ'	mɛ'	mɛɛya	mɛɛd	mɛɛdnɛ	mɛɛb	'build'

2.2.4.1. The Perfective

As can be seen from the data, the perfective A forms of the verb are the same as the root whereas the perfective B forms carry the suffix morpheme –*ya*. The perfective A is obligatorily followed by an object and most often the postverbal aspectual particle *nɛ*[3]. The postverbal aspectual particle can either be preceded or followed by the object.

(29)   Biig la   di **nɛ**   diib la

Child DEF eat PTVP food DEF

'The child ate the food.'

(30)   Biig la   di   diib la **nɛ**

Child DEF eat   food DEF PTVP

'The child ate the food.'

---

[3] The distribution of the postverbal aspectual aspectual particle in this language leads to the assertion of the possibility of short object shift as observed in Icelandic and other Scandinavian languages (see Vikner 2005). It is however not clear yet where to put *nɛ* in the structural representation of the VP and more difficult since Kusaal is a VO language.

In cases where the object is a pronoun, it obligatorily precedes the postverbal aspectual particle.

(31)   Ba bu' o   nɛ   *Ba bu' nɛ o

        3Pl beat 3Sg. PTVP

        'They beat him/ her.'

The perfective B form on the other hand does not take either an object or the post verbal particle *nɛ*. Any such attempt will render the sentence ungrammatical.

(32)   O gbis-ya

        s/he sleep-PERF

        'S/he has slept'

(33)   Biig   la   di-ya

        Child DEF eat-PERF

        'The child has eaten.'

(34)   *Biig la diya diib.

(35)   *Biig la diya nɛ diib.

2.2.4.2.   The Imperfective

Whereas the past tense is expressed using tense particles, the present tense does not have any morphological representation in this language. It is usually expressed using the imperfective forms of the verb. The imperfective A forms of the verbs are characterized by the suffixed morpheme */-d/* or */-t/.* They more or less express habitual events. The imperfective A forms just as the perfective A form may optionally be followed by the postverbal aspectual particle *nɛ* which can either be preceded or follow by the object. The imperfective B forms, as will be illustrated soon, are used in expressing progressive actions. They have an additional suffix */nɛ/* after */-d/* or */-t/* as the case may be. This *nɛ* is not considered as a postverbal aspectual particle since it cannot be separated from the verb.

(36)   M   mɛɛd   ya

        1Sg. build-IMPERF houses

        'I build houses.' (for a living)

(37)   a. M   mɛɛd   nɛ   yir

           1Sg. build- IMPERF   PTVP   house

           'I am building a house.'

          b. M   mɛɛd   yir   nɛ

            1Sg. build –IMPERF   house PTVP

            'I am building a house'

In cases involving object pronouns, the postverbal aspectual particle occurs after the pronoun.

(38)   a. M   bu'ud   o   nɛ

           1Sg.   beat-IMPERF 3Sg.   PTVP

           'I am beating him/her.'

          b. N   dit   o   nɛ

            1Sg. feed-IMPERF 3Sg. PTVP

            'I am feeding him/her

Neither the perfective nor imperfective aspectual forms as illustrated in the data presented employ the use of auxiliary forms. The next section looks at the derivation of the VP judging from our discussion so far.

2.2.5.   The Derivation of the VP in Kusaal: Tense and Aspect
2.2.5.1.   Tense Marking

Based on the idea that in a language like English, a sentence is headed by T and modals, and infinitival *to* are in T head (Adger 2003), I propose that tense particles in Kusaal are in T head as well. I assume that V moves to *v* which projects to vP where the subject is merged at Spec-vP. vP merges with T which further projects to TP. The subject moves from Spec- vP to Spec- TP which has a strong D-feature though it does not assign theta role. The sentence below is used as an illustration:

(39)   Bupuŋ   la   sa   da'a   laad   la

         Woman   DEF PVP   buy   items DEF

         'The woman bought the items.'

(40)

```
                        TP
                      /    \
               Bupuŋ la     T'
                           /   \
                          T     vP
                          |    /   \
                         sa  < Bupuŋ la>  v'
                                        /    \
                                       v      VP
                                      / \    /   \
                                   daa   v <daa>  laad la
```
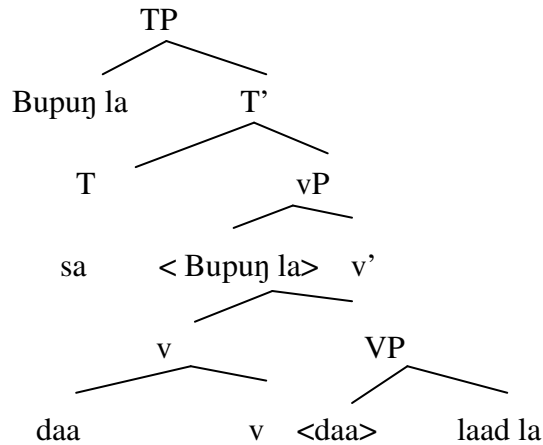
Tense particles as exhibited fit properly under T heads. This is vital since it provides the basis upon which our proposed analyses for aspect will be integrated.

2.2.5.2. V+AspP movement to *v*

In the absence of aspectual auxiliaries I assume AspP to stand for aspectual Phrase (Imperfective and Perfective). In an attempt to derive the word order of the VP in this language, I propose an operation that involves V+AspP-*v*[4] movement of the verb. In Kusaal, unlike English which operates on an order that is T > Prog >Perf >v >V Adger (2003), Perf and Imperf cannot be combined. By proposing V + AspP movement to *v*, I assume that aspectual markers –*t/-d* and -*ya* are not suffix morphemes but rather are pronunciations of the AsP: Imperf or Perf heads themselves.

(41)   Ti   sa   kuosid   ti gbana.

                  we PVP sell- Imperf our book(pl)

                  'We were selling our books.'

In this case, we merge *kuos*, 'sell' with the object *ti gbana la*, 'our books'. *kuos* moves to Asp (Imperf) –*d* this ensures that the pronunciation of Imperf is realised by the head itself. Asp moves to *v* which projects to *v*P and the subject *ti* 'we' is merged at Spec-*v*P. T, *sa*, is

---

[4] AspP is used in this analysis in the sense of Rizi 1997 and Hiraiwa and 2005a 2005b CP/DP Parallelism where it is c-commanded by *v*.

then merged with vP and it projects higher through the hierarchy of projection and the subject *ti* moves to the Spec- TP.

```
                TP
           ╱         ╲
        Ti            T'
                  ╱        ╲
               T            vP
               │        ╱        ╲
               sa    <ti>          v'
                              ╱          ╲
                             v            AspP
                          ╱     ╲       ╱      ╲
                       kuosid    v   Asp (Imperf)    VP
                                   ╱        ╲      ╱      ╲
                              < kuos       -d⁵>  <kuos>  ti gbana la
```
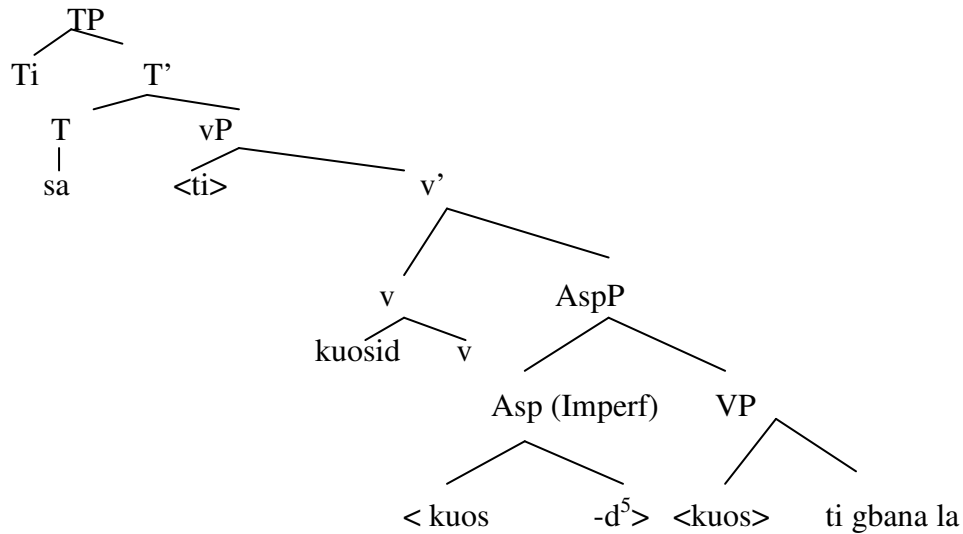
2.2.5.3. The Negative Phrase and the Proposed Analysis

It has earlier on been discussed that the particles *bo*, *ku* and *na* are used to express polarity. Whereas *bo* is non-future, *ku* and *na* are future negative and future positive respectively. Our main interest is not in the future so all examples will use *bo*. The negative particle occurs after the subject and before the verb. In the presence of a tense particle, the negative marker occurs after the particle but still before the verb. Any attempt to distort this order results in ungrammatical expressions.

(42)

a. Fo bo   di-t   diib la

    You not eat-Imperf food the

    'You are not eating the food'

---

[5] There is vowel insertion anytime the suffix morphemes *-t* or *–d* are added to a root which ends in a consonant. Example: kuos-kuosid, guls-gulsid.

b. M ma sa bo kuosi-d fuug la

My mother PVP Neg sell-Imperf cloth the

'My mother was not selling the cloth.'

In the absence of an auxiliary in expressing tense and aspect in the language, the proposed analysis in Adger (2003) where we have movement of auxiliaries to T cannot hold for Kusaal. But the hierarchy of projections: T > (Neg) > (Perf) > (Prog) > v >V is maintained with a slight modification regarding the order between (Perf) > (Prog). As indicated earlier, the two suffix morphemes –t/-d and -ya are two different values of the single head Aspect and as such cannot occur at a time on a single verb. It has also been proposed that AspP be c-commanded by v. The order will therefore be modified as: T > (Neg) > v > (AspP) > V. Based on our earlier proposal that tense particles are T heads, it can then be assumed that negation follows T and merges after vP. Example (43) is illustrated below:

(43)

```
                    TP
                  /    \
              Mma        T'
                       /    \
                      T       NegP
                      |      /    \
                      sa   Neg      vP
                           |      /    \
                           bo  <m ma>    v'
                                       /    \
                                      v      AspP
                                    /  \    /     \
                               kuosid  v  Asp(Imperf)  VP
                                         /    \       /    \
                                      <kuos  d >  <kuos>   fuug la
```

21
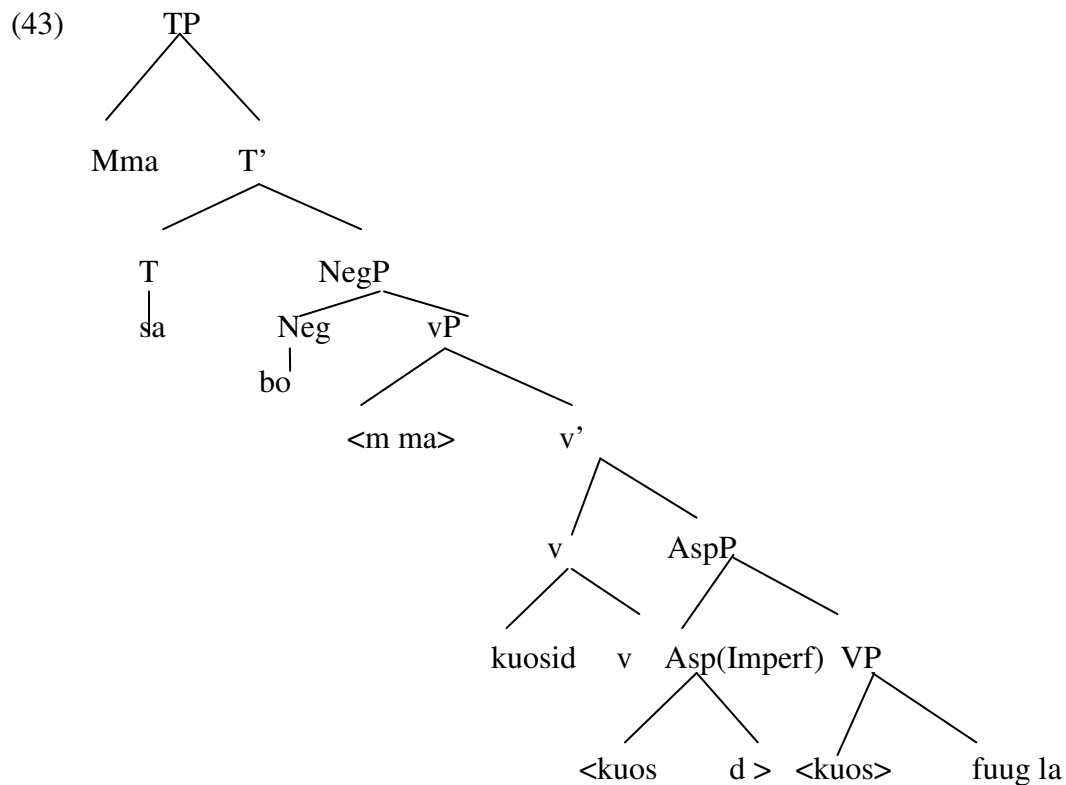
2.3.   Summary/Conclusion of the Chapter

This chapter has basically discussed issues concerning the nominal and the verbal phrases in Kusaal. The aim has been to give the reader an insight into the syntactic structure of the language.

The DP is observed to be strictly head final. The order of the DP is observed to be: (Poss) N Adj Num Def/Dem (Q) which is argued to be derived through successive movement of the NP (Cinque 2005). An attempt is also made to classify the nouns in this language into seven identified groups. This classification is done based on the way the singular and the plural forms of nouns are formed.

On the issue of the verbal phrase it is proposed that V+AspP move to *v*. This movement makes it possible to get the right order of words in the language and also allows the pronunciation of the aspectual suffix morpheme to come from the head itself and not from little *v*.

To check the efficacy of this proposal, I tried to find out how the negative phrase can be integrated. This was easy since all modifications to Adger's (2003) system end at AspP and the NegP also merges after vP and before T.

The next chapter considers issues concerning serial verb constructions in Kusaal.

CHAPTER THREE

SERIAL VERB CONSTRUCTIONS (SVCs) IN KUSAAL

3.0.   Introduction

This chapter will start by presenting a general overview of serial verb constructions as has been discussed in the literature, including the geographical distribution of the phenomenon. A detailed description of the phenomenon as it occurs in Kusaal will be the central focus of the chapter. The chapter goes further to discuss the various proposals made by earlier research works on analysing the concept of object-sharing in serial verb constructions. First, however, these are some basic examples of constructions involving serial verbs in Kusaal to introduce the phenomenon

(1) Bupuŋ la   sa   da'a diib di.

    Lady DEF Pst buy   food eat

    'The lady bought food and ate it.'

(2) O   sa   do   yi   kiŋ.

    S/he Pst get-up come-out leave

    'S/he got up and left.'

3.1.   The Phenomenon of Serial Verb Constructions

Talking about the phenomenon of Serial Verb Constructions raises the issue of the difficulty of finding a uniform definition for it. Osam (1994) observes that one of the problems associated with the study of SVCs cross-linguistically is the difficulty in having two researchers agree on exactly what the phenomenon is about. One possible reason may be that an author defines the concept based on the properties he or she identifies in a particular serialising language under study. It is even observed that, within a single language, one group of serial verb constructions may show a certain property, while another group may not, (Lord 1993).

Sætherø (1997) observes that SVCs are characterized by two or more verbs occurring within a clause with no marking of co-ordination. The verbs in the series are further observed to have common NP arguments and also share grammatical properties, for instance tense, aspect and polarity. Sætherø also assumes that a fundamental criterion of serial verb construction is that the order of verbs strictly mirror the temporal order of the events described, the first verb thus describing the initial phase of the event or action. This observation will be seen to be consistent with matters in SVCs in Kusaal.

Aikhenvald and Dixon (2006:1) define the concept of SVCs as "a sequence of verbs which act together as a single predicate, without any overt marker of coordination, subordination, or syntactic dependency of any other sort. SVCs describe what is conceptualized as a single event. They are monoclausal; their intonational properties are the same as those of a monoverbal clause, and they have just one tense, aspect, and polarity value. SVCs may also share core and other arguments. Each component of SVC must be able to occur on its own. Within an SVC, the other individual verbs may have same, or different, transitivity values."

Baker and Harvey (2010) argue that SVCs are a type of 'Complex predicate' alongside constructions such as light verb constructions, and particle + verb constructions among several others. They differentiate between coverb constructions and serial verb constructions even though the two are supposed to be monoclausal. Whereas coverb constructions express a single simple event though it may be semantically complex, SVCs express multiple events. This, in a way, appears to be a counter claim to Aikhenvald and Dixon (2006) though it is not necessarily the case as we may see in a moment.

Baker and Harvey (2010) further outline some basic functions performed by SVCs. They argue that the term 'serial verb' just as 'complex predicate' has been applied to a wide variety of constructions with many semantic structures involved. They focus on some representative serial verb structures such as benefactive marking with 'give', comitative marking and object marking with 'take', and complementizer with 'say'. They identify the introduction of non-subcategorised arguments into monoclausal structures as one prominent function of SVCs though it is not universal. This function will later be observed to be consistent with SVCs in Kusaal. Other characteristic functions identified include the introduction of direction and manner which are normally carried out by adjuncts in other languages. SVCs also convey all kinds of resultative and causative meaning.

Jarkey (2010) also observes that SVCs are "mono-clausal but multi-predicational. They are said to involve two or more distinct predicating morphemes, linked together in a single clause by virtue of the fact that they share one or more argument positions through coindexation". The basic argument between Aikhenvald (2006) observation of SVCs and Baker and Harvey (2010) is that, whereas the former claims SVCs express 'what may be conceptualised as a single event' the latter claims that SVCs are 'multi-predicational'. Using data from Hmong, Jarkey (2010) suggest that the issue between Aikhenvald (2006) and Baker and Harvey (2010) is, to some extent at least, a difference of approach, resulting in a different use of terminology. The data presented from Hmong support the idea that SVCs do in actual fact convey what may be conceptualised as a single 'event', in spite of the fact that they also involve the use of more than a single predicate. Kusaal will be seen to be consistent with Jarkey's observation.

