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## THE MULTIPLE SENSES OF *so* IN SIGU

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### Abstract

In Sigu, a previously unrecorded non-natural, secret, and sacred language, the high frequency and meaning variation of the verb *so* are among the notable aspects of the language. The paper outlines the nature and distribution of the phenomenon using a lexical-translational approach and presents the different usage values of the verb. It then investigates the meanings of *so*, and how its usage values are related. The analysis proposes that *so* is lexically underspecified and that linguistic and non-linguistic strategies work to narrow down the range of possible meanings.

**Key words:** lexical manipulation, lexical semantics, underspecification, alternate language

### Résumé

La fréquence élevée et l'éventail des emplois du verbe *so* sont parmi les aspects notables du Sigu, une pseudo-langue non-documentée jusqu'à présent. Cet article expose la nature et la distribution du verbe *so* en utilisant une approche lexico-traductionnelle et présente les différents emplois de ce verbe. Ensuite, il examine les significations de *so* et les liens entre ses valeurs d'emploi. L'article propose que *so* est sous-spécifié dans sa représentation lexicale, et que des stratégies linguistiques et non-linguistiques ont pour rôle de limiter l'éventail de ses significations possibles.

## 1 Preliminary<sup>1</sup>

### 1.1 What is Sigu?

Sigu is a non-natural, secret, and sacred language 'owned' by a clan of ethnic Chakali that lives in Gurumbele, a village in Ghana's Upper West Region.<sup>2</sup> It is non-

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natural in the sense that it has no native speakers. The language is ‘secret’ and ‘sacred’ because local protocols protect its transmission and usage, and spiritual endowment is believed to be given by the shrine and its related medicine. It is mainly sung, only seldom spoken, and preserved orally, transmission taking place in rites of initiation, blood sacrifices, annual performances, and funerals of group members. Small talk among the initiates has been observed but it is not clear what role it plays in learning: it must be considerable, but it was observed to be quite infrequent.<sup>3</sup> The amount of exposure to the language is manifestly limited, thus becoming a professional singer involves attending many events and getting the chance to perform. Recordings, either on cassettes or memory cards, are also likely to play a role in learning, but only a handful of people have access to them. Because it is tied to specific, occasional, and, for the most part, unpredictable events, Sigu is not a learner-friendly language. In terms of the exposure to the language and the potential for language learning, Sigu’s usage cannot be compared with normal communication.

## 1.2 What type of linguistic system is Sigu?

If natural languages are defined as languages which spontaneously evolve in the mind of children and are not planned beforehand, then Sigu is not a natural language.<sup>4</sup> Sigu is not used in everyday communication, so it is not a code to which children are constantly exposed. Its history is unknown and attempts to demonstrate genealogical affiliation to other languages of the area have failed. Sigu may have been designed and planned, yet today’s speakers and owners explicitly attempt to keep the language as it has been passed down to them. The conjecture is that all constructed

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<sup>2</sup> The information in this section is based on observations from fieldwork in the Chakali area from 2008 until today. By ‘owned’, I mean that the clan is in charge of the initiation rite which defines users’ rights. Sigu shows almost no linguistic similarities to the secret language of the Dogon of Sanga, which Leiris transcribed as *sigui*, *sigi*, *sigu*, and *sugu* (Leiris 1948: 485). This is not a surprising coincidence. That the two peoples share cultural features is ostensible when one reads the available work on Dogon masking- and initiation traditions. Further, there is a definite shared masking culture in this North-South stretch, the *awa* of the Dogon to the north (ibid: 435), the *koro* of the Bobo in south-west Burkina Faso (Le Moal 1980:168), and the *sigmaa* of the Chakali, Vagala, Tampilma, and others in the South. When necessary each language is preceded by *cli*. for Chakali and *sig*. for Sigu.

<sup>3</sup> The actual Sigu term for ‘initiated’ is *gàràbòyó*, which refers to someone who has ‘converted’ to the shrine *Dààbàntólúgú* through initiation. The person is bound to all the doctrines of the shrine. The term is also translated in Chakali as *nihîè* ‘elder’ since initiation endows a person with knowledge equal to that acquired through a long life. Although there are good reasons to believe that several grades may have operated in the past, today all newly initiated individuals have the same grade as anyone else.