From the above definitions, one can simplify the description of the phenomenon of SVCs as constructions involving series of verbs which share common NP arguments in what appears to be a single clause. The following are illustrations from Kusaal, Aka, Ewe and Yoruba respectively.

Kusaal

(3) Asibi da   dug nyur di.

    Asibi pst cook yam eat

    'Asibi cooked yam and ate it.'

Akan (Agyeman, 2002)

(4) Ama noa-a   bayerɛ di-i.

    Ama cook-past   yam   eat-past

    'Ama cooked yam and ate it.'

Ewe (Agbedor, 1993)

(5) Kofi da   nu ɖu.

    Kofi cook thing eat

'Kofi cooked and ate.'

Yoruba (Awoyale, 1988)

(6) Ajé wá   aso   rí   jí   gbé   wò.

Ajé seek dress see steal take wear

'Aje looked for some clothes, found them, stole them, and put them on.'

In the above examples, all the sentences (3-6) are composed of more than one lexical verb which share the same grammatical feature; tense. These verbs also share identical NP arguments. All the verbs in the various sentences share same subjects and objects. The direct object of V_1 also serves as the direct object of all the subsequent verbs. A more detailed discussion of these characteristics with data from Kusaal will be given shortly.

3.1.1. The Geographical Distribution of SVCs

The phenomenon of SVCs is found across several languages of the world. Both Baker and Harvey (2010) and Aikhenvald and Dixon (2006) observe that the phenomenon of Serial Verb Construction is widespread in Creole languages, in the languages of West Africa, Southeast Asia, Amazonia, Oceania, and New Guinea. SVCs occur in Creole languages such as African-Caribbean creoles spoken mainly in the Caribbean islands. In West African Languages, they are mostly realised in the Kwa and Gur language sub-groups. The Kwa group has received considerable attention in this area of research. Bodomo (1993) and Hiraiwa and Bodomo (2008) are the only works that could be cited on Serial Verb Constructions in the Gur languages as of the time of this research. One of the basic objectives of this thesis is to contribute to the discussion with extensive data from Kusaal. Languages of Southeast Asia such as Chinese (Li 1991) and Khmer (Schiller 1990) are a few examples of those that are serializing. Alamblak (Papuan area: Bruce 1988:27) and Kallam serve as examples of languages for New Guinea and Oceanic. Dâw (Arawak) and Tariana (Arawak) represent languages from Northwest Amazonia.

3.1.2. Functions of SVCs in Kusaal

SVCs in Kusaal can be observed to be used in the introduction of non-subcategorised arguments into monoclausal structures. Baker and Harvey (2010) following Lord (1993) assert that this function is very prominent in serializing languages within the West African language sub-group and the Caribbean creoles. In examples (7a-b) we see the verb *tis* 'give' being used to introduce a non-subcategorised argument into the monoclausal structure. Example (8a-b) also uses the verb *nok* 'take' to introduce a non-subcategorised argument, an instrumental, into a monoclausal structure.

(7)   a. buraa   la   kwi   **tis**   ti
            man   DEF die   GIVE us

        'The man died for us.'

    b.   doog   la   ni   bo   zu'e   **tis**   ba

          room DEF   inside Neg   large   GIVE them

          'The room is not large enough for them.'

(8)   a.   o   **nok**   o   nuug   dit
            he   TAKE his   hand eat

         'He eats with his hands.'

    b. o **nok**   suug   nwaa tiig   la

        he TAKE machete cut   tree   DEF

        'He cut off a tree with a machete'

Another observation involving the use of SVCs in Kusaal has to do with the chaining together of series of verbs to describe a sequence of related events.

(9)   a.   o   du'os   zo   yi   kiŋ da'a   diib la.

           s/he got-up run come-out go   buy   food DEF

          'S/he got-up, run and came out and went and bought the food.'

    b. Ba sa ie   ligir   la   nye   zu   zo kul.

          3Pl Pst search money DEF see   steal run go-home

'They searched for the money, found it stole it run and went home.'

In these examples (9a, b), multiple events are described as taking place within a single scope of time. The verbs also follow in the order in which the events took place.

3.1.3. SVCs and Coordinating Constructions in Kusaal

An important distinction which needs to be explained involves the difference between SVCs and Coordinating Constructions in Kusaal. Both SVCs and coordinating constructions in the said language employ the use of more than a single predicate. But whereas the series of verbs in SVCs are expressed within a single clause, that of coordinating constructions are expressed using two or more clauses. The series of verbs in coordinating constructions are link using the conjunction *ka*[6] 'and'.

(10)

    a.   Pua   la   zo **ka** bas biig la

         Woman DEF run Conj leave child DEF

         'the woman ran and left the child.'

    b.   N sa   tis   bupuŋ la ligiri   **ka**   o sa   kul.

         I pst give lady the money   Conj. she pst   go-home.

         'I gave the lady money and she went home.'

In these sentences, *ka* serves as a coordinating conjunction linking the two clauses together. Any construction that employs *ka* as a conjunction should be viewed as a coordinating construction and not a Serial Verb Construction.

SVCs also differ from Coordinating Constructions in the number of tense particles that can be used at a time. It will be realised in our subsequent discussions that whereas SVCs restrict the number of tense particles to one, which must again occur before V_1, Coordinating Constructions do not impose such restrictions. They can employ the use of more than a single

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[6] More functions of ka will be discussed in our subsequent chapters.

tense particle in a construction as in (10b). It will later be shown that Coordinating Constructions can even employ the use of different types of tense particles in a single construction. Further distinction between SVCs and Coordinating Construction will be discussed as the work develops. The difference between SVCs and Coordinating Construction will serve a good purpose in identifying constructions that are true SVCs.

3.2. Properties of SVCs in Kusaal (Constraints on SVCs in Gur Languages)

Bodomo (1993) identifies a series of constraints with serial verb constructions in the Gur languages. As we discuss the various properties of SVCs in Kusaal, we will match these properties with the various constraints identified to be common with SVCs within the Gur language sub-group.

3.2.1. Multiple Verbs

In comparison with many serialising languages, SVCs in Kusaal exhibit more than one verb in a chain of events that form a single clause. There are cases where a series of verbs are used to code conceptually unitary events:

(11)   Bupuŋ la   da   da'e   biig   la   bas   tiŋ

      girl   the   pst.   push   child the   leave   ground

      'The girl pushed the child onto the ground.'

(12)   o   di'e   piar la ε sida

      s/he   take   story the be true

      'S/he believed the story.'

(13)   o   zo   yi   doog la ni

      she   run   come-out   room the inside

      'She run out from the room.'

(14)　　　o　　da'a　　laad　la　tis　　　ba

　　　　　s/he　buy　　items the　give　　them

　　　　　'S/he bought the items for them.'

On the other hand, a series of verbs can be used to represent different events. Osam (1994) refers to this as the chaining type of SVCs. He states that "multi-verbs are used to code related multi-events" (Osam 1994:194). The linear ordering of the verbs depicts the order in which the events took place. It must be indicated that there are no limits as to the number of verbs that can occur in this type of construction:

(15)　　　N　sam ku　　nua　la waawaʔ　　dug　　　　di

　　　　　My father kill　　hen　the cut- cut　　cook　　　eat

　　　　　'My father killed a hen, cut it cooked it and ate it.'

(16)　　　Bupuŋ　la　da　do　zo　yi　　　kiŋ　　da　　daam la.

　　　　　Woman the　past　get-up, run come-out　go　　　buy　　beer the.

　　　　　'The woman got up, ran out, went and bought the beer.'

The sentence in (15) is made up of four verbs whilst (16) contains five verbs. All these verbs code different events. They follow in a sequence representing the order in which the events unfolded.

 It can again be seen from example (15) that all the verbs are transitive verbs. Example (16) on the other hand has both transitive and intransitive verbs. It will be seen later on that Kusaal places a limitation on the kind of verbs that can co-occur in a chain.

One important difference between the examples in (11-14) and the examples in (15-16) is that it is possible to introduce conjunctions in the latter resulting in coordinate constructions. This however is not possible in the former. Example (14) is repeated here as (17a) and example (15) as (17b) to illustrate this assertion:

(17)　　　a. * o　　tor　　　laad　la　ka　tis　　　ba

　　　　　　　s/he　share　　items the　Conj　give　　them

'*S/he shared the items and gave them....'

This sentence is incomplete because the verbs are no longer coding a unitary event. There is the need for a direct object for the verb *tis* so that the whole construction will be a coordinate construction. (17b) on the other hand comes out as a full coordinate construction:

b. N   sam   ku   nua la ka waʔ   ka   dug   ka   ne o onb.

My father   kill   hen   the Conj   cut   Conj   cook   Conj then 3sg chew

'My father killed the fowl and he cut it and he cooked it and he chewed it.'

The last verb in the construction takes an obligatory subject pronoun. *ne* 'then' is also introduced. *ne* signals that the sentence is getting to the end.

Example (15) can equally be broken down into four simple sentences as illustrated in (c-f).

c. N   sam ku   nua la

My father   kill   hen the

'The father killed the hen.'

d. N   sam waawaʔ   nua la

My father cut   hen the

'My father cut the chicken into pieces.'

e. N   sam   dug   nua la

My father   cook   hen the

'My father cooked the chicken.'

f. N   sam onb   nua la.

My father chew   hen the.

'My father chewed the chicken.'

This type of structure is prominent in most languages that have SVCs. It can be found in languages such as Akan, Ewe and Yoruba (see Agyeman 2002, Agbedor 1993, and Awoyale 1988).

Bodomo (1993) refers to instances whereby series of verbs are used to code conceptually unitary events, such as discussed in examples (12-15), as cases involving the predicate constraint. He puts this as:

(18)   *"A construction c is an SVC if two or more different finite verbs occur monoclausally, selecting each other in such a way that together they express a single event."*

It must however be indicated that in this work, I will equally consider constructions that involve the chaining together of series of verbs in the expression of multiple events as cases involving SVCs. It will later be seen in our discussion that these types of constructions equally pass all the tests that are used in differentiating SVCs from other types of constructions.

3.2.2. Co-occurrence of Verbs from Different Sub-categorization Classes

Verbs from different sub-categorisation groups are found to have limitations with regard to their co-occurrence with one another in Kusaal SVCs. Ditransitive verbs cannot precede monotransitive verbs in SVCs in Kusaal. Such order can only result in coordinate constructions with or without a common shared subject. The following examples are used as illustrations of possible and impossible combinations of verbs from the various sub-categorization groups:

(19)   N da kiŋ da'a gbana la.

           I pst go buy books the.

           'I went and bought the books.'

In this example (19), an intransitive verb *kiŋ* is followed by a transitive verb *da'a*.

(20)   N da kiŋ tis   biig   la   ligiri.

            I pst go give child the money

            'I went and gave the child money.'

Example (20) is made up of an intransitive verb *kiŋ* followed by a ditransitive verb *tis*. The direct object of *tis* is *biig la* and the indirect object is *ligir*.

(21)   N   da'a fuug tis   biig la

             I   buy dress give child the.

            'I bought a dress for the child.'

In this example (21), the first verb is a transitive verb, followed by a ditransitive verb.

(22)   N da   kiŋ da'a fuug tis   biig la

            I pst go buy dress give   child the

            'I went and bought a dress for the child.'

In example (22), the first verb is an intransitive verb, followed by a transitive verb, followed by a ditransitive verb. All these verbs share one subject. The direct object of V_2 is also the perceived direct object of V_3, and V_3 has *biig la* as its indirect object.

(23)   N sa   di diib gbuis

            I pst eat food sleep

            'I ate food and slept.'

In this example, (23), we have a case of a transitive verb followed by an intransitive verb. It must be indicated that conjunctions can be introduced in examples (19-23) resulting in coordinate constructions. Example (23) is repeated with a conjunction as (24) for illustration:

(24)   N sa   di diib ka   gbuis

            I pst eat food Conj. sleep

            'I ate food and slept.'

In cases where a ditransitive verb precedes an intransitive or monotransitive verb, it is obligatory to have a conjunction in the construction whether the subject is shared or not.

(25)   N sa   tis bupuŋ la ligiri   ka   o   kul.   *N sa tis bupuŋ la ligiri ɔ kul

         I   pst give lady the money   Conj. she go-home.

         'I gave the lady money and she went home.'

(26)   N sa   tis bupuŋ la ligiri   ka   kul.   *N sa tis bupuŋ la ligiri kul

         I pst give lady the money Conj. go-home.

         'I gave the lady money and I went home.'

Examples (25) and (26) are both coordinate constructions and not SVCs. They are made up of a ditransitive verb preceding an intransitive verb. (25) unlike (26) does not have a shared subject between the verb *tis* and *kul*.

(27)   Ba sa   tis bupuŋ la diib   ka   o   di.   *Ba sa tis bupuŋ la diib di

          They pst give lady the food Conj. she eat

          'They gave the lady food and s/he ate it.'

Example (27) is also a coordinate construction. A ditransitive verb precedes a transitive. The two verbs are not sharing a common subject.

(28)   N sa   tis   biig la diib   ka   o di gbuis   *N sa tis bii la diib di gbuis

          I pst give child the food Conj. she eat sleep

          'I gave the child food and s/he ate and slept.'

Example (28) is an illustration to show that a ditransitive verb cannot occur before a transitive verb and then an intransitive verb and all share an internal argument. It is not possible to have *biig la* as the direct object of *tis* and as subject for both *di* and *gbuis*. The result therefore is a coordinate construction.

3.2.3. Argument Sharing

3.2.3.1. Subject sharing

A very common characteristic of SVCs in Kusaal is the subject sharing phenomenon. Most often, all the verbs in this type of constructions share the same subject. The shared subject always occurs before the first verb in the series. Bodomo (1993) refers to this as the Subject sameness constraint. He further argues that this constraint is not a distinguishing factor between SVCs and other constructions. But rather what is does is to distinguish SVCs from constructions such as canonical coordination and subordination where different arguments can act as the subject. The constraint reads as:

(29)   *"A construction c satisfies the subject sameness constraint iff all the lexical verbs in c share the same structural subject."*

Examples (30) and (31) are illustrations:

(30)   M   ma   sa   mal   diib tor   tis   biis   la.

         My mother pst prepare food share give children the

         'My mother prepared food and shared for the kids.'

(31)   Aminu daa ko   puug la burug kawena.

         Aminu pst plough farm the plant corn

         'Aminu ploughed the farm and planted corn.'

Unlike in a language like Akan (see Agyeman 2002), the subject cannot be shared in cases where a ditransitive verb precedes a monotransitive verb in Kusaal SVCs.

(32)   a. Amina$_i$ sa   tis Asibi$_j$ diib   ka   o$_j$ di.

            Amina pst give Asibi food   Conj. she   ate

            'Amina gave Asibi food and she ate.'

         b. *Amina$_i$ sa   tis Asibi$_j$ diib   ka   o$_i$ di

         c. *Amina sa tis Asibi diib di

(33) a. Amina$_i$ sa tis nua$_j$ la kawena ka o$_i$ gwua o$_j$.

Amina pst give hen   the corn Conj she catch it

'Amina gave the hen some corn and caught it.'

b. *Amina sa tis nua$_i$ la kawena gwua o$_i$

It can be seen from examples (32) and (33) that both constructions are made up of a ditransitive verb as V_1 and a transitive verb as V_2. In both constructions the two verbs do not share a common subject and again they are instances of coordinate constructions and not serial verb constructions.

3.2.3.2. Object Sharing/Internal Argument Sharing[7]

A vital aspect of this thesis concerns internal argument sharing in SVCs in Kusaal. SVCs involving two or more verbs as illustrated in the examples below share a single internal argument. The internal argument constraint as observed by Bodomo (1993) reads as follows:

(34)   *"For a construction c to be a well-formed SVC, if there are two or more polyadic verbs, then all these must share the syntactic realisation of their direct internal arguments."*

The following is an illustration:

(35) Amina da da'a mui tor (*li).

Amina pst buy   rice share it

'Amina bought rice and shared it.'

(36) Anima da da'a   mui$_j$ dug Ø$_j$ di Ø$_j$.

Amina Pst buy   rice cook   eat

---

[7] Following Collins (1997:463) it is proposed in this work that the subject of a transitive verb functions as an external argument (e.g. causers) whereas all other arguments are considered as internal (e.g. themes, instruments and goals).

'Amina bought rice cooked it and ate it.'

(37)   Asibi   nwe' gotiŋ   la   nwa'e   bas

         Asibi   hit   mirror DEF   break   abandon

         'Asibi hit the mirror and broke it.'

What one would have expected under normal circumstances is the realisation of the object as a pronoun instead of a null NP as illustrated in (38). Such instances, however, create constructions that are absolutely ungrammatical.

(38)   *Amina da   da'a mui dug   li   di li.

          Amina Pst buy   rice cook   it   eat it

          'Amina bought rice cooked it and ate it.'

The sharing of a common internal argument is necessary in SVCs in Kusaal as it serves as a distinguishing feature between SVCs in this language and other constructions such as overt coordinating construction. Consider the illustration below:

(39)   a. Asibi nwe' naayig la   kpen' doog   la   ni

          Asibi hit   thief   DEF   enter   room DEF into

          'Asibi hit the thief into the room.'

        b. Asibi$_i$ nwe' naayig la *(ka) *(o$_i$) kpen' doog   la   ni

          Asibi hit thief DEF   and   she   enter   room DEF into

          'Asibi hit the thief and then she entered the room.'

In the absence of internal argument sharing (39b) must become a coordinate construction. In (39a) the direct object of *nwe'* 'hit' is the understood subject of *kpen'*. Both V_1 and V_2 share the internal argument *naayig* 'thief'. (39b) on the other hand is composed of two separate clauses joined by the conjunction *ka*. No internal argument can be mentioned in this case.

Baker (1989:522) on his part argues that in a case where a ditransitive verb precedes a monotransitive verb, the two verbs cannot share the same object. This argument is as a result

of his observation of what happens in a language like Yoruba in the event of object sharing. Kusaal is observed to be consistent with this assertion following the ungrammaticality of example (40b):

(40)   a. Amina da'a fuug tis Asibi

            Amina buy dress give Asibi

            'Amina bought a dress for Asibi.'

        b. *Amina tis   Asibi da'a   fuug

              Amina   give Asibi buy   dress

            'Amina bought a dress for Asibi'

3.2.4.   Tense, Aspect, Mood and Polarity (TAMP)

These grammatical categories have been extensively discussed in the first chapter. It has been seen that tense, aspect, mood and polarity are expressed using particles in Kusaal. These particles are proposed to spell out different nodes as in the case of modals and auxiliaries in the structural representation of a language like English. Anytime a preverbal particle occurs in SVCs in this language its scope casts across the entire construction. This explains why there can only be for example a single tense particle or a single polarity particle in SVCs as will be further explained shortly. Different categories of particles can however be used in a single construction. (Bodomo, 1993) sets the constraint for TAMP as follows:

(41)   *"For any construction c to pass as an SVC, all the different verbs in c must be in the scope of one TAMP node."*

This constraint can be adopted except that we cannot have a single node for tense, aspect mood and polarity. With reference to the illustration in (42), there is the need for a series of nodes for all the particles that may occur in a serial verb construction in Kusaal. The TAMP (Tense, Aspect, Mood and Polarity) will therefore be composed of several nodes since it is possible to have a particle from the various categories in a single construction:

(42)   O   da bo   kuosi-d   mui

           S/he Pst Neg   sell-Imperf rice

           'S/he was not trading in rice.'

3.2.4.1.   Tense Particle Constraint in Kusaal (The Past)

Kusaal does not have an overt morpheme for marking the present tense. The present tense is deduced from context. The progressive form of the verb is usually used to express events in the present. The past tense on the other hand can be expressed through Ø-morpheme or through the use of tense particles. These tense particles have been listed in chapter one. The following examples are illustrations of these particles in SVCs:

(43)   o   sa   do   yi   kiŋ da'a diib la

           s/he pst get-up, come-out   go   buy food the

           'S/he got up and went and bought the food yesterday.'

(44)   o   Ø   do   yi   kiŋ   da'a   diib la

           s/he pst get-up   come-out   go   buy   food the

           'S/he got up and went and bought the food.'

From example (43), it can be observed that the tense particle constraint requires that, anytime a tense particle occurs, it comes directly before the first verb and its scope spreads throughout the construction. It is therefore assumed that a Ø morpheme be imagined before the first verb and stretches throughout the entire construction as in (44). It will be ungrammatical to have the tense particle after the first verb or repeated before the other verbs:

(45)   *o   do   sa   yi   kiŋ da'a diib la

           s/he get-up, pst come-out   go   buy food the

(46)   *o   sa   do   sa   yi   sa   kiŋ sa da'a diib la

           s/he past get-up, pst come-out pst go   past buy food the

The same tense particle can however be repeated in a coordinating construction with a repeated subject.

(47)   a. o   sa   do   ka   yi   kiŋ da'a diib la

         s/he   pst get-up   Conj come-out go   buy   food the

         'He got up and went out and bought the food.'

        b. o   sa   do   ka   o   sa   yi   kiŋ da'a diib la

         s/he pst get-up Conj s/he pst come-out go   buy   food the

         'He got up and went out to buy the food.'

(48)   *o   sa   do   ka   sa   yi   kiŋ da'a diib la

         s/he pst get-up, Conj. pst come-out   go   buy   food the

(49)   *o   da   do   sa   yi   kiŋ   da'a diib la

         s/he pst get-up, pst come-out   go   buy   food the

It is again not possible to have different tense particles within a serial verb construction in this language as in (49). This can be said to be due to the fact that the first tense particle forces all the verbs to have its interpretation. Different tense particles can however be used to code different time events in a coordinate construction as in (50):

(50)   o   da kiŋ Tromsø yum ayi wani ka (o)   sa   lep   suɔs na

         she pst go Tromsø years two now Conj. (3Sg.)   pst return yesterday

         'She went to Tromsø two years ago and returned yesterday.'

3.2.4.2.   The Future

The future is expressed in Kusaal using the particles *na* 'will/ shall' or *ku* 'will not/ shall not'. The constraint here requires that the particle precedes the first verb in a series and has its scope spread across the entire series of verbs. A particle under this constraint cannot be used after the first verb nor can it recur with all the verbs:

(51)   a.   o   na   do   yi   kiŋ da'a diib la

             s/he will get-up, come-out   go buy food the

             'S/he will get up and go and buy the food.'

        b.   *o dɔ na yi kiŋ daa diib la

(51)   a.   o   ku   do   yi   kiŋ   da'a diib la

             s/he will not get-up, come-out go   buy food the

             'S/he will not get up and go and buy the food.'

        b.   *o ku do ku yi ku kiŋ ku da'a diib la

3.2.4.3.   The Aspectual Suffix Constraint

Aspect in Kusaal is marked using suffix morphemes as indicated in the previous chapter. The constraint regarding aspectual suffixes requires verbs in a sentence to have identical suffix morphemes. Examples (52) to (54) are used as illustrations of possible ways of expressing aspectual events in Kusaal SVCs:

(52)   Ba zo-t   kiŋ-e   di-t   mui la

        they run-IMPERF go-IMPERF eat-IMPERF   rice DEF

        'They run there to eat rice (repeatedly)'

(53)   Ba   da da'a-d   mui kuosi-d

        they Pst buy-IMPERF rice   sell-IMPERF

        'They were buying rice and selling it.'

(54)   Amina yi   kiŋ   da'a   diib la

        Amina come-out- PERF. go- PERF   buy-PERF food DEF

        'She came out and went and bought the food.'

The imperfective aspectual marker must be realized on each verb in SVCs in Kusaal. Constructions such as (55) to (58) are ungrammatical.

(55)   *Ba   zo-t   kiŋ-Ø   di-Ø   mui la

          they run-IMPERF go-IMPERF eat-IMPERF rice DEF

          'They run there to eat rice (repeatedly).'

(56)   *Ba   zo-Ø   kiŋ-e   di-t   mui la

          they run-IMPERF go-IMPERF eat-IMPERF   rice DEF

          'They run there to eat rice (repeatedly)'

(57)   *Ba   zo-Ø   kiŋ-Ø   di-t   mui la

           they run-IMPERF go-IMPERF eat-IMPERF   rice DEF

          'They run there to eat rice (repeatedly)'

(58)   *Ba   zoØ   kiŋe   diØ   mui la

          they run-IMPERF go-IMPERF eat-IMPERF   rice DEF

          'They run there to eat rice (repeatedly)'

One observation is that overt perfective suffix unlike the imperfective is not compartible with serial verb constructions in Kusaal. –*ya* can neither occur on the first verb in SVCs nor on all the verbs in a series.

(59)   a. Amina   yi   kiŋ

             Amina   come-out-PERF   leave-PERF

             'Amina came out and left'

          b. *Amina yi-ya   kiŋ-ya

             Amina come out –PERF go-PERF

             'Amina came out and left.'

Perfective and imperfective aspects cannot both be used simultaneously in a single construction as shown in (60).

(60)   * ɔ dɔ-t   yi-ya   kiŋ-ya da'a-ya   diib la

          s/he get-up- Imperf, come-out-Perf   go-Perf buy-Perf   food DEF

It must also be indicated that the postverbal aspectual particle *nɛ* as illustrated in chapter two can occur in SVCs when the verbs are in the aspectual forms. It occurs after the series of verbs either in the imperfective A forms or the perfective A forms. It can again occur either before or after the object and there can be only one *nɛ* in a construction involving SVCs.

(61)   Ba zo-t   kiŋ-e   di-t   **nɛ** mui la/ mui la **nɛ**

          3Pl run-IMPERF go-IMPERF eat-IMPERF PTVP rice DEF/ rice DEF PTVP

          'They run there to eat rice (repeatedly)'

(62)   Amina yi   kiŋ   da'a   nɛ diib la/   diib la   nɛ

          Amina come-out- PERF. go-PERF buy-PERF PTVP food DEF/food DEF PTVP

          'She came out and went and bought the food.'

3.2.5. The Polarity Constraint

Consider the following sentences in example (63):

(63)   a. o   do   yi   kiŋ da'a diib la

              s/he get-up, come-out go buy food the

              'S/he got up and go and buy the food.'

          b. o   bo   do   yi   kiŋ daa diib la

              s/he not get-up, come-out go buy food the

              'S/he did not get up and go and buy the food.'

From the two declarative sentences above, it can be observed that a negative declarative sentence in Kusaal is marked using the particle *bo* 'not'. The absence of this particle as in (63a) makes the sentence a positive declarative one. The polarity constraint requires that the negative polarity particle, just like all the other particles seen so far, precedes the first verb and its scope is as well expected to spread across the entire construction in cases of SVCs. It is therefore not possible to have both positive and negative interpretations in a single construction. It is neither possible to have the negative polarity element following the first verb nor recurring with all the verbs.

(64)   O   bo   li   du'os

         s/he neg fall-pst get-up-past

         'S/he did not fall and hence did not get up'

(65)   *O   li   bo du'os

         s/he fall-pst neg get up

         'S/he fell and did not get up'

A context such as the above can only be created in a coordinate construction.

(66)   O   sa li   ka sa   bo du'os

         s/he pst fall Conj. pst neg get up

         'S/he fell and did not get up'

3.3.   Tests for Serial Verb Constructions

From the ongoing discussion so far, SVCs in Kusaal can be assumed to be characterized by properties such as: the sharing of NP arguments, a single tense particle and single polarity item which must both precede the first verb in the series with their scope casting across the entire construction. To distinguish Serial Verb Constructions from other types of constructions in Kusaal, the next section discusses several tests based partly on these properties that can be used to determine whether a particular example is an SVC or a coordinate construction.

3.3.1.   The Single Tense-Marker Test

The various definitions of SVCs at the beginning of this chapter indicate the need to have a single tense-marker in a construction assumed to be a Serial Verb Construction preceding the first verb with its scope stretching throughout the entire construction.

(67)   a. o   **da**   dug suma   (***da**) onb

3Sg. Past boil groundnut past chew

'S/he boiled groundnut and chewed it.'

b.   o   **da** dug suma   ka   (**da**) onb

3Sg. Past boil groundnut Conj. past chew

'S/he boiled groundnut and chewed it.'

(68)   a. o   **ne** dug suma   (***na**) onb

3Sg. Fut boil groundnut Fut. chew

'S/he will boil groundnut and will chew it.'

b. o   **ne** dug suma   ka   (**na**) onb

3Sg. Fut. boil groundnut Conj. Fut. chew

'S/he will boil groundnut and will chew it.'

From the above illustrations, it can be observed that if there is a single tense particle then the construction is a Serial Verb Construction as in (67a) and (68a). The presence of two tense particles makes the construction a coordinate construction (67b) and (68b). Both the past tense and future particles *da* and *na* respectively cannot be repeated after the first verb in SVCs. This, however, is not the case in the examples involving coordinate construction. In these constructions, the two verbs are linked with the coordination marker *ka* and both the tense and future particles can optionally be repeated after the conjunction. The fact that the particles *da* and *na* can be repeated after the coordinator, gives an indication that SVCs and coordinating sentences have different structures in Kusaal.

3.3.2. The Negation Test

The negative polarity element as indicated earlier can only occur before V_1 and any attempt to have it repeated (69b) or before V_2 (69c) results in ungrammaticality.

(69)　　a. o　**bo**　dug　nim　　onb

　　　　　3Sg　Neg.　cook　meat　chew

　　　　　'S/he did not cook meat and chew it.'

　　　　b. *o　**bo**　dug　nim　**bo** onb

　　　　　3Sg Neg.　cook meat　Neg. chew

　　　　　'(Lit.) S/he did not cook meat and did not chew it.'

　　　　c. *o　　dug　nim **bo**　onb

　　　　　3Sg　cook meat Neg.　chew

　　　　　'S/he cooked meat and did not chew it.'

In overt coordination on the other hand, the negative element can appear before V_2.

(70)　　a. o　**bo**　dug　nim onb

　　　　　3Sg　neg　cook meat　chew

　　　　　'S/he did not cook meat and chew it.'

　　　　b. o　　dug　nim　ka　　**bo** onb li

　　　　　3Sg　cook meat Conj. Neg. chew it

　　　　　'S/he cooked meat and didn't chew it.'

This difference, thus if the negative particle occurs before V_1 then an SVC and if it occurs before V_2 then a coordinating construction, is one strong indication that SVCs in Kusaal are distinct from coordinating constructions.

3.3.3. The Pronoun/Empty Category Test

Baker (1989) observes that an overt pronoun cannot appear after V_2 in SVCs. An overt coordinating construction can have a pronoun appearing after V_2 without any instances of ungrammaticality. The following examples from Kusaal are just as expected from the above observation.

(71)   o   da dug ni'im   onb (*li)

             3Sg   pst cook meat   chew it

             'S/he cooked meat and chewed it.'

(72)   o   da dug   nim ka   da onb li wusa

             3Sg pst cook   meat Conj. past chew it   all

             'S/he cooked meat and chewed all of it.'

Collins (1997) argues that the V_2 in Ewe can take a pronoun after it. The data above indicates Kusaal does not allow a pronoun after the V_2 in SVCs. A similar observation is made by Hiraiwa and Bodomo with data from Dagaare (see Hiraiwa and Bodmo 2008:800). It will therefore be assumed in this work that a construction is SVC if it has no overt pronoun after V_2 and it is a coordinating construction if it has an overt pronoun after V_2.

3.3.4. The Extraction Test

Whereas coordinating constructions bar extractions, SVCs in Kusaal makes it possible to extract. From the illustrations below, SVCs in Kusaal can be observed to not be subject to the Coordinate Structure Constraint (Ross 1967) which makes it possible for the object to be extracted.

(73)   a. **Bo**   ka o   da dug onb

             what   C   3Sg. Pst cook chew

             'What did he cook and chew?'

b. *__Bo__   ka   o   da   dug   ka   da   onb   li?

What   C   3Sg. Pst   cook   C   pst   chew   it

'What did he cook and then chew?'

SVCs in Kusaal are therefore distinguishable from coordinating construction via the extraction test. If extraction is possible from a construction like (73a) then it is SVC and if extraction is impossible (73b) then we have a coordinating construction.

The various tests above are further indications to confirm the assertion that Kusaal is a true serializing language. It again shows that the phenomenon of object-sharing is a major characteristic of SVCs in this language and that they are not instances of a (c)overt coordination construction.

The next section looks at various approaches proposed by some researchers in analysing the object-sharing phenomenon in Serial Verb Constructions.

3.4.   Previous Analyses in the Literature for Object-sharing SVCs

The analysis of the object-sharing phenomenon in serial verb constructions has generated heated arguments in the literature over the years. This is because object-sharing SVCs, as in example (74), pose a challenge to the theta- criterion which is formally stated in (75).

(74)   Bupuŋ la   sa   da'a   mui   kuos.

Lady DEF   Pst   buy   rice   sell

'The lady bought rice and sold it.'

(75)   The Unique θ Generalization

Each θ-role must be assigned but a constituent cannot be assigned more than one θ-role. (Adger 2003:81)

mui is the only internal argument in (74). *Kuos* 'sell' is a transitive verb that assigns a theme θ-role to an internal argument but there is no overt NP following it. What this means is that the complement of V_2 is not represented in SVCs and both V_1 and V_2 are assumed to assign a

theme theta-role to a single internal rgument. The problem then is how to reconcile this type of occurrence with the generalization in (75).

In an attempt to solve this puzzle Baker (1989) argues for a ternary branching structure where the shared object is simultaneously assigned theta roles by both V_1 and V_2.

(76)

```
                        S
                     ___|___
                    |       |
                  SUBJ     VP
                           |
                           V'
                        ___|___
                       |   |   |
                      V₁  NP  V₂'
                               |
                               V₂
```
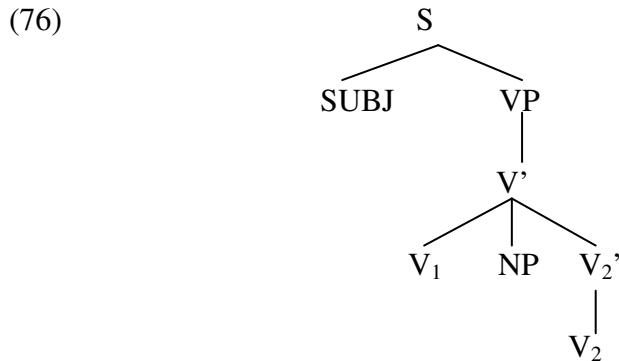
According to Baker, an element can receive more than one theta-role as long as all the theta roles are assigned to the same structural position. What this means is that the internal argument in (76) is shared between V_1 and V_2 and the theme theta role is assigned to this shared object by both V_1 and V_2 simultaneously.

The difficulty in adopting this framework has to do with the ternary branching structure which is unacceptable under our current minimalist framework. The difficulty in explaining how these elements will be ordered via the LCA at PF is a big puzzle.

In an attempt to analyse object-sharing in serial verb constructions, Collins (1997) proposes a VP-shell analysis where the second verb (=V_2) takes a *pro* and the first verb (=V_1) takes the object. This analysis is carried out using data from Kpeli, a dialect of Ewe, which possesses the postposition *yi*. Collins (1997) argues that *yi* has the ability to assign Case in some environments to NPs that lack structural case. Judging from the distribution of the postposion *yi*, Collins proposes the presence of an empty category in SVCs.