<sup>4</sup> I avoid using the expression ‘artificial language’ because all constructed languages may be seen as ‘natural’ as they are essentially the product of human cognition. Perhaps the notion of being ‘planned’ and ‘non-spontaneous’ may legitimise the term ‘artificial’, but in practice this may also be problematic given, for example, the proficiency of Esperanto and the fact that the language has native speakers.

languages have features of natural languages by the very nature of the designers. Without a posited time depth for the spiritual group that uses Sigu, and the process by which it got to its present state, it is more appropriate to say that Sigu displays ‘Chakalic’ features. The term ‘Chakalic’ suggests a linguistic appearance of Sigu without necessarily stipulating an origin.

At first sight, Sigu is a lexically-manipulated L1 (in the sense of Mous 2003: 209). Chakali, a Southwestern Grusi language (Gur, Niger-Congo), is the first language of the singers. Many features found in Chakali are also found in Sigu: the word order, phrase and word formations, phoneme inventories, and syllable structures of Sigu and Chakali are identical. The personal pronouns are also identical, except for a mismatch in first and second person plural. Nonetheless, unlike a prototypical lexically-manipulated language, Sigu is lexically and grammatically much ‘leaner’ than Chakali. The lexicon appears to be small, probably due to the limited domain of application and limited diversity of experience. Nominal inflection and derivation are rare. When a plural is made, the suffix *-sV* is identical to one of the three plural markers of Chakali. Still, the most striking difference between Chakali and Sigu is the near absence of grammatical particles. Sigu does not have the tenses, aspects, moods, demonstratives, and various other particles that Chakali makes use of. Only one pre-verbal particle, i.e. **ni**, whose meaning is not yet fully understood, is attested. Therefore Sigu cannot be classified as a lexically-manipulated L1 – nor an argot-type of alternate language in the sense of Bagemihl (1988: 17) or a *pseudo-langue* in the sense of Moñino (1991) – since it cannot be defined solely on the basis of vocabulary replacement.

Although case studies exist, lexically-manipulated languages have not received much attention, because they “simply involve a vocabulary (lexicon) which is distinct from the ordinary language” (Bagemihl 1996: 698) and are “usually not predictable” (Laycock 1972: 63). While ludling (essentially phonological manipulation, see Laycock 1972: 61) has contributed substantially to linguistic theories by providing secondary evidence which support such issues as the skeletal tier of auto-segmental phonology (McCarthy 1991), the establishment of licit syllable types of the source language (Hombert 1986: 176), the autonomy of tones (Demolin 1991: 45), among others, a series of questions remains when dealing with lexically-manipulated languages. I believe that a study of the verb **sɔ** in Sigu addresses some of these questions.

While the method of concealment in the case of ludling can be reduced to predictable and regular (morpho-) phonological rule(s) affecting the source language’s phonological representation without affecting the semantics, in the case of lexically-manipulated languages, concealment strategies are generally non-systematic and affect different aspects of the lexical items. Such phenomena could be explained

with relexification (Muysken 1981, Lefebvre 1988, Wittman & Fournier 1996, Lefebvre 2014), paralexification (Mous 2001), or Full Transfer/Full Access (Schwartz & Sprouse 1996), among others, that is, theories dealing with the representation of vocabulary alternation or replacement. If any of these hypotheses is correct – so that, roughly speaking, the grammar of Chakali is the grammar matrix of Sign, plus relabeling<sup>5</sup> – then one question is: are the verbal lexemes of the matrix language copied into the alternate language one-to-one? In other words, is each lexical entry assigned a new label? The analysis put forward in this article shows that it is not necessary for an alternate language to map lexical items one-to-one because verb meanings are built incrementally from the activation of certain semantic representations and contextual enrichment. The article is organised as follows: in §2 the method and dataset are explained and selected examples are presented, in §3 an analysis of *sɔ* is proposed, and finally in the conclusion I suggest how the findings can contribute to further research on lexically-manipulated languages. One of the contributions of this paper is to simulate the sort of (non-) linguistic knowledge required to succeed in interpreting an ambiguous verb in an alternate language.