(77)   a. Me nya ɖevi-ε   dzo (yi). [= dzo(-e)]

         I   chase child-DEF leave P

         'I chase the child away.' (Collins 1997:470)

49

b. Me nya ɖevi-ε$_i$ [$_{VP}$ dzo [ec$_i$ (yi)]].

I chase child-DEF   leave   P   (Collins 1997:471)

Collins argues that (77a) is an instance showing the possibility for having *yi* to appear at the end of the SVC even though there is no overt NP for it to assign case to. In accounting for this, Collins proposes an empty category which mediates the relationship between V$_2$ and the object and V$_1$ as illustrated in (77b). Collins argues that *dzo* 'leave' is unaccusative and does not assign accusative Case to its argument. This is what makes it possible for *yi* to assign Case to the null object.

(78)
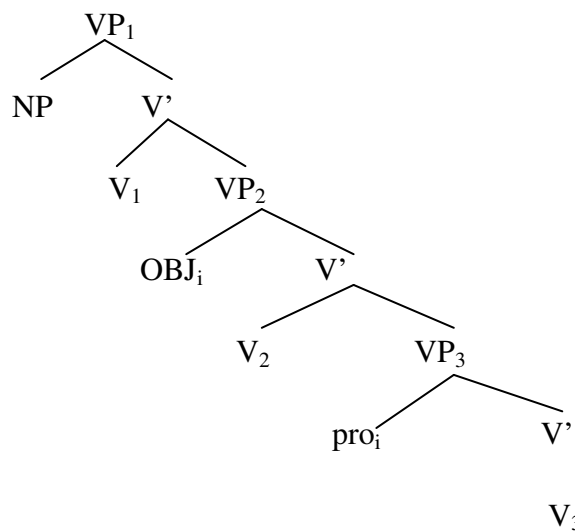
Collins (1997) chooses *pro* over *PRO* for the empty category on the basis of the assumption that by claiming that the later must be ungoverned (Chomsky 1981). He argues that the empty category in an SVC is in fact governed and hence cannot be PRO. (see Collins 1997:477 for details).

Even though there is no clear evidence against this proposal in Kusaal, so also is there lack of clear evidence in support of it. Consider the Kusaal version of the data in (77).

(79)   N kar biig la bas

        I chase child DEF leave

        'I chased the child away.'

 Kusaal does not have instances of postpositions hence the difficulty in suggesting the presence of an empty category.

In our next chapter, we will turn to look at Predicate Cleft Constructions and Serial Verb Constructions in Kusaal. We will discuss the possibility of having V_1 form a syntactic constituent with the object excluding V_2 or V_2 also forming a syntactic constituent with the object excluding V_1. Thus we find both the possibility of predicate clefting V_1 and the object and that of V_2 and the object. These predicate clefting options cannot be analysed using the framework proposed by both Baker (1989) and Collins (1997), so an alternative proposal by Hiraiwa and Bodomo (2008) to account for similar Dagaare facts will be introduced.

3.5.   Summary/Conclusion of the Chapter

In trying to establish that Kusaal is an example of a true serializing language, the various properties of SVCs as elaborated in the definitions at the beginning of the chapter have been looked out for with data from Kusaal. The tests for negation, pronoun extraction, and single-tense marker are all carried out to show that a particular construction, specifically a SVC in Kusaal, does not involve instances of (c)overt coordination constructions.

Some previous accounts on the analysis of the object-sharing phenomenon in SVCs have been discussed. Baker's (1989) proposal is deemed unsatisfactory under the minimalist framework due to its ternary branching nodes. Furthermore, while there is no evidence against Collins' (1997) analysis so also do we lack evidence in favour of it with data from Kusaal.

 The next chapter looks at the theory of predicate cleft constructions and its interactions with object-sharing SVCs with data from Kusaal.

CHAPTER FOUR

PREDICATE CLEFT CONSTRUCTIONS IN KUSAAL

4.0.   Introduction

Several West African languages have received considerable attention regarding the construction of Predicate Focus. Notable among these are the Kwa languages such as Ewe(gbe) (Emeka, 1992), Akan (Boadi, 1974), Fɔn(gbe) (Lefebvre 1992) Yoruba (Manfredi 1993) among others. As at the time of this work, only two Gur languages are known to have received such attention. These are Buli (Hiraiwa 2005a) and Dagaare (Hiraiwa and Bodomo 2008). Kusaal also allows Predicate Cleft Constructions (PCC) as shall be seen in this discussion.

This chapter will be divided into four parts. The first part begins with a review of the phenomenon of Focus Constructions and Predicate Cleft Constructions. This is followed by brief discussion on *ka* and its distribution in Kusaal. The second section considers the properties of predicate focus constructions in the language. The third part also discusses the interaction between predicate cleft constructions and serial verb constructions in the language. The final part of the chapter looks at the derivation of predicate cleft constructions in Kusaal followed by a conclusion to the chapter.

4.1.   The Phenomenon of Focus Construction and Predicate Cleft Constructions

Rizzi (1997) observes that the left periphery of the clause can host several elements. He proposes that the CP layer consists of a highly structured hierarchical set of projections. He indicates four kinds of elements that are noted to occur in the left periphery as including interrogative, relative pronouns, topics and focalized elements.

In an attempt to differentiate a topic and comment articulation from a focus and presupposition articulation, Rizzi argues that the topic is a fronted element which is separated from the rest of the clause by using "comma intonation". It is usually old information which can be inferred from previous discourse; the comment is a sort of complex predicate in the form of an open sentence predicated of the topic that introduces new information. In contrast,

the Focus element carries focal stress and it introduces new information whereas the open sentence conveys information that is deduced contextually, it is some kind of presupposed knowledge that the speaker assumes to share with the listener. In Italian, according to Rizzi, the topic-comment articulation is expressed by the construction called Cletic Left Dislocation (CLLD) involving a resumptive clitic coreferential to the topic. The Focus-presupposition articulation can be expressed in Italian by preposing the focus element (focalization) and assigning it special focal stress.

(1) IL TUO LIBRO ho letto (, non il suo)

'Your   book I read (, not his)'

This structural option is restricted to contrastive focus in Italian. This structure is relevant as Kusaal exhibits similar features in expressing focus. Rizzi explains that Example (1) presupposes that you believe I have read something different from your book, and corrects this belief. It couldn't be felicitously uttered as conveying non-contrastive new information, i.e. as an answer to the question "What did you read?

He therefore argues that a constituent observed to be endowed with a topic or focus feature must end up in a Spec-head configuration with Top or Foc as the case may be. This argument is in line with the idea that Topic or Focus movements must be triggered by the need to satisfy a criterion (Rizzi 1997:287). He also noted that multiple foci are unacceptable in the grammar of Italian. This observation corresponds with what happens in Kusaal as will be discussed later on.

A Foc° head takes the focus as its specifier and the presupposition as its complement

(2)
```
              FocP
             /    \
           ZP      Foc'
                  /    \
               Foc°     WP
```
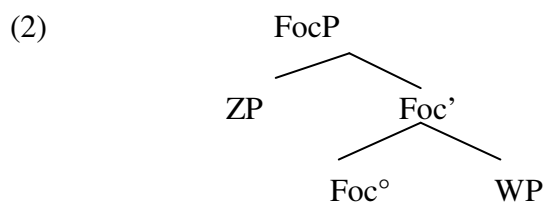
ZP = Focus

WP = Presupposition

Rizzi further observes that, while Top° and Foc° are phonetically null in Italian, they may be pronounced in other cases. For instance, the particle *wé* in Gungbe is argued to be a focus

marker and should be analysed as such (see Aboh, 1995). It will be seen that Kusaal is again comparable to Italian in this respect. Unlike several Gur languages such as Buli, (Hiraiwa 2005a) Dagaare (Hiraiwa and Bodomo 2008) and Dagbani (Issah 2008) that use the focus particles *ká*, *lá*, *ka* respectively, Kusaal does not have an overt focus marker. In spite of this significant difference between Kusaal and Dagaare, there are several striking similarities between these languages in areas including focus construction and predicate cleft constructions as will be unravelled in our subsequent discussions. It will be observed that focus constructions as well as predicate cleft constructions in Kusaal involve the focalization or the topicalisation of a constituent to the left periphery position which is directly followed by the complementizer *ka*. This work will concentrate on predicate cleft constructions in Kusaal which involve the movement of the verb to the left periphery position. This phenomenon is quite rare since most languages are able to focus other elements but not the verb. More interestingly, it will be observed that not only can the verb be focused; the verb and the object can be pied-piped to the left periphery position in Kusaal SVCs.

Hiraiwa and Bodomo (2008) attest to the fact that Dagaare like many other (West) African languages allows Predicate Cleft Constructions. They observe that Predicate clefting in the said language patterns with constituent clefting. According to them, the focused element is moved to the left periphery and followed by the focus marker *lá* and then after that the complementizer *ka*. The following illustrations are taken from (Hiraiwa and Bodomo 2008:802-803).

(3)

a. ǹ   dà   dà   **lá** bɔ́ɔ́

   1Sg. Pst   buy F goat

   'I bought a goat.'

b. **bɔ́ɔ́**   lá   ká ǹ   dà   dà (*lá)

   goat F C   1Sg. Pst buy F

   'It is a goat that I bought.'

c. **dáá̤ó**   la ka ǹ   dà **dà**   bɔ́ɔ́

buy.Nml F C 1Sg. Pst buy goat

'It is buying that I did to a goat (as opposed to e.g. selling it).'

Example (3b) is an illustration of the object focus construction and (3c) illustrates the predicate cleft construction. Hiraiwa and Bodomo (2008) observe that after the movement of the verb *dà* 'to buy' in example (3c) to the left periphery it must be obligatorily nominalised. The original copy of the dislocated verb must also be pronounced. An explanation for these facts will be rendered later on in this discussion. Hiraiwa and Bodomo (2008) further make the assertion that languages are divided into two groups. There are languages where clefted predicates are morphologically nominalised e.g. Buli and Dagaare. There are other languages e.g. Fɔngbe and Hatian Creole, where clefted predicates are just the same as their original predicates. It will be seen that Kusaal can be grouped with languages where clefted predicates are morphologically nominalised.

They also argue that the dependency between the focused predicate and the in-situ predicate is one that is derived by movement. This is supported by the fact that long-distance predicate clefting produces grammatical constructions whereas predicate clefting out of an island results in constructions that are highly ungrammatical as will be illustrated in our subsequent discussions.

On a more significant note, Hiraiwa and Bodomo (2008:805)) argue that the object in PCC in Dagaare can be optionally pied-piped along with the verb.

(4) **bɔ́ɔ́ dáá̤ó**   lá ká ń   dà dà (*ò/*bɔ́ɔ́).

goat buy.Nml F C 1Sg. Pst buy (it/goat)

'It is buying a goat that I did (as opposed to e.g. selling a hen)'.

The object *bɔ́ɔ́* 'goat' is moved to the left periphery and the original copy in this case is not pronounced. In instances like (4) where the object and the predicate are focused, the whole clefted constituent receives a contrastive focus interpretation. They further argue that pied-piping is not due to incorporation and furthermore what looks like pied-piping in Dagaare

cannot be derived from multiple focusing. A more detailed explanation will be given to this later using data from Kusaal where it will be shown that Kusaal exhibits all these various characteristics of Dagaare.

On the issue of the interaction between predicate cleft constructions and serial verb constructions, Hiraiwa and Bodomo (2008) identify three possible predicate clefting patterns: either V_1 or V_2 is clefted or the whole V_1+V_2 complex is clefted. Another possibility is the clefting of the object with eitherV_1 or V_2 or with V_1+V_2. They indicate that the pied-piping patterns in Dagaare predicate clefting of object sharing SVCs are typologically quite uncommon and as such very important. They claim that the rarity of such patterns in other languages is due to the difficulty in clefting V_2. In the few cases where clefting of V_2 seems to be allowed it happens that pied-piping is also not allowed. (see Hiraiwa 2005a 2005b), Stewart (2001), Kandybowicz (2006) and Lefebvre and Brousseau (2002). The diagram below is a summary of the patterns of PCCs and SVCs as observed by Hiraiwa and Bodomo (2008).

(5) Cross-linguistic Variation of PCCs and SVCs

	Buli	Yoruba	Edo	Nupe	Fɔngbe	Dagaare
V_1	o.k.	o.k.	o.k.	o.k.	o.k.	o.k.
V_1+Obj	o.k.	o.k.	*	*	*	o.k.
V_2	*	*	o.k.	*	o.k.	o.k.
V_2+Obj	*	*	*	*	*	o.k.
V_1+V_2	o.k.	o.k.	*	(*)	*	o.k.

Based on this observation, Hiraiwa and Bodomo (2008) make the following generalization:

(6) "In Dagaare, not only V_1 and the object can form a syntactic constituent excluding V_2, but also V_2 and the object can form a syntactic constituent excluding V_1."

The observed patterns of interaction between PCCs and SVCs, according to Hiraiwa and Bodomo (2008) can be used to substantiate the claim that the shared object in SVCs is
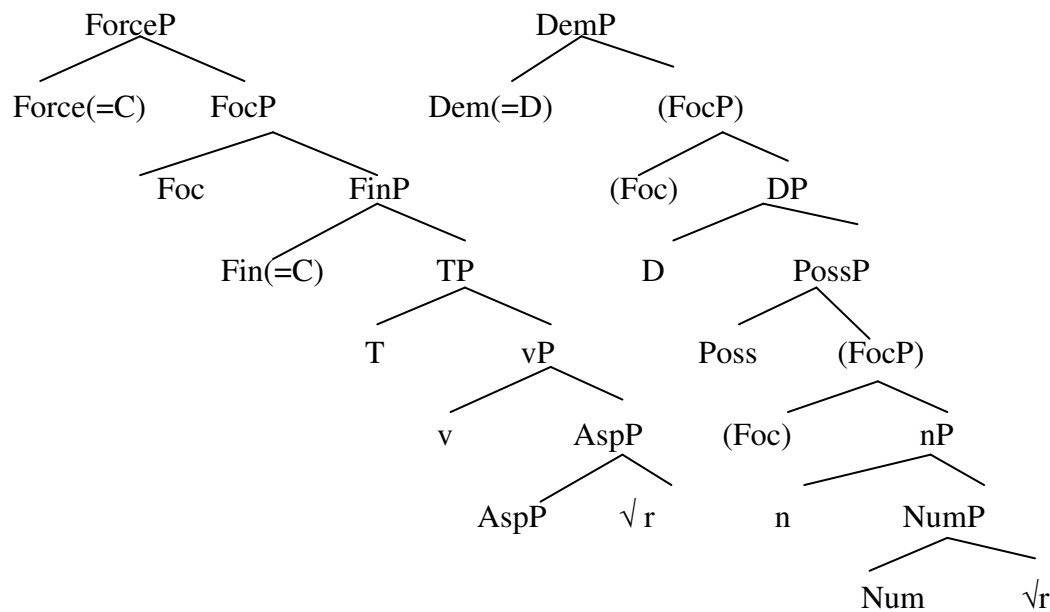
syntactically shared. It will later be observed that PCCs and SVCs in Kusaal interact in the same ways as observed in Dagaare and that Kusaal in conjunction with Dagaare can be said to provide evidence that the shared objects in SVCs are syntactically shared. The data that will be presented in our discussion later will reveal that Kusaal can be used as an additional example of languages that follow the generalization in (6).

According to Hiraiwa (2005a, 2005b), much important research on the parallelism between DPs and CPs has indicated that the DP domain and the CP domain show a significant amount of structural similarities. As a result Hiraiwa (2005a, 2005b) proposes the following symmetric structure between CP and DP by building on Rizzi's articulated left periphery.

(7) CP/DP Parallelism (Hiraiwa 2005a, 2005b)

a. "CP domain"   b. "DP domain"

```
        ForceP                              DemP
       /      \                            /     \
  Force(=C)   FocP                   Dem(=D)     (FocP)
             /    \                            /      \
          Foc     FinP                      (Foc)      DP
                 /    \                               /    \
            Fin(=C)   TP                             D     PossP
                     /   \                                 /    \
                    T     vP                            Poss    (FocP)
                         /   \                                  /    \
                        v    AspP                            (Foc)    nP
                             /   \                                   /    \
                          AspP   √ r                               n     NumP
                                                                        /    \
                                                                     Num     √r
```

 It has been indicated earlier on that the fronted predicate element gets pronounced in both the focus and original positions. This form of "predicate doubling" according to Hiraiwa (2005a, b) is one common but significant feature of PCC cross-linguistically. He argues, by adopting and further elaborating on Abels (2001) and Harbour (1999) that verb-doubling in PCC is as a result of an interface condition. Abels (2001) proposes that verb-doubling is due to a morphological principle. He argues based on data in Russian that the lower copy of the verb needs to be spelled out because: (i) Russian lacks *do*-support, and (ii) inflectional features of

(T)ense cannot be stranded (Lasnik 1981, 1995 for the *Stray Affix Filter*).This explains the contrast in (8a) and (8b) as shown below:

(8)

Russian (Abels 2001)

a. Čitat' **(-to)** Ivan eë ***(čitaet),** no ničego ne ponimaet.

　read(INF) (TO) Ivan it(FEM.ACC)　read　but nothing not understand

　'Ivan does read it, but he doesn't understand a thing.'

b. **Čitat'**　　(-to) on budet ~~čitaet~~.

　read(INF)　(TO) he will　　read

　　'He will read.'

In (8a) the lower copy of the verb must be pronounced. This is because T's inflectional features are otherwise stranded while in (8b) the lower copy of the verb cannot be pronounced since T's inflectional features are taken care of by the overt future particle *budet*. In simple terms, a copy of the predicate gets pronounced so as to save the stranded features in cases where T's morphosyntactic features are left unhosted. This, according to Hiraiwa and Bodomo (2008) cannot be adopted for the analysis of PCCs in Gur and Kwa languages. They argue that the presence of a preverbal tense particle does not allow the original copy to be unpronounced. This is illustrated with examples from Kusaal in (9), (see Hiriawa 2005a, Hiraiwa and Bodomo 2008, Aboh 2004, for examples in Buli, Dagaare and kwa respectively).