## 2 The Multiple Senses of the Verb *sɔ*

### 2.1 Method and Dataset

Although there are singers whose first language is not Chakali, all singers and consultants I have worked with are from Ducie and Gurumbele, two of the four remaining villages where Chakali is spoken by the majority. The linguistic landscape has changed in the last 50 years, but it is fairly accurate to say that today Chakali speakers have Waali (Western Oti-Volta), Tampulma, Pasaale, or Vagla (all Southwestern Grusi languages), as well as varieties of Akan if they have worked in the south of the country, in their linguistic repertoire. Most members of the spiritual group, especially the older generation, have not been to school and do not understand English. However a few do, and could help with transcription and translation. The bulk of the work was carried out with two male consultants (both in their 30s), native speakers of Chakali, fluent in Waali and Ghanaian English, as well as being Sign enthusiasts and who also perform. The transcription is based on slow repetition of the lyrics. The orthography is a mixture of phonetic and phonemic transcription and the use of diacritics represents an impressionistic representation of intonation.<sup>6</sup> Other consultants have provided occasional clarifications on transcriptions and translations.

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<sup>5</sup> “Relabeling is a mental operation that consists in assigning a lexical entry of a given language,  $L_1$ , a new label taken from another language,  $L_2$ .” (Lefebvre 2014: 9)

<sup>6</sup> It is important to mention such details because the reader may believe that lexical or grammatical tones can affect the interpretation. The form under study does not contrast tonemically.

Specific questions were normally addressed directly to the performers. Eleven songs have received a narrow annotation, that is a phonetic transcription, a translation in Chakali and English, an interlinearisation, and comments either from the consultants involved in the transcription-translation process or from the performers. A parallel corpus was created using the Chakali and English translations.<sup>7</sup> Table 1 displays the tokens in a descending order according to their frequencies.

**Table 1: Frequency list**

Form	Glosses	Tokens in text
<i>sɔ</i>	(several analyses) <i>v.</i>	481
<i>ni</i>	pre-verbal particle	314
<i>a</i>	3.PL.-H 3.SG.IPRS <i>pro.</i> , <i>conn.</i>	298
<i>o</i>	3.SG <i>pro.</i>	233
<i>n</i>	1.SG <i>pro.</i>	132
<i>dani</i>	OBJ.CLS <i>pro.</i>	130
<i>i</i>	2.SG <i>pro.</i>	128
<i>lɔma</i>	house <i>n.</i>	124

The frequency list in Table 1 contains fairly common top-listed words of corpora, at least corpora of isolating languages for which frequency lists have been compiled. It is normal, if not a rule, to find pronouns, connectives, determiners, auxiliaries, and adpositions on top of such lists. Still, it is unexpected to find a verb topping a frequency list, and as we will see later, *sɔ* cannot function as a preverb or auxiliary. This fact is intriguing: how can a verb surpass all other items in a frequency list, and what is the function and meaning of that verb?

## 2.2 Lexical-translational Heuristic to Sense Identification

In a lexical-translational approach to sense discovery, the process of finding meanings relies on corresponding translations.<sup>8</sup> The first step is to identify the occurrences of the verb *sɔ* in the parallel corpus, extract the senses of their Chakali translations and cluster them into groups. This is what Table 2 attempts to show.

The tentative subdivisions take into account the sort of event described by the Chakali predicates. The groups existential, possessive, motion and transfer are

<sup>7</sup> The parallel corpus consists of approximately 1600 sentences, 5400 word tokens, and 650 word types.

<sup>8</sup> An alternative method for the analysis of the data at hand is developed in Dixon (1971).

subjective and pre-theoretical eventuality group labels used in the categorisation of verbal predicates. Since the goal is not to provide an articulated representation of verb classes in Chakali, these four groups were deemed appropriate for the exercise at hand. In addition, the goal is to account for the sense groups, not for each Chakali verb *sɔ* was translated into. In §2.2.1 to §2.2.4, examples are given where the verb *sɔ* is translated with various Chakali verbs. The glossing of the Sigu verb is based on the English translation of the Chakali verb. A predicate-argument structure is also provided at the bottom of each example. Again these structures are not analytic but descriptive, isolating the predicate and the realisation of its arguments.