(9)　a. O　**na** sen' ni'im.

　　　3Sg. Fut roast meat

　　　'He will roast meat.'

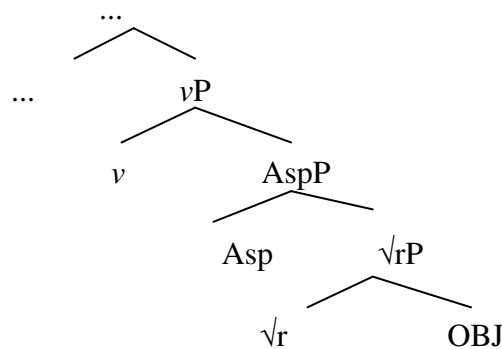　　b. **sen'b**　　ka o　**na** *(**sen'**) ni'im.

　　　roast.Nml C 3Sg. Fut roast　meat

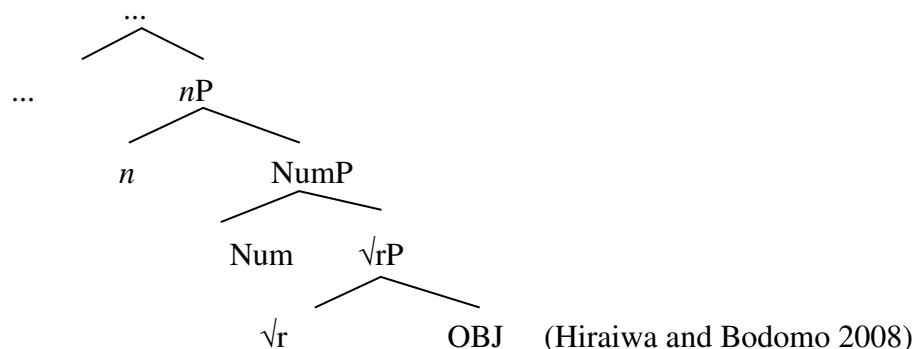　　　'It is roasting that he will do to meat.'

Hiraiwa (2005a, 2005b) argues that the pronunciation of the original copy of the verb is due to what is moved. He proposes following Marantz (1997, 2007), Arad (2005), and Embick and Marantz (2008) among others, that syntactic categories such as verbs and nouns are decomposed into a root (√) plus a category-determining head *v/n*. A critical observation will show that the root in (10a) is (in Hiraiwa and Bodomo 2008's term) "dominated" by *v* and the same root in (10b) is "dominated" by *n*.

(10)

    a. Verb: v + Root

```
              ...
            /     \
      ...         vP
                /    \
              v      AspP
                    /     \
                 Asp      √rP
                         /    \
                       √r      OBJ
```

    b. Noun: n + Root

```
              ...
            /     \
      ...         nP
                /    \
              n      NumP
                    /     \
                 Num      √rP
                         /    \
                       √r      OBJ     (Hiraiwa and Bodomo 2008)
```

Hiraiwa (2005a 2005b) explains extending the work of Abels, that PCCs in Buli (and Kwa languages) target Asp—√r—instead of *v*-Asp-√r. This argument is substantiated with evidence from Case-marking (see Hiraiwa and Bodomo 2008). Morphological case is generally not an overt characteristic of Kusaal. There is however a distinction in the form of the 1st person pronoun which has *n/m* for the nominative/genitive form and *ma* for the accusative. The pronoun in example (11b) takes the nominative/genitive form. This according

to Bodomo (2004) is due to the fact that, in PCCs, the fronted predicated is unable to assign the accusative Case.

(11)   a. Bupuŋ la   nwe'   ***n/ma**

          Lady DEF beat.Perf. 1Sg.(NOM/GEN)1Sg.(ACC)

          'The lady beat me.'

          b. **n/*ma**   nwe'b   ka bupuŋ la   nwe'.

          1Sg.(NOM/GEN)1Sg(ACC) beat.Nml   C   lady DEF   beat.Perf.

          'It is beating me that the lady did.'

Hiraiwa (2005a, 2005b) argues "that the burden of the interface conditions naturally carries to *v* in the sense that the "verbalizer"—being affixal—cannot be stranded without a √r at Spell-Out." Adopting this under the suggested theory of CP/DP Symmetry means that at Spell-Out the *v* head is supposed to determine the category of its complement. This is what necessitates the phonological realization of the original predicate which is the complement of *v*.

On the issue of the nominalization of focused predicate at the left periphery, Hiraiwa (2005a, 2005b) makes the following proposal which is quoted in (12):

(12)   Hiraiwa (2005a, 2005b)

"In languages that allow a clausal determiner, focused predicates in PCCs are nominalised."

He further argues consistent with the above that the element that undergoes movement in PCC languages does not have any categorial status. The clausal determiner D/C (Force) in the CP/DP parallel geometry as illustrated in (7) performs the role of a categorial determiner in the CP/DP symmetry and causes nominalization. Example (13) is an illustration of the use of clausal determiner in Kusaal relative clauses. The definite determiner *la* heads the relative clause in (13).See Hiraiwa and Bodomo (2008) for an example in Buli.

(13)   a. Amina nye   buug kane   ka Asibi   da'a   **la**

          Amina   see-perf. goat   REL   C Asibi   buy.Perf   DEM

          'Amina saw the goat which Asibi bought.' (Relative clause)

4.2.   The Distribution of *ka* in Kusaal

Ka, aside from its function as a coordinating conjunction, also serves as a complementizer, example in relative clauses and questions. Other minor roles will be discussed as and when they show up. Consider the following illustrations:

(14)

    a.   Anon **ka** fo bor?

        Who C   you look

        'Who are you looking for?

    b. Buraa kanne **ka** fo bor   la kiŋ tuma

         Man   REL C you look DEM go work

        'The man who you are looking for is gone to work'

    c.   N sa nye buraa kanne ka Ayi da nye la.

         1Sg. Pst see man REL C Ayi Pst see D

        'I saw the man that Ayi saw.'

    d. Bupuŋ kanne mor pug   la
        Lady   REL   has   stomach

        'The pregnant lady'

    e. N sa nye buraa kanne da da'a gbana la

        1Sg. Pst see man REL Pst buy book D

        'I saw the man who bought the book.'

In *wh*-questions as in (14a) *ka* functions as a complementizer. It directly follows the *wh*-word. This provides evidence of the movement of the *wh*-word from its theta-position to the specifier of CP.

Examples (14b-e) further show that *ka* functions as a relative clause complementizer which can either be realized overtly or null depending on whether the moved item is the subject of the construction or not. *Ka* is overtly realised when the moved item is the object or something other than the subject of the construction as in (14b, c). It is phonologically null in (14d, e) because the moved item is the subject of the construction.

The function of *ka* as a complementizer is further attested in predicate cleft constructions as will be seen in detail in our next discussion. Anytime an item is moved to the left periphery position it is immediately followed by *ka* just as in cases involving *wh*-fronting. It will be argued in this work that focus in this language is marked suprasegementally other than overtly. All focus items are pronounced with some kind of emphasis which is carried out using the high tone. The use of the emphatic form in focused items is overtly realised segmntally when a pronoun is fronted.

(15)   Emphatic Pronouns in Kusaal

Person	Pronoun (NOM/ACC)	Emphatic Pronoun
1Sg.	m/n	man
2Sg.	-f	fo
3Sg.	o	ona
1Pl.	ti	ton
2Pl.	ya	yanam
3Pl.	ba	banam

(16)

    a.   Ba   pu:si   ti

          3Pl. greet   2Pl/Acc.

        'They greeted us.'

    b. **Ton**   ka ba pu:si

        2Pl/Nom./Emph. C   3Pl. greet

'It was us that they greeted.'

The fronting of *ti* causes it to change to the emphatic form *ton* in example (16). Focus is additionally marked suprasegementally. The focused item is pronounced with the high tone marking emphasis in this language. *Ka* is a complementizer in Kusaal as it is in the case of Dagaare (Hiraiwa and Bodomo 2008) and not a focus marker as in Dabgani (Issah 2008) and Buli (Hiraiwa 2005a).

It should be indicated that Kusaal has two forms of the complementizer *ka* and *ye*. *ye* is so far identified to be used after the verbs *baŋ* and *mi:* both meaning 'to know'. An example involving *ye* will be seen shortly in our next discussion.

4.3. Properties of Predicate Focus in Kusaal

4.3.1. Focus constructions

(17)   a. Buraa la   da da'a suma

man   DEF Pst buy groundnut

'The man bought groundnut.'

b. **Suma**   ka buraa   la   da da'a

groundnut C man   DEF Pst buy

'GROUNDNUT the man bought.' (not beans)

c. **Bo**   ka buraa la   da da'a?

what C man DEF Pst buy

'what did the man buy?'

(18)   a. Biis   la di-Ø   bedigu zina

children DEF eat-perf   Q   today

' The children ate a lot today.'

b. **zina**   ka biis   la   di   bedigu

       today C children DEF eat-perf   Q

       'TODAY that the children ate a lot.' (not yesterday)

(19)   a. Ba   p u:si   f

            3Pl.   greet   2Sg.

            'They greeted you'

            b. **Fo**   pu:sid   ka ba   pu:si

            2Sg.Nom/Gen/Emph. greet.Nml. C   3Pl.Nom greet

            'YOU that they greeted.'

From the examples above, the focus constituents (boldfaced) are moved to the clausal left periphery position. They are immediately followed by the complementizer *ka.* There are no particles overtly marking focus.

One observation is that the constituents that can be focused include the NP-object (17b), an adjunct (18b) and the pronoun (19b). The fact that the marking of focus requires an obligatory movement of the focused constituent to the left periphery of the clausal position leads to the assertion that the marking of focus in Kusaal is ex-situ. So far, no cases of in-situ focus marking have been identified in this language. A similar observation is made in Dagbani (see Issah, 2008).

One pertinent issue that needs to be discussed is the question as to whether the ex-situ focus construction in Kusaal should be analysed as an instance of a monoclausal or a bi-clausal structure. A given structure is considered as a cleft or bi-clausal when the morpheme that introduces the focused element is a copular verb. One interesting observation in this language is that Kusaal has both monoclausal and bi-clausal structures expressing focus. (17b) is repeated here as (20a) and its bi-clausal version as (20b).

(20)   a. Suma   ka buraa la   da da'a

         groundnut   C   man   DEF pst buy

         'Groundnut that the man bought' (not beans)

      b. Li anɛ suma   ka buraa la   da da'a

         It is   groundnut C man   DEF pst buy

         'It is groundnut that the man bought.' (not beans)

Examples (20a) and (20b) are both grammatical and natural utterances in the language that are used to express contrastive focus so long as the appropriate context is created. The only difference is that example (20b) is considered as more emphatic than (20a) but they both have the same function; contrastive focus expressions. Whereas (20a) is monoclausal (20b) is bi-clausal. In (20a), it is argued that the focus element is involved in a kind of syntactic movement to the specifier position of the focus phrase (see Issah 2008). There is no focus element as compared to other Gur languages such as Dagbani, Buli, and Dagaare. Thus the focus marker is phonologically null as in the case of Italian and other Romance languages (Rizzi 1997). (20b) on the other hand is an instance of a bi-clausal construction where the cleft NP is base generated in an adjoined position to the CP which causes movement of a *wh*-operator in the specifier of CP (Issah 2008). For the line of argument that will be taken in this thesis, we adopt the version of focus construction (20a) which is analysed as a monoclausal construction.

4.3.2. *Focus Interpretation*

Predicate Cleft Constructions in Kusaal receive a focus interpretation with another predicate in the same construction after they have been moved to the left periphery position.

(21)   a. Buraa la da da'a buug

         Man DEF Pst buy goat

         'The man bought a goat'

b. **Da'ab** ka buraa la   da **da'a** buug.

buy.Nml C man DEF Pst buy goat

'It is buying that the man did to the goat (as opposed to e.g. stealing it).

In this example, (21b), the verb *da'a* 'buy' is contrastively focused and as such moved to the left periphery of the entire sentence and is assigned with a contrastive focus interpretation with another predicate. The predicate cleft sentence in the above illustration depicts a situation where someone asked "Did you say the man STOLE the goat? In denying the statement the speaker answers "No, It is BUYING that he bought the goat. Another possible context where (21b) can be used is in answering to the Yes-No question "Did you say the man stole or bought a goat?"

(22)   a. (fo   yeli ye) buraa la da zu buug be?

               2Sg. Say C   man DEF pst steal goat

               '(Did you say that) the man stole a goat?

           b. Buraa la   da da'a buug be o   da zu buug?

               Man DEF Pst buy goat   or   3Sg Pst steal goat

               'Did the man buy a goat or did he steal a goat?'

Example (21b) is used as an answer to the questions in (22a and 22b).

4.3.3. *Nominalization of clefted predicates*

One other feature of clefted predicates is the nominalization of the verb moved to the left periphery. After nominalising the dislocated verb, the original copy still gets to be pronounced. According to Hiraiwa and Bodomo (2008), languages are divided into two types. Whereas in languages like Buli and Dagaare, clefted predicates are morphologically nominalised, in Fɔngbe and Haitian Creole, they are exact copies of the original predicates. In Kusaal, just like Buli and Dagaare, clefted predicates are morphologically nominalised. The

reasons for the nominalization and double pronunciation of focused predicates will be discussed in our subsequent sections.

(23) a. Biis   la di   diib   la wusa

children DEF eat food DEF Q

'The children have eaten all the food.'

b. **Diib**   ka biis   la **di** diib la   wusa

eat.Nml   C children DEF eat food DEF all

'It is eating that the children ate all the food.'

In (23b) the verb *di* 'eat' receives a contrastive focus interpretation and moves to the left periphery. It is obligatorily nominalised to *diib*.

4.3.4.   Long-distance predicate clefting

Long distance predicating clefting is possible in Kusaal as is observed by Hiraiwa and Bodomo (2008) in the case of Dagaare. Example (24b) serves as an illustration:

(24) a. Amina baŋ ye n da **da'a** buug

Amina know C 1Sg. pst buy goat

'Amina knows that I bought a goat'

b. **da'ab**   ka Amina baŋ ye n   da **da'a** buug

buy.Nml C Amina know C 1Sg. pst buy goat

'It is buying that Amina knows that I bought a goat (as opposed to e.g. stealing it).'

Predicate clefting out of an island is however not possible. This is attested from the ungrammaticality of (25b).

(25)

    a. Pua   la   kul,   ka ba nan di diib la

        woman DEF went-home Conj 3Pl. before eat food DEF

      'The woman went home before they ate the food'

    b. *Diib ka pua   la   kul   ka ba nan di <diib la>?

        eat.Nml C woman DEF go-home and 3Pl before eat <food DEF>?

      '*Eating did the woman go home before they ate?'

This situation therefore shows that, the relationship between the focused predicate and the original predicate in this language is one that is derived by movement.

4.3.5. Object pied-piping

The object, as illustrated in (26), can be optionally pied-pied in predicate cleft constructions in Kusaal. In such occurrences, it is moved to the left periphery and its original copy is not pronounced. Anytime the object is pied-piped, it precedes the nominalised predicate and both (object and predicate) receive the contrastive focus interpretation.

    (26)   **buug da'ab** ka n   da da'a (*o/buug).

            goat buy.Nml C 1Sg. pst buy (it/goat)

            'It is buying a goat that I did (as opposed to e.g. stealing a fowl).'

Pied-piping in Kusaal just as indicated by Hiraiwa and Bodomo (2008) for Dagaare is also not due to incorporation. This is because the head can be moved alongside several other elements as shown in (27).

    (27)   **buug la/ buug tita'ar kanna da'ab**   ka n   da **da'a.**
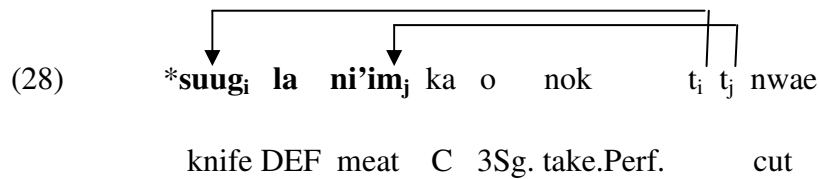
            goat DEF/goat-big   DEM buy.Nml C 1Sg. pst buy

            'It is buying that big goat that I did.'

There is no limitation on the syntactic size of a pied-piped object. The example in (27) for instance involves a definite DP with an accompanying adjective.

4.3.6. Multiple focusing

It has already been indicated elsewhere that multiple focusing which has to do with the fronting of the object and the fronting of the predicate is not allowed in Kusaal just as it is the case in Dagaare.

(28)   *$\mathbf{suug_i}$ **la** $\mathbf{ni'im_j}$ ka o   nok t_i t_j nwae

            knife DEF meat   C   3Sg. take.Perf.   cut

            'It is the knife, meat that he took and cut.'

The ungrammaticality of (28) shows that (26) and (27) are derived by moving larger syntactic constituents. Object pied-piping involves the movement of an entire "object-predicate" complex which receives a semantic focus interpretation with another.

4.4. Predicate Cleft Constructions and Serial Verb Constructions in Kusaal

Object- sharing SVCs in Kusaal have three possible predicate cleft patterns. It is possible to either have V_1 clefted excluding V_2, or V_2 clefted excluding V_1 or both V_1 and V_2 clefted together. This feature is quite unique and it is only Dagaare that has so far been known to exhibit such characteristics.

(29)   a. O   da **sen'**   ni'im   **onb**.

            3Sg. Pst roast meat chew

            'He roasted meat and chewed it.'

        b. **sen'b**   ka o   **sen'** ni'im   **onb.**

            roast.Nml   C 3Sg. roast meat   chew

'It is roasting that he did amd chewed meat (as opposed to e.g. boiling it)'. (clefting of V$_1$)

    c. **onbid**   ka o **sen'** ni'im **onb**

    chew.Nml C 3Sg. roast meat chew

    'It is chewing that he roasted and did to meat (as opposed to e.g. throwing it away)'. (clefting of V$_2$)

    d. **sen'-onbid**   ka o da **sen'** ni'im **onb**.

    roast-chew.Nml C 3Sg. Pst roast meat chew

    'It is roasting and chewing that he did to meat (as opposed to e.g. buying something else)'. (clefting of V$_1$+V$_2$)

The interpretations in (29) are contrastive due to the contrastive focusing of the clefted predicates. What is happening is nothing different from our earlier predicate clefting examples.

More significantly, the object in object–sharing SVCs can equally be pied-piped with either V$_1$ or V$_2$ or V$_1$+V$_2$ as illustrated in (30). This occurrence is also unique to Kusaal and Dagaare.

    (30)   a. **ni'im sen'b**   ka o **sen'** **onb**.

    meat roast.Nml   C 3Sg. roast chew

    'It is roasting meat that he did and chewed (as opposed to e.g. boiling rice).'

    (clefting of V$_1$+OBJ)

    b. **ni'im onbid**   ka o **sen'** **onb**.

    meat chew.Nml C 3Sg. roast chew

    'It is chewing meat that he roasted and did (as opposed to throwing away and not something else).'   (clefting of V$_2$+OBJ)

c. **ni'im sen'-onbid**   ka o   **sen'   onb**.

meat roast-chew.Nml C 3Sg. roast chew

'It is roasting meat and chewing it that he did (as opposed to doing

something else.)' (clefting of V$_1$+V$_2$+OBJ)

As it was shown earlier that pied-piping is not a result of multiple fronting, it therefore means that the object in (30) can form a syntactic constituent with either V$_1$ or V$_2$. The pied-piped object is part of the elements that receive contrastive focus interpretation. For example (30a) shows that He ROASTED MEAT and chewed it and NOT that he boiled rice and ate it (see Hiraiwa and Bodomo 2008 for similar patterns in Dagaare). It must be further noted that these patterns are absolutely grammatical as long as the right contexts are established. (31) is used to serve as a further illustration of this observation.

(31)   a. bupɔŋ   la   da dug daam kuos

lady   DEF   Pst boil pito   sell

'The lady boiled pito and sold it'

b. daam dugid   ka bupuŋ   la   da dug kuos.

pito boil.Nml   C   lady   DEF Pst cook sell

'It is boiling pito that the lady did and sold.'

c. daam kuosid   ka bupuŋ   la   da dug kuos.

pito sell.Nml C   lady   DEF   Pst boil sell

'It was selling pito that the lady boiled and did.'

d. daam dug-kuosid ka bupuŋ la   da dug kuos.

pito   boil sell.Nml C lady   DEF Pst boil   sell

'It was boiling and selling pito that the lady did.'

To confirm the assertion that the object when pied-piped forms a syntactic constituent with the clefted predicate, SVCs that do not have a shared object will be used as illustrations.

71

(32)   a. n   da   **ken' di** saab.

1Sg. Pst come eat T.Z

'I came and ate T.Z[8]'

b. **Saab diib**   ka n   da **ken' di**.

T.Z. eat.Nml C   1Sg Pst come eat

'It is eating T.Z. that I came and did.'

c. ***Saab kene**   ka n   da **ken' di.**

T.Z. come.Nml C 1Sg. Pst come eat

'It is coming T.Z. that I did and ate T.Z.'.

In (32), V_1 is a transitive verb and as such the object is not shared. (32c) is therefore ungrammatical since the object cannot be clefted with V_2.

(33)   a. O   nok   **suug la**   nwae **ni'im**.

3Sg. take.perf.   knife DEF cut   meat

'He cut meat with the knife.'

b. **ni'im nwaar** ka o   **nok**   suug la **nwae**.

meat   cut.Nml C   3Sg. take.perf   knife DEF cut

'It is cutting meat that he took the knife and did.'

c. ***ni'im nokid**   ka o   **nok**   suug la **nwae**.

meat take.Nml   C 3Sg. take.perf.   knife DEF cut

'It is taking meat that he did the knife and cut.'

Saab 'T.Z.' is the main staple menu for all Northerners in Ghana.

d. *__suug la__   __nwaar__   ka o   __nok__   __nwae__   ni'im.

knife DEF   cut.Nml C   3Sg. take.perf. cut   meat

'It is the knife cutting that he took and did meat.'

Example (33) is an instrumental SVCs where both V_1 and V_2 are transitive verbs. It is ungrammatical to cleft V_1 *nok* 'take' with the second object *ni'im* 'meat' just as it is ungrammatical to cleft V_2 *nwae* 'cut' with the first object *suug la* 'the knife'. The same condition also applies in cases involving benefactive SVCs as illustrated in (34).

(34)   a. O   da __sen'__   ni'im __tis__ ba

3Sg. Pst roast meat give 3Pl.

'He roasted meat for them.'

b. __ni'im sen'b__   ka o   da   __sen' tis__   ba

meat roast.Nml C   3Sg. Pst roast give 3Pl.

'It is roasting meat that he did for them.'

c. * __ni'im tisib__   ka o   da __sen' tis__   ba

meat give.Nml C 3Sg. Pst roast give 3Pl.

'It is meat that he roasted for them.'

In the above illustration, it is ungrammatical to pied-pipe V_2 *tisi* 'give' with the direct object *ni'im* 'meat'.

It must however be indicated that it is possible to have pied-piping of the object in resultative SVCs.

(35)   a. N   da   da'e Amina lob

1Sg. Pst   push Amina throw

'I pushed Amina and got her down.'

b. Amina da'ad   ka n   da   da'e lob

   Amina push.Nml C 1Sg. Pst push throw

'It is pushing Amina that I did and got her down.' (clefting of V$_1$)

c. Amina lobid   ka   n   da   da'e lob.

   Amina throw.Nml   C   1Sg. Pst push throw

'It is getting down Amina that I pushed and did.' (clefting of V$_2$)

Hiraiwa and Bodomo (2008) point out the possibility of imagining that these pied-piping patterns may be due to some form of linear adjacency condition instead of syntactic constituency. For instance, one could claim that the ungrammaticality of (32c) and (33c) may be due to the fact that they are not linearly adjacent to each other in the underlying form. This argument cannot hold since the ungrammaticality of (33d) and (34c) discredit this claim. This is so because the objects and the verbs that are clefted in examples (33) and (34) are indeed adjacent before the taking place of any movements. To show the irrelevance of linear adjacency, they propose an illustration involving double-object construction.

(36)   a. Amina tis Asibi **gbana la**

            Amina give Asibi book DEF

            'Amina gave Asibi the book.'

         b. *Amina tis **gbana la**   Asibi

            Amina give book DEF Asibi

            'Amina gave Asibi the book.'

       c. **gbana la   tisib**   ka Amina tisi Asibi.

          book   DEF give.Nml C Amina give Asibi

          'It is giving the book that Amina did to Asibi.'

It must be noted that the word order between an indirect object and a direct in Kusaal is very rigid just as noted in Dagaare by Hiraiwa and Bodomo (2008) and possibly most other Gur languages:-V IO DO.

From the data and arguments presented so far, Kusaal can be said to be another example of a language where PCCs and object-sharing SVCs interact in interesting ways. Kusaal in addition to Dagaare can be said to be the only languages that allow the clefting of V_2 alone and pied-piping of the object. Based on this, the Cross- linguistic Variation of PCC and SVCs as proposed by Hiraiwa and Bodomo (2008) can be modified to include Kusaal as illustrated in (37) and the descriptive generalization will also be modified as in (38).

(37)   Cross-linguistic Variation of PCCs and SVCs

	Buli	Yoruba	Edo	Nupe	Fɔngbe	Dagaare	Kusaal
V	o.k.	o.k.	o.k.	o.k.	o.k.	o.k.	o.k.
V_1+Obj	o.k.	o.k.	*	*	*	o.k.	o.k.
V_2	*	*	o.k.	*	o.k.	o.k.	o.k.
V_2+Obj	*	*	*	*	*	o.k.	o.k.
V_1+V_2	o.k.	o.k.	*	(*)	*	o.k.	o.k.

(38)

In Dagaare and Kusaal, not only V_1 and the object can form a syntactic constituent excluding V_2, but also V_2 and the object can form a syntactic constituent excluding V_1.

4.5.   The Derivation of PCCs in Kusaal

Several approaches have been proposed in the literature concerning the syntactic derivation of PCCs (see Harbour 2008, Kandybowicz 2006, Manfredi 1993 Hiraiwa 2005a 2005b). What is adopted in this work is the proposal of Hiraiwa 2005a and 2005b to explain

important concepts such as the double pronunciation and nominalization of predicates in the event of PCC in Kusaal.

Focus, as indicated earlier is null in Kusaal. It is proposed that AspP is what moves in PCCs in Kusaal. AspP, which is the complement of *v* undergoes successive–cyclic focus movement to [Spec, FocP]. C= (Force) is then merged with FocP. In the DP/CP parallelism it has been argued that C serves as a clausal determiner and as such a categorial determiner. This causes the nominalization of the root in the focused position. It must however be indicated that the lowest copy of AspP needs to be realised as well in other to prevent *v* from getting stranded. The status of *v* as a categorial determiner also causes the realisation of the root in the original position as a verb. Building on the work of Hiraiwa and Bodomo (2008) the structural representation of PCCs in Kusaal is as illustrated below:

(39)
```
                 D/CP
               /      \
           D/C         FocP
                      /     \
                  AspP       Foc'
                  /  \       /    \
               Asp   √rP   Foc     CP
                    /  \    |      /  \
                  √r   OBJ  Ø     C    TP
                                  |   /   \
                                 Ka  T     vP
                                         /    \
                                      AspP     v'
                                     /   \    /   \
                                  Asp   √rP  v    AspP
                                       /  \      /    \
                                     √r   OBJ  Asp    √rP
                                                      /   \
                                                    √r    OBJ
```
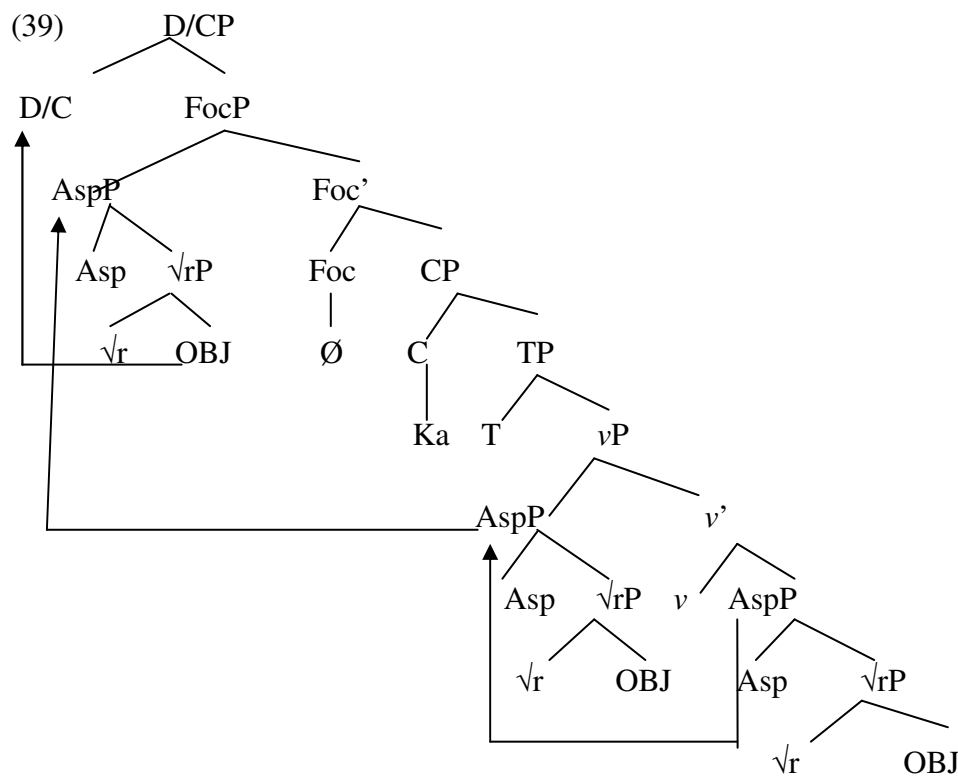
According to Hiraiwa and Bodomo (2008) the realisation of object pied-piping should be viewed to be due to the 'higher pronunciation of a copy of the object'. No object pied-piping can take place should the original copy of the object be pronounced.

(40) Hiraiwa and Bodomo (2008:817)

    a. [$_{AspP}$...OBJ] C...*v* [$_{AspP}$...~~OBJ~~] (object pied-piping)

b. [AspP...~~OBJ~~] C ...*v* [AspP...OBJ] (no pied-piping)

As demonstrated in example (41a,b), the pied-piped object must obligatorily come before the nominalised predicate in PCCs in Kusaal.

(41) a. buug da'ab   ka n   da   da'a (*o/buug)

    goat buy.Nml C 1Sg. Pst buy (it/goat)

   'It is buying a goat that I did.'

  b. *da'ab   buug ka n   da   da'a (*o/*buug)

    buy.Nml goat C   1Sg. Pst buy (it/goat)

   'It is buying a goat that I did.'

This means that the object in (41) must come before the root. This occurrence is argued to be triggered by movement. As indicated in chapter two, the DP is Kusaal is mostly head-final. It is only the possessor that precedes the N root. It has also been mentioned that a pied-piped object pronoun receives an obligatory nominative/genitive Case marking which further serves as evidence of movement.

(42)   Amina   gbana   banna

    Amina's books   Dem

   'Those books of Amina'

Following the argument of Hiraiwa and Bodomo (2008) it is claimed that within a DP in Kusaal, "the licensing position for a noun phrase is its specifier position and a noun phrase moves there from its original position. The root first undergoes head-movement to adjoin to Num and then, the whole DP undergoes movement to [Spec, DemP]."

(43) a. [DemP [Dem banna] [DP [nP [Amina [NumP –a [√r gban-]]]]]

   b. [DemP [Dem banna] [DP [nP [Amina [NumP [√r gban-] –a t √r]]]]

   c. [DemP [DP [nP [Amina [NumP [√r gban-] –a t√r]]] [Dem' [Dem banna] tDP]]

In cases involving gerunds in Kusaal as in Dagaare, it is also feasible to have two arguments where the subject must occur before the object as exemplified in (44).

(44) Asibi ni'im sen'b.

Asibis's meat roast.Nml

'Asibi's roasting of meat.' (see Bodomo 2004, Hiraiwa and Bodomo 2008 for more data in Dagaare)

From the ongoing discussion, it is obvious for one to notice that the pied-piped object in PCCs in this language starts out in a lower position. Following Hiraiwa and Bodomo (2008), this position is assumed as [Spec, AspP/NumP] and the movement of the object takes place at the CP phase level. This movement takes place at the same time with the focus movement of AspP to [Spec, FocP]. In (39) the fronted AspP is noted to be categorially neutral; this is because the root does not have a category–determining head since it is no longer c-commanded by the phase head *v*. The higher phase head C/D serves as the closest categorial determiner. From the framework of (Chomsky 2004, 2008) which is adopted by Hiraiwa and Bodomo (2008) and by extension in this work, at this phase level, categorial determination and the AspP-internal movement take place simultaneously. A DP within a DP or a gerund as in (43) and (44) respectively can only be assigned the nominative/genitive Case-marking since they lack *v*.

(45) Hiraiwa and Bododmo (2008:819)

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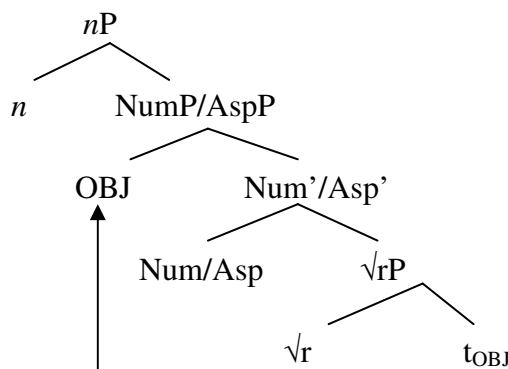
4.6. **Summary/Conclusion of the Chapter**

This chapter has considered issues such as focus constructions, predicate cleft constructions and the interactions between predicate cleft constructions and serial verb constructions in Kusaal. Notwithstanding the fact that Kusaal differs from Dagaare in areas such as the availability of an overt focus marker in the latter whereas in the former, this is phonologically null, there exist striking similarities in the way focus constructions and predicate cleft constructions are expressed in these sister languages. In both languages, focus predicates are moved to the left periphery of the entire construction and they receive contrastive focus interpretations. Clefted predicates are obligatorily nominalised in both languages and they also receive double pronunciations. PCCs and SVC are observed to interact in similar and interesting ways. There are three predicate cleft patterns observed. It is possible to cleft V_1 or V_2 or V_1+V_2 complex. It is also possible to cleft the object with either V_1 or V_2 or both V_1+V_2. Based on this pattern Hiraiwa and Bodomo (2008) claim that both V_1 and V_2 share the object syntactically. This observation leads to the argument that the object in object-sharing SVCs in Kusaal, as is the case in Dagaare, is symmetrically shared. Object sharing as symmetrical sharing forms the basis of our discussion in the next chapter.

CHAPTER FIVE

OBJECT-SHARING AS SYMMETRIC SHARING IN KUSAAL

5.0.   Introduction

The discussion in this chapter focuses on proposing an analysis for the formalization of the phenomenon of object-sharing SVCs as it is manifested in Kusaal. This is carried out by using the concept of parallel merge by Citko (2005) and object sharing as symmetric sharing by Hiraiwa and Bododmo (2008). The chapter is divided into two sections. The first section looks at the application of parallel merge to object-sharing SVCs as proposed by Hiraiwa and Bodomo (2008). The second section proposes an analysis for object sharing SVCs by extending the idea of parallel merge and object-sharing as symmetric sharing to Kusaal. It goes further to discuss the linearization of elements in object-sharing SVCs in Kusaal before Spell-Out.