**Table 2:** Preliminary categorisation of the different senses of the Sigu verb *sɔ* based on Chakali translations

Sense group	Usage value in Chakali (tokens)
Existential	<i>dva</i> ‘be at, be on’ (195), <i>zɔv<sub>1</sub></i> ‘live, inhabit’ (3), <i>saya</i> ‘sit (+H)’ (1), <i>saga</i> ‘sit (-H)’ (1)
Possessive	<i>kpaga</i> ‘have’ (24)
Transfer	<i>kpa</i> ‘take’ (156), <i>dv/tfiɛŋẽ</i> ‘put’ (20), <i>jaa</i> ‘fetch’ (7), <i>trɛ</i> ‘give’ (10), <i>sãã</i> ‘build’ (1), <i>dũũ</i> ‘plant’ (1)
Motion	<i>kaali</i> ‘go’ (28), <i>zɔv<sub>2</sub></i> ‘enter’ (27), <i>wa</i> ‘come’ (12), <i>tele</i> ‘reach, come to’ (5), <i>tiya</i> ‘follow’ (1)

### 2.2.1 Existential-locative

The verb *sɔ* can depict various existential-locative relations expressing the existence of something at some place. While Chakali makes fine distinctions based on semantic restriction requirements (Brindle 2011, Brindle and Atintono 2012), *sɔ* is translated into Chakali’s existential-locative predicate *dva* ‘be at, be on’ in (1a), *zɔv* ‘live, inhabit’ in (1b), postural predicate *saya* ‘sit’ (with +HUMAN subject nominal) in (1c), and *saga* ‘sit’ (with –HUMAN subject nominal) in (1d).<sup>9</sup>

<sup>9</sup> The reference in the parentheses provides the name of the song and the line number in the corpus. From the first interlinearisation tier, each example provides a Sigu sentence, a gloss, the Chakali translation, an English translation, and a predicate-argument structure. The abbreviations are: OBJ.CLS object pronoun classifier, PV pre-verb particle, INTS intensifier, CONN connective particle, +/-H human gender value, and QUANT quantifier.

- (1) a. *nāātārā sɔ̌ gɔ̌ŋī*  
 human.being be.at road  
 ‘(di) nār dóá tíwíí ní’  
 ‘(That) someone is on the road’ (AMO-KOT-KK 1.31)  
*sɔ̌ (human, road)*
- b. *dááreyíwóŋ sɔ̌ náŋvòlì*  
 salt be.in soup  
 ‘jísá kà zòù dísá ní’  
 ‘Salt is in the soup’ (AMO-NME 1.291)  
*sɔ̌ (salt, soup)*
- c. *kùntùŋkpálémá pɔ̌jǎ́ sò tàŋì á zàŋnáàrí dààrèŋwòŋ*  
 bird ass sit land CONN see Salt  
 ‘kùntùŋkpálémá jǎ́ sàŋà káá nìné jísá’  
 ‘Bird sits while watching Salt’ (AMO-NME 1.204)  
*sɔ̌ (buttocks, ground)*
- d. *pɔ̌jǎ́vùlúù sò jání*  
 ass.excrement be.on back  
 ‘bíná ságá hàbòà ní’  
 ‘Faeces are on the back’ (AMO-SUN 1.141)  
*sɔ̌ (faeces, dorsum)*

In (1) *sɔ̌* is translated into an existential-locative predicate with two arguments, one the entity to be located and the other the location of that entity. Note that Sign has the verb *buɔ* ‘be’ which consistently translates into Chakali *jaa* in equational and predicational structures.

### 2.2.2 Possessive

The verb *sɔ̌* is translated into the Chakali possessive predicate *kpaga* ‘have’. The relation between the possessor and the possessed, and the characteristics of the two arguments, are described as follows: in (2a) the possessed is an unowned possession and a physical quality of the possessor, i.e. as in English ‘forest has animals’, in (2b) the possessed is an associated quality of the possessor, and in (2c) the possessed is an owned possession.<sup>10</sup>

<sup>10</sup> In (2a), the possessed entity is conceptualised as +HUMAN, indicated by the 3.PL.+H pronoun *ba* ‘they’, while the Chakali translation analysed ‘land creature’ as –HUMAN with the 3.PL.–H pronoun *a* ‘they’. This example also demonstrates that, unlike Chakali, *sɔ̌* does not phonologically absorb object



- (3) a. *súṅgúrúmá sò kpàntál*  
 tortoise come outside  
 ‘kpààkpúrò wà lìì gántál’  
 ‘Tortoise came outside (from inside a hole)’ (AMO-SUN 1.151)  
*sɔ (tortoise, outside)*
- b. *súṅgúrúmá, sò dzãmãdžõ*  
 tortoise enter hole  
 ‘kpààkpúrò, zùù à bùó’  
 ‘Tortoise, (you) enter the hole’ (AMO-SUN 1.124)  
*sɔ (tortoise, hole)*
- c. *ì ní sò góṅíú*  
 2.SG PV go road.far  
 ‘dì ì káálí tìwíí bùòlìí’  
 ‘If you go on a long journey’ (AMO-SACR 1.32)  
*sɔ (human, road)*
- d. *gõṅĩ sõ nààtàràzìgú*  
 road reach elder  
 ‘tìwíí váníí télé níhîê’  
 ‘An elder is about to die’ (KPE-NME 1.128)  
*sɔ (road, human)*

#### 2.2.4 Transfer

Verbs of manipulation, verbs of contact and control, and verbs of transfer of possession are also used to translate *sɔ*. Least commonly, the verb *sɔ* translates into the ‘take’-verb **kpa** and occur on its own, as example (4) shows.

- (4) *í sò wówògõ*  
 2.SG take money  
 ‘í kpá mòlèbíé’  
 ‘You shall take money’ (DAN 1.46-.47)  
*sɔ (human, money)*

Crucially, however, it is observed that when *sɔ* is translated into a form that has a transfer sense, it is mainly found in *v*<sub>1</sub> position of serial verb constructions.<sup>11</sup>

<sup>11</sup> Lefebvre (1991) gives an account of manipulative serial verb construction in Fon (Gbe). It is striking that in Fon a verb with the form *sɔ* behaves in practically the same way as the one described in this section. According to Lefebvre, *sɔ*, which she translates as ‘take’, belongs to a closed-class of verbs

These serial verb constructions correspond to what Ameka & Essegbey (2006: 378) call manipulative serial verb construction, which is a type of serial verb construction that expresses a transfer of possession or information. In Sigu and Chakali, it normally consists of a subject, a ‘take’-verb (i.e. sig. **sɔ** and cli. **kpa**), its object, which is the thing being manipulated, followed by another verb and its object. The prototypical sequence and examples are found in (5).

(5) NP  $v_{1[\text{take}]}$  NP  $v_2$  NP

a. *ó sò kádáásípólà méṅì ñ kónù*  
 3.SG take knife cut 1.SG head

‘ó **kpá** kìsìè ṅmènà ñ jùù’

‘He will take a knife to cut my head’

(AMO-SUN 1.18)

*sɔ* (human, knife)

b. *ò sò súnḡúrúmá síálí tàṅà*  
 3.SG take tortoise throw land

‘ò **kpá** kpààkpúrò à jùò hàṅlírí nī’

‘He threw tortoise away’

(AMO-SUN 1.79)

*sɔ* (human, tortoise)

c. *tì ní sò tàntfúḡuló sò tāṅī*  
 1.SG PV take guinea.corn be.at land

‘dì jà wá **ḡúú** mǎá’

‘When we sow guinea corn’

(FUS-SAN 1.122)

*sɔ* (humans, grains), *sɔ* (grains, soil)

The sentence in (5a) conveys that an agent will cut someone with an instrument. The theme argument ‘knife’ is the instrument in the event and the agent manipulates it. The subject and object of *sɔ* in  $v_1$  may be seen as both acting in the event represented by the verb **méṅì** in  $v_2$  position. In (5b) the object of *sɔ* is not an instrument but the entity being thrown by the subject. In (5b) the serial verb construction is translated in Chakali with an overt connective **a** ‘and’, resulting in a coordinated clause with a subject overtly expressed only once, before  $v_1$ . In (5c) the serial verb construction is predicated by two *sɔ* verbs but is translated in Chakali with