5.1.   The Phenomenon of Merge

Chomsky (2004) differentiates between two types of Merge: External merge and Internal Merge. External Merge, the "canonical" type of Merge, selects two structures and joins them to form one. Internal Merge on the contrary, takes a subpart of an existing structure as one of the two objects and remerges/internally merges it into the new position. Unlike earlier theories of movements such as the copy theory of movement in which a trace is a copy of the moved item that has to be deleted in the phonological component (thus in cases of overt movement) but is available for interpretation at LF (Corver and Nunes 2007), in internal merge, the displaced element is not copied and merged into its new position and there are no traces that require deletion later on in the derivation but the displaced element is rather remerged internally into its new position (Citko 2005). The following are illustrations of both External and Internal Merge as demonstrated by Citko (2005).
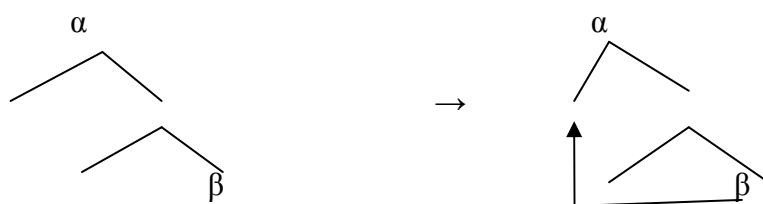
(1) *External Merge*

α   β   →
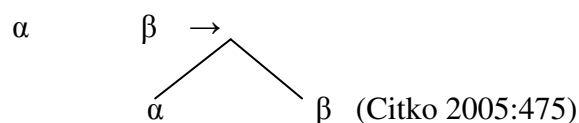
α   β   (Citko 2005:475)

(2)

a. *Copy theory of movement* (Chomsky 1995, Citko 2005:476)

α   α

→   β

β   β
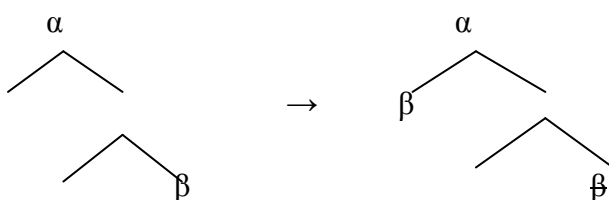
b. Internal Merge theory of movement (Citko 2005:476)

α   α

→

β   β

Based on the existence of Internal Merge and External Merge, Citko (2005) predicts the existence of a third type of Merge called Parallel Merge, which according to her creates symmetric, multidominant structures which must become anti-symmetric in the course of the derivation. Citko argues that Parallel Merge is like External Merge in that it involves two distinct rooted objects (α and β), but is also like Internal Merge as it combines the two by taking a subpart of one of them.

(3)   Parallel Merge (Citko 2005:478)

α   β   →   α   β

α   γ   α   γ   β
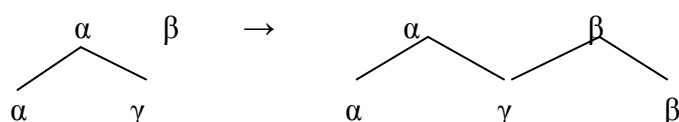
The most significant question that comes to mind concerning Parallel Merge is how its structures will be mapped onto a linear string. Citko (2005) admits that Parallel Merged structures are incompatible with the Linear Correspondence Axiom (LCA), which derives linear precedence from strict asymmetric c-command, thus banning symmetric structures from syntax (see Kayne 1994). Citko (2005) observes that the LCA fails to unambiguously and totally order parallel Merge structures as illustrated below.

(4) VP_1 VP_2

   V_1 NP V_2
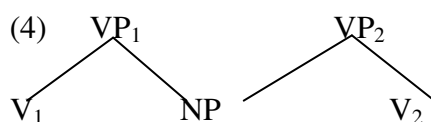
The problem in this illustration has to do with the NP which is part of both VP$_1$ and VP$_2$ when it comes to the ordering of the elements in (4). The LCA cannot order this structure because both VP$_1$ and VP$_2$ dominate NP. The fact that VP$_1$ c-commands VP$_2$ and VP$_2$ also c-commands VP$_1$, NP will end up proceeding and following itself since it is contained in both VP$_1$ and VP$_2$.

In resolving this situation, Citko (2005) proposes that it is first of all significant to identify where exactly the LCA applies. Chomsky (1995) contra Kayne (1994) suggests that there is no reason for LCA to order an element that will disappear at Spell-Out, for instance a trace or an unpronounced copy. This simply means that LCA does not have to apply *throughout* the whole derivation since it is linked to pronunciation. Chomsky (1995) can therefore be said to permit Parallel Merge structures as long as the shared element undergoes overt movement (more accurately, Internal Merge) into a higher position such that the structure is asymmetric at Spell-Out. Citko (2005) argues that across-the board (ATB) *wh*-movement in English has an instance of a Parallel Merge structure in its underlying form.

(5) English ATB-Movement and Parallel Merge (Citko 2005:479)

      a.   I wonder what Gretel recommended and Hansel read

b.
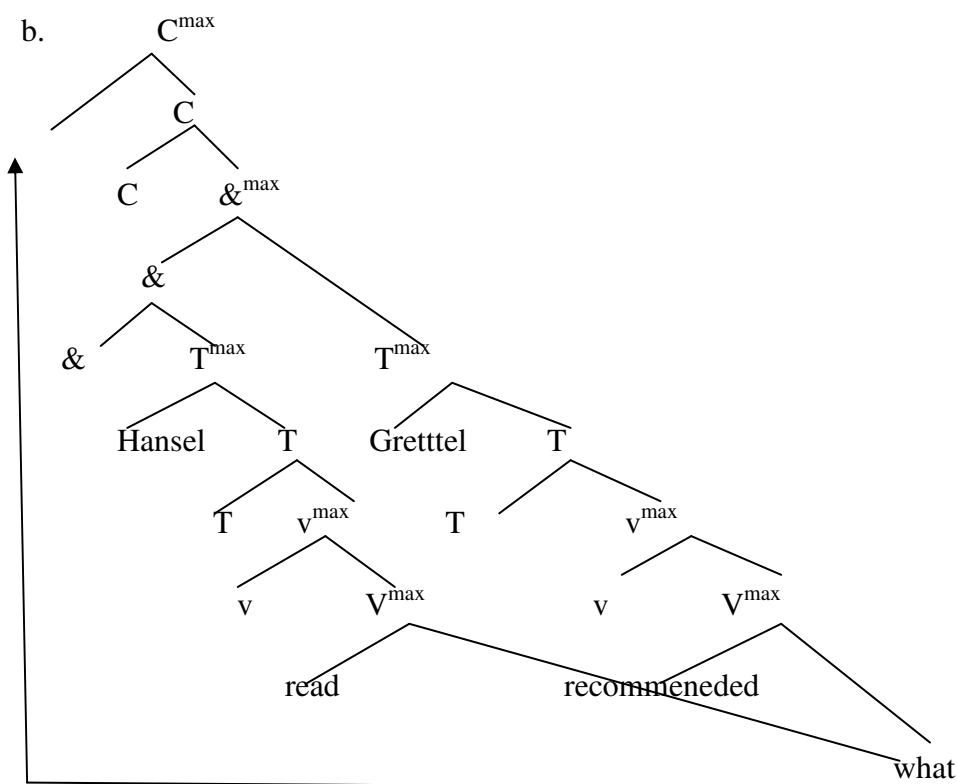
She notes that the structure becomes linearizable after the shared elements have undergone movement (see Citko 2005:479-480 for detail). I will adopt Citko's assumption that Parallel Merge is licit for as long as it can be made linearizable with its effects being invisible at Spell-Out.

The next section turns to look at the application of the phenomenon of Parallel Merge to Predicate Cleft Constructions and object-sharing.

5.2.   Object-sharing as Symmetric Sharing

Apart from the fact that the verb in PCCs can be moved to the left periphery position (refer to chapter four for examples), Hiraiwa and Bodomo (2008) further observe that the object in object-sharing SVCs in Dagaare has three possible predicate clefting patterns. The object in object–sharing SVCs can be pied-piped either with V_1, V_2 or V_1+V_2 forming different syntactic constituents as illustrated below.

(6) Ò   dà   sέ   lá nένè ɔ̀ɔ̀

   3Sg. pst roast F meat eat

   'He roasted meat and ate it.'

(7)   **nένè séέó**   lá ká ó   **sέ   ɔ̀ɔ̀**.

   meat roast.Nml F   C   3Sg. roast eat

   'It is roasting meat that he did and ate (as opposed to e.g. boiling yam).'

      (Clefting of V_1 + OBJ)

(8) **nένè ɔ́ɔ́ó**   lá ká ó   **sέ   ɔ̀ɔ̀**.

   meat eat.Nml   F   C   3Sg. roast eat

   'It is eating meat that he roasted and did (as opposed to e.g. throwing away something   else).' (Clefting of V_2+ OBJ)

(9) **nένè sέ-ɔ́ɔ́ó**   lá ká ó **sέ   ɔ̀ɔ̀**.

   meat roast-eat.Nml F C 3Sg roast eat
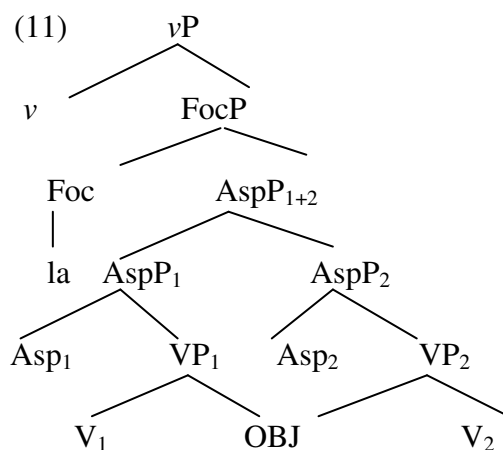
'It is roasting meat and eating it that he did (as opposed to doing something else).'
(Clefting of V_1+V_2+OBJ)   (Hiraiwa and Bododmo 2008, pp 806)

These various pied-piping patterns result from the movement of the syntactic constituent V_1+OBJ (AspP$_1$) or the movement of the syntactic constituent V_2+OBJ (AspP$_2$) or further still the movement of the higher constituent V_1+V_2+OBJ (AspP$_{1+2}$).

The main empirical observation about the interaction between SVCs and PCCs in Dagaare is:

(10)   *In Dagaare, not only V_1 and the object can form a syntactic constituent excluding V_2, but also V_2 and the object can form a constituent excluding V_1.* (Hiraiwa and Bodomo (2008)

Hiraiwa and Bodomo (2008) propose that the object in object-sharing SVCs (in Dagaare)   is structurally shared (Symmetric Sharing) following the theory of Parallel Merge by Citko (2005).

(11)

```
            vP
          /    \
        v      FocP
              /    \
            Foc    AspP₁₊₂
             |    /      \
            la AspP₁     AspP₂
              /   \      /    \
           Asp₁  VP₁  Asp₂   VP₂
                /  \       \
              V₁   OBJ     V₂
```

Hiraiwa and Bodomo (2008) further point out that the proposed structure in (11) is first of all "double-headed" as noted by Baker (1989) and Baker and Stewart (1999). This is because the whole Asp Phrase is made up of two different Asp projections, which dominate V_1 and V_2 respectively. They assume (12) following Baker and Stewart (1999).

(12)   Double-Headedness

   Double-headed structures are allowed when features of each head are identical or nearly so (Baker and Stewart 1999).

They back this analysis with the evidence that imperfective aspectual markers in Dagaare must be realized on each V. This would not be expected if it were VP that was to be double-headed instead of AspP.

(13)

a. ò   dà zò-**ró**   gὲ-**rέ**   wùò-**ró**   lá hááné.

3Sg. Pst run-Imperf go-Imperf collect-Imperf F berries

'(Lit.) S/he was running, going there, and collecting berries.'

b. *ò   dà zò-Ø   gὲ-**rέ**   wùò-**ró**   lá hááné.

3Sg. Pst run-Imperf go-Imperf   collect-Imperf F berries

'(Lit.) S/he was running, going there, and collecting berries.'

c. *ò dà zò-**ró**   gàà-Ø   wùò-**ró**   lá hááné.

3Sg. Pst run-Imperf go-Imperf collect-Imperf F berries

'(Lit.) S/he was running, going there, and collecting berries.' (Hiraiwa and Bodomo 2008)

Secondly, Hiraiwa and Bodomo (2008) note that the structure in (11) raises the question regarding the extent as to which Parallel Merge is allowed in narrow syntax. They adopt the position of Citko (2005) and Chomsky (1995) that Parallel Merge is licit in narrow syntax and interface conditions require that such structures be rendered linearizable before Spell-Out.

(14)   Parallel Merge and Linearization (Hiraiwa and Bodomo 2008:832)

Parallel Merge (or Ternary Branching) is allowed in narrow syntax as long as the structure is made linearizable before Spell-Out.

Hiraiwa and Bodomo (2008) further identify two major challenges that confront the proposed theory of symmetric sharing. The first is the observation indicated earlier on that a symmetric sharing structure is by itself not linearizable (Kayne 1994; Chomsky 1995; Citko2005). It is important for the symmetry to be broken before Spell-Out. The second

challenge that they identify is the inability for symmetric sharing to explain why the object is sandwiched on the surface in object-sharing SVCs as illustrated in (15).
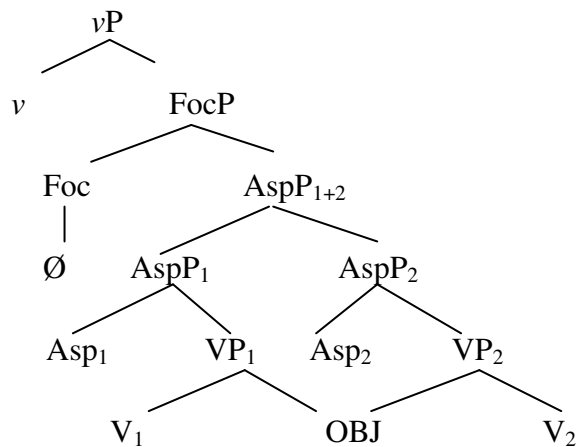
(15) Hiraiwa and Bodomo (2008:824)

a. XP   ZP   b. XP   ZP

X   Y   Z   X   Z   Y
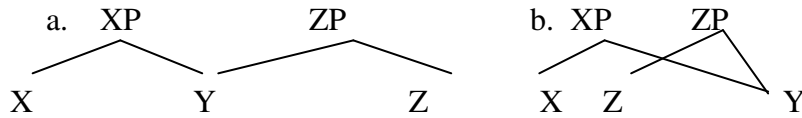
It has previously been assumed that symmetric sharing takes the structure in (15a) where we have: $X=V_1$, Y=OBJECT, $Z=V_2$. There is no compelling evidence in selecting (15a) over (15b), meaning the later can equally be a possibility. Hiraiwa and Bodomo identify the main difference between (15a) and (15b) to be due to their surface ordering. Whereas the structure in (15a) has a sandwiched order, (15b) has a "V_1, V_2 Object" order. It is assumed that something must have triggered the sandwiched surface order.

5.3. Symmetric Sharing in Object-sharing SVCs in Kusaal

The proposal by Hiraiwa and Bodomo (2008) is very significant to Kusaal as all data presented so far reveal that object-sharing SVCs in Kusaal are consistent with what happens in object-sharing SVCs in Dagaare. Most significantly, it has been established in chapter four that just as V_1 can form a syntactic constituent with the object excluding V_2, so also can V_2 form a syntactic constituent with the object excluding V_1 in situations where we have an interaction between SVCs and PCCs in Kusaal. Building on the structure in (11), (16) is proposed for Kusaal. It has been mentioned in our earlier chapter that focus is phonologically null in this language and as a result it shall be represented as such. It is proposed that V_1 and V_2 are merged simultaneously and that both V_1 and V_2 have the argument structure {agent, theme} where the theme θ-role is assigned to the shared object by the two verbs at the same time. This structure is different from Baker's (1989) theory where V_1 and V_2 are merged with each other. Regarding the pied-piping patterns in this structure, it involves the movement of the syntactic constituent $AspP_1$ (cases involving V_1) or the movement of another constituent $AspP_2$ (cases involving V_2). In cases that require $AspP_1$ and $AspP_2$, the higher constituent $AspP_{1+2}$ (cases involving V_1+V_2) is moved.

(16)

```
                    vP
                   /  \
                  v    FocP
                      /    \
                   Foc      AspP₁₊₂
                    |       /      \
                    Ø    AspP₁      AspP₂
                        /    \      /    \
                     Asp₁   VP₁  Asp₂    VP₂
                            /  \         /  \
                          V₁   OBJ      V₂
```

(17)

   a. O   da **sen'** ni'im   **onb**.

      3Sg. Pst roast meat chew

      'He roasted meat and chewed it.'

   b. **sen'b**   ka o   **sen'** ni'im **onb.**

      roast.Nml   C 3Sg. roast meat chew

   'It is roasting that he did amd chewed meat (as opposed to e.g. boiling it)'. (clefting of V₁)

   c. **onbid**   ka o   **sen'** ni'im **onb**

      chew.Nml C 3Sg. roast meat chew

      'It is chewing that he roasted and did to meat (as opposed to e.g. throwing it away)'. (clefting of V₂)

   d. **sen'-onbid**   ka o da   **sen'** ni'im **onb**.

      roast-chew.Nml C 3Sg. Pst roast meat chew

  'It is roasting and chewing that he did to meat (as opposed to e.g. buying something else)'. (clefting of V₁+V₂)

It is again claimed that the structure in (16) is double-headed by Asp as opposed to V as noted by Hiraiwa and Bodomo (2008) in the case of Dagaare. This can be shown by the fact that the imperfective aspectual marker must obligatorily be realized on each verb on both intransitive SVCs and object-sharing SVCs in Kusaal unlike in cases involving tense and polarity where a single particle has its scope spread across an entire construction.