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used in serial verb constructions and co-occurs with verbs of open class. In her analysis *sɔ* introduces a CAUSE predicate and an agent argument. Only motion verbs and transfer verbs occur with closed-class *sɔ*. See Amberber (1995) for an alternative approach to the same phenomenon. Otherwise, until there is further evidence, I suspect that the form/sense correspondence is a coincidence. Fon and Chakali are not in contact and manipulative serial verb constructions are found in many languages of West Africa.

the single verb **dũũ** ‘sow’ and its object **mĩã**, i.e. **dũũ mĩã** ‘sow guinea corn’. In (5a-c) the final argument is a location, i.e. the destination of the knife in (5a), the destination of the tortoise in (5b), and the destination of the guinea corn in (5c). All the examples in (5) contain three arguments, two of which seem to be related to *sɔ* in  $v_1$  position and one shared by two verbs.

When *sɔ* translates into a Chakali ‘take’-verb and functions as the only verb in a clause, that clause is very often part of a clause chain. A clause chain is defined for our purpose as clauses denoting separate events, lacking overt subject, and linked by a connective. Several instances of *sɔ* can be found in clause chaining.

- (6) *sáŋwára zàŋàsáŋá, à sɔ wáálí, à sɔ kpálin̄kpàhá,*  
 bird.type stand.up CONN fetch water CONN go farm  
*à sɔ tʃɔŋtʃúgúló à nùgùmè tʃɔŋtʃúgúló,*  
 CONN take guinea.corn CONN eat guinea.corn  
*sòŋó tí*  
 abdomen be.satisfy  
 ‘tʃàpàràpĩ sii, à jàà ní, à kààlì kùò, à kà kpá mĩá, à tiè mĩá, à piŋà’  
 ‘Bird got up, fetch water, went to farm, took guinea corn, chewed guinea corn,  
 and was satisfied’ (FUS-SAN 1.6-1.11)  
*sɔ (bird, water), sɔ (bird, farm), sɔ (bird, corn)*

Example (6) illustrates that *sɔ* can be translated into Chakali verbs expressing different meanings in the same sentence. The subject of the first verb is overt, i.e. **saŋwara** ‘bird type’ (*Pterocles quadricinctus*), and the subsequent verbs in the sentence share the same subject. The sentence shows a series of clauses introduced by the connective **a** ‘and’, which has the same form in Sigu and Chakali. The example (6) is intended to show that within a clause chain at least two different senses can be drawn, i.e. **jaa** ‘fetch’, **kpa** ‘take’, and **kaali** ‘go’.

### 2.3 Discussion

The various examples provided in §2.2 demonstrate that *sɔ* translates into semantically-varied Chakali verbs. The pre-theoretic groups existential, possession, motion, and transfer are used to cluster *sɔ*’s usage values into four sense groups. At the bottom of each example, a predicate-argument structure – i.e. *sɔ* ( $x, y$ ) – contains the relation and the substantiation of the arguments.

The problem at this point is that while some of the readings of *sɔ* can clearly be separated from each other, others cannot. Having all usage values stored individually is not an ideal design: a ‘full-storage’ approach where each usage value is listed would not capture any generalisation. Furthermore, it is difficult to conceive of

a single form with so many usage values in such a small lexicon, knowing that the learner has little exposure.

How does a consultant arrive at the meanings encoded in the corresponding Chakali verbs? According to Murphy (2010: 84), “[i]f a word has one sense that is general enough that it can be applied to many different things, then the word has a vague, or indeterminate sense”. The question raised by the various translational units is whether they confirm different senses, or a single indeterminate one. Another related question is whether the sense groups proposed lack any logical or causal relation. In the next section, it is proposed that various representations and procedures are involved in narrowing down the proper interpretation of *sɔ*, and that these are both linguistic and non-linguistic.

I am aware of the potential problems of this approach and a word of caution is in order here. With a lexical-translational heuristic to sense identification, the different senses in the object language are deduced from the corresponding expressions in the translation language. Matthewson (2004: 380) writes that translations should be seen as clues for semantic analysis, rather than as its result. This is what I had in mind in §2.2. Ideally, meaning ought to be characterised language internally, coupled with a model of cognitive and/or linguistic categories describing meaning representation. This is what §3 proposes.