(18)

a. o sa zo-**t**   kiŋ-**e**   vaa-**d**   la'ad la

 3Sg Pst run-Imperf go-Imperf collect-Imperf   stuff DEF

 '(Lit.) S/he was running, going there and collecting the stuff.'

b. * o sa zo-Ø   kiŋ-**e**   vaa-**d**   la'ad la

 3Sg Pst run-Imperf   go-Imperf   collect-Imperf   stuff DEF

 '(Lit.) S/he was running, going there and collecting the stuff.'

c. *o sa zo-**t**   kiŋ-Ø   vaa-**d**   la'ad la

 3Sg Pst run-Imperf   go-Imperf   collect-Imperf   stuff DEF

 '(Lit.) S/he was running, going there and collecting the stuff.'

(19)

a. o   da **da'a**   mui **kuos**.

 3Sg. Pst buy   rice   sell

 'S/he bought rice and sold it.'

b. o   da **da'a-d**   mui   **kuosi-d**.

 3Sg. Pst buy-Imperf   rice   sell-Imperf

 'S/he was buying rice and selling it.'

c. mui daab   ka o   da da'a-d   kuosi-d

 rice buy.Nml C   3Sg. Pst buy-Imperf sell-Imperf

'It was buying rice (as opposed to groundnut) that s/he was bying and selling.'

I further propose following Hiraiwa and Bodomo (2008) and Citko (2005) that Parallel Merge is allowed in narrow syntax as long as the structure is rendered linearizable before Spell-Out.

5.4. Linearization and object shift
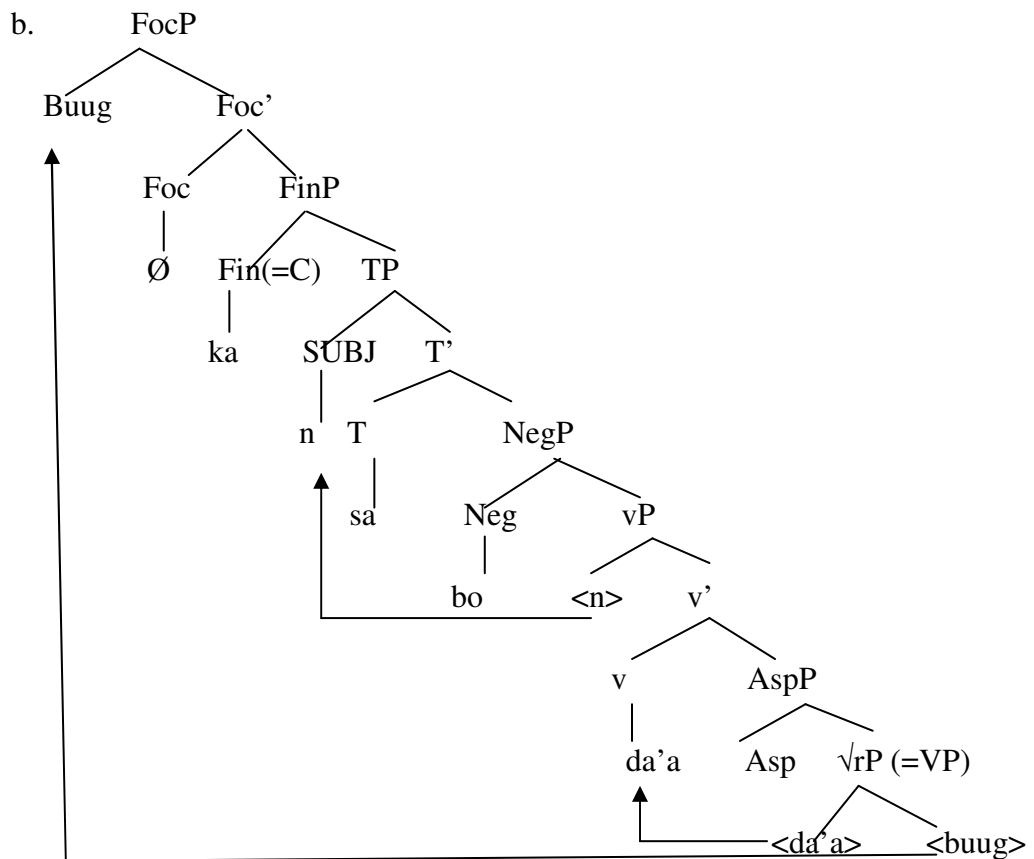
5.4.1. *V to v movement*

Using the earlier assumption that focus is phonologically null in this language, the clausal architecture of Kusaal is as proposed in (20b) using the sentence in (20a).

(20)

a. Buug ka n sa bo da'a

goat C 1Sg. Pst Neg buy
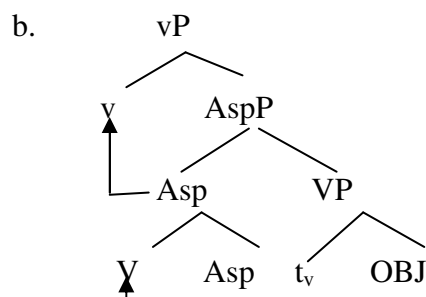
'It was goat that I did not buy.

b.

It is argued that the verb undergoes some form of movement before spell-out. This is evidence in the pronunciations of the aspectual forms of the verb. It is claimed that V moves to Asp for onward movement to *v*. This is what makes it possible to have the imperfective aspectual suffix morpheme attached to the verb before pronunciation.

(21)

  a. Ba   di-t   mui

     They eat-IMPERF rice

     'They are eating rice.'

  b.
```
                vP
              /    \
            v      AspP
            ▲      /    \
            |    Asp     VP
            └── /  \    /   \
              V   Asp  t_v   OBJ
              ▲
              |
```

5.4.2. *Object shift*

It has previously been argued in chapter four following the work of Hiraiwa (2005b), Chomsky (2004, 2008) and Hiraiwa and Bodomo (2008) that the object undergoes some form of movement from its base/first merged position to [Spec, AspP/NumP].

(22)   A Hypothesis (Object shift)

        A full DP object moves to [Spec, AspP] (but not to the edge of *v*P) in Kusaal.

The derivation of object-sharing SVCs in Kusaal can be represented as in (23) after joining the observations concerning V-*v* movement and short object shift. In this derivation, it is argued that V_1 moves to *v* and the shared object also undergoes short object movement to the specifier of AspP$_{1+2}$. More significantly, the verb movement and the short object movement change a symmetric structure to an antisymmetric structure. The two operations can again be

used to derive the sandwiched word order for object-sharing SVCs (see Hiraiwa and Bododmo 2008).

This process will end up converting the symmetric structure into an asymmetric one in which V_1 will asymmetrically c-command the object and the object will also asymmetrically c-command V_2.

(23)
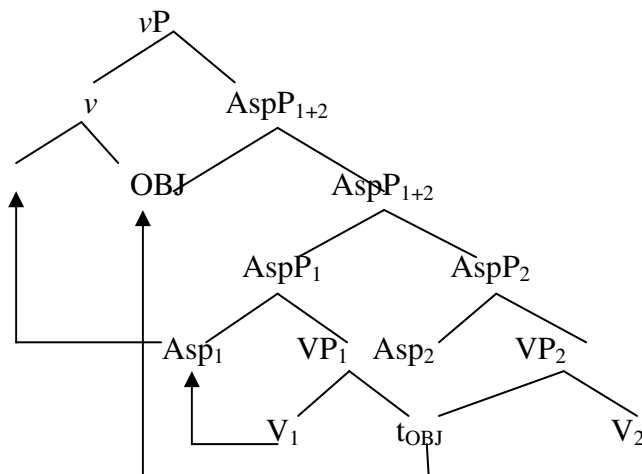
An important question that comes to mind as observed by Hiraiwa and Bodomo (2008) regarding *V-v* movement is as to what principle enforces the choice of V_1, but not V_2 as the target for *V-v* movement. The proposed symmetric structure predicts that either V_1 or V_2 could be moved to *v* since they (V_1 and V_2) are equally close to it (*v*), a prediction which is contrary to the existing facts in Dagaare (see Hiraiwa and Bodomo2008) and also in Kusaal as illustrated in (24).

(24)

a. O   **sen'** ni'im **ob**.

   3Sg.   roast meat chew

   'He roasted meat and chewed it.'

b. *O   **ob**   ni'im   **sen'**.

   3Sg.   chew meat   roast

   'He chewed meat and roasted it.'

Hiraiwa and Bodomo (2008) assume that Merge takes place without any form of limitations and that in narrow syntax either V_1 or V_2 stands the chance of moving to v. They suggest that the derivation which has an illicit surface order is ruled out at LF. This proposition can be supported using Li's (1993) Temporal Iconicity Condition which stipulates an ordering between the verbs.

(25) Temporal Iconicity Condition (Li 1993, 499)

Let A and B be two subevents (activities, states, changes of states, etc.) and let A' and B' be two verbal constituents denoting A and B, respectively; then the temporal relation between A and B must be directly reflected in the surface linear order of A' and B' unless A' is an argument of B' or vice versa.

Adopting the position of Hiraiwa and Bodomo (2008:823), it is argued that the Temporal Iconicity Condition is an LF constraint which requires that the temporally preceding verb (V_1) takes a scope over the other (V_2). The scope relation is determined based on the asymmetric c-command relation between the two verbs.

5.5. The Derivation of PCCs and Object-sharing SVCs

Joining our observation from the discussion on PCCs and object-sharing as symmetric sharing, the structure in (27), which is a representation of the data in (26b), is used as an illustration of the derivation of a PPC movement from an object-sharing SVC.
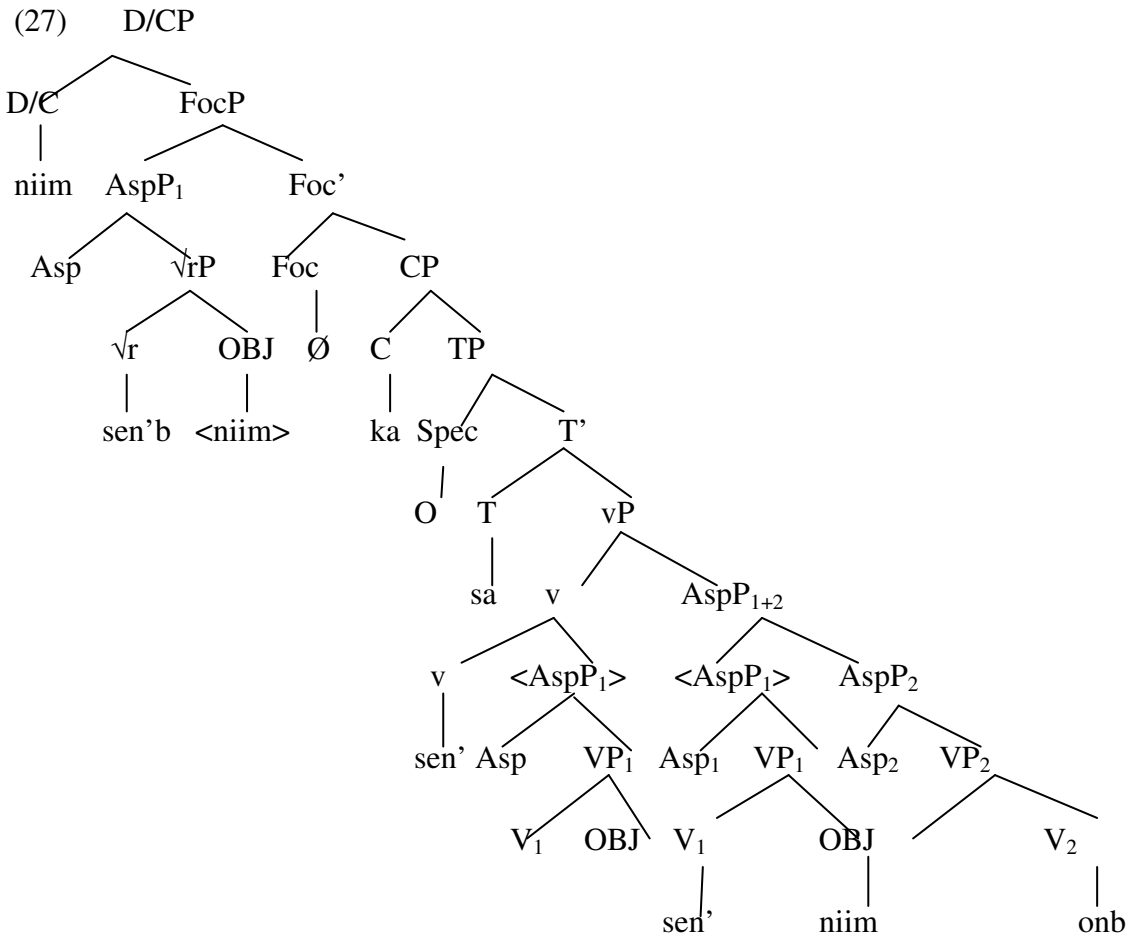
(26)

a. O sa sen' niim onb

    3Sg. past roast meet chew

    S/he roasted meat and chewed (yeaterday).'

b. Niim se'nb ka o sa sen' onb.

    Meat roast.Nml C 2Sg. past roast chew

    'It was roasting meat that s/he roasted and chew (as opposed to boiling fish

(27)   D/CP

D/C   FocP

niim   AspP$_1$ Foc'

Asp   √rP   Foc   CP

√r   OBJ   Ø   C   TP

sen'b   <niim>   ka   Spec   T'

O   T   vP

sa   v   AspP$_{1+2}$

v   <AspP$_1$>   <AspP$_1$>   AspP$_2$

sen'   Asp   VP$_1$ Asp$_1$ VP$_1$ Asp$_2$ VP$_2$

V$_1$ OBJ   V$_1$ OBJ   V$_2$

sen'   niim   onb

In this structure, the object *niim* 'meat' is symmetrically shared by both V$_1$ *sen'* 'roast and V$_2$ *onb* 'chew'. AspP$_1$ undergoes successive-cyclic focus movement to [Spec, Foc]. C which functions as a categorial determiner causes the root to be nominalised to *sen'b*. To prevent *v* from getting stranded the lowest copy of the verb must as well be realised. The function of *v* as a categorial determiner causes the root to be realized as a verb. It has been argued earlier on in this work that the noun in this language undergoes movement to the specifier position. The object *niim* 'meat' moves to [Spec D/CP].

5.6. Summary/Conclusion of the Chapter

In this chapter, an analysis of object-sharing SVCs in Kusaal is discussed. It is proposed that the object in object-sharing SVCs in this language is symmetrically shared. This follows from the empirical observation that V$_1$ can form a syntactic constituent with the object excluding V$_2$. So also can V$_2$ form a syntactic constituent with the object excluding V$_1$.

In order to show that the proposed structure of symmetric sharing is linearizable before Spell-Out, accounts of V-*v* movement and object shift in Kusaal are given. It has been shown that V moves to Asp in order to realise the pronunciation of the aspectual suffix morpheme on the verb.Asp undergoes onward transfer to *v*. It has also been indicated that a full object DP can undergo object shift to [Spec AspP].

CHAPTER SIX

Summary and Conclusion

In this chapter, I present a summary of the major observations that are made in this research. The chapter further looks at some theoretical implications of the findings of our proposed analysis of object-sharing as symmetric sharing in Kusaal.

This thesis investigated the possibility of analysing object-sharing in Kusaal as an instance of symmetric sharing. Because this language has received very little attention in the scope of research, an attempt is made in the second chapter to discuss the syntactic structure of both the nominal and the verbal phrases in the language. Using simple declarative sentences, the order of the DP is observed to be: N Adj Num Def/Dem which is argued to be derived through successive movement of the NP (Cinque 2005). An attempt is also made to classify the nouns in this language into seven identified groups. This classification is done based on the way the singular and the plural forms of nouns are formed. Following Rizzi (1997) and Hiraiwa (2005a, b) it is assumed that AspP is c-commanded by v. V+AspP move to v. This movement makes it possible to get the right order of words, T > (Neg) > v > (AspP) > V, in the language and also ensures that the pronunciation of the aspectual suffix morpheme comes from the head itself and not from little v.

This research has also presented data to prove that Kusaal is a true serializing language. The tests for negation, pronoun extraction, and single-tense marker are all carried out to show that a particular construction, specifically a SVC in Kusaal, does not involve instances of (c)overt coordination constructions.

The puzzle as to how to analyse the object in object-sharing SVCs became the central issue. Previous analyses by Baker (1987) and Collins (1997) could not be applied to Kusaal for reasons outlined in chapter three. In an attempt to solve this puzzle, the interaction between predicate cleft constructions and object-sharing serial verb constructions in this language led to an interesting observation.

In Kusaal, just as in Dagaare, it is observed that focused elements are moved to the left periphery of the entire construction and they receive contrastive focus interpretations. There is however no overt morphological realisation of focus. The particle *ka* , which is a focus marker in Buli and Dabgani, was observed to function as (1) a conjunction, (2) a complementizer, and (3) a relative clause complementizer. Kusaal differs from Dagaare

which has an overt particle, *la*, as focus marker (Hiraiwa and Bodomo (2008) but in both languages *ka* functions as a complementizer.

It has also been observed that Clefted predicates are obligatorily nominalised and they receive double pronunciations. There are three predicate cleft patterns observed. It is possible to cleft V_1 or V_2 or V_1+V_2 complex. It is also possible to cleft the object with either V_1 or V_2 or both V_1+V_2. Based on this pattern it is proposed following Hiraiwa and Bodomo (2008) that both V_1 and V_2 share the object syntactically. This observation leads to the proposal that the object in object-sharing SVCs is symmetrically shared. The findings in this research provide further evidence to the observation made by Hiraiwa and Bodomo (2008) that the object in object-sharing SVCs in Dagaare is symmetrically shared.

In order to show that the proposed structure of symmetric sharing is linearizable before Spell-Out, accounts of V-*v* movement and object shift in Kusaal are given. It has been shown that V moves to Asp which moves to *v*. It has also been indicated that a full object DP moves to [Spec AspP] in Kusaal.

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