### **3. How does the meaning of *sɔ* arise?**

How is *sɔ* represented and how does the speaker-singer express and the hearer-audience interpret a *sɔ*-meaning? In this section I put forward a lexical concept for *sɔ* with very limited core features and a series of constraints and strategies believed to force certain interpretations while excluding others. Let us call this narrowing,<sup>12</sup> as the approach bears resemblance to that of recent studies in lexical pragmatics, constructionist frameworks, and discourse analysis.

One prerequisite of conceptual adjustment is the presence of a concept. The lexical concept represented in (7) is assumed.<sup>13</sup>

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<sup>12</sup> This notion is intended to be more inclusive than the notions of ad hoc concept (Carston 2002: 323), concept broadening/narrowing (Rubio-Fernández 2008), and on-line concept construction (Carston 2002: 320) documented in the pragmatic literature.

<sup>13</sup> The attribute value matrix is a notational variant for the representation of feature structure. It does not presume any theoretical framework, although (7) is HPSG-inspired.

(7) *Lexical-conceptual representation for sɔ*

$$\left[ \begin{array}{ll} \text{PHON} & s\text{ɔ} \\ \text{CAT} & v \\ \text{CONTENT} & \left[ \begin{array}{ll} \text{ARG1} & - \\ \text{ARG2} & - \end{array} \right] \end{array} \right]$$

The core features of *sɔ* are represented by the (PHON)ological form /sɔ/, which denotes a relation between ARG1 and ARG2. It is a relation that always has two roles to satisfy, but which is underspecified as to what sort of event relation holds between the arguments. These may be seen as the only inherent lexical-conceptual properties of the verb *sɔ*.

Within this view, the lexical concept in (7) is an underspecified representation that gets adjusted to yield a more specific concept. The approach adopts frames that establish meaningful relations among participants, thereby constraining the meaning potential of *sɔ*. It is shown in §3.1 that certain interpretations are determined by the denotations of the arguments and by the relation arguments have to one another at the sentential level. In addition to the immediate linguistic context, it is shown that non-immediate and non-linguistic contexts play an important role in interpretation. In accordance, prior context, especially discourse structure and content, activates certain interpretations. This is discussed in §3.2. Since no other linguistic cues are available, pragmatic enrichment is necessary in order to explain certain meaning choices made by the consultants in the translation. Overall, the solution is based on interrelated mechanisms: an underspecified representation, a combinatorial system, semantic frames, pragmatic enrichment, prior context, and encyclopedic (world) knowledge.

### 3.1 Who are the Participants and What Role Do They Play?

It is well known that the immediate linguistic environment can constrain the construal of a word (Pustejovsky 1995). In keeping with this line of thinking, the likelihood that the denotations of certain arguments help to construe the meaning of *sɔ* is taken into account. For instance, the subject of a transfer verb typically denotes an animate entity, so a constraint could be postulated to this effect. Another constraint could be that when the object of *sɔ* denotes a location, then the yielding sentence is to be interpreted with either an existential-locative or motion meaning. An additional one could be that when the object of *sɔ* denotes an alienable entity, either the transfer or possessive meaning should be interpreted.

(8) a. When *sɔ* (*x*, *y*), if *x* = +ANIMATE, transfer or possessive sense is more likely;

- b. When *sɔ* (*x*, *y*), if *y* = +LOCATION, motion or existential-locative sense is more likely;
- c. When *sɔ* (*x*, *y*), if *y* = +THING, transfer or possessive sense is more likely.

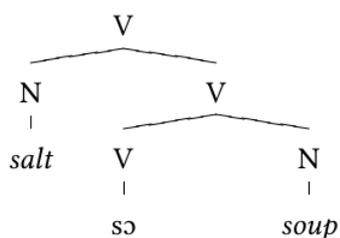
Since in principle the composition of a lexical item with another invites some meanings more than others, constraints such as the ones in (8), and possibly others, can narrow down the possible interpretation of *sɔ*. One can easily imagine the necessity of the interplay of an animacy hierarchy, a prototypical location theory, etc. They are believed to be among the processes underlying the comprehension of *sɔ*.

In association with argument denotation-based adjustment, another strategy proposed is that some of the meanings are structurally built. I adopt the notion of relational semantic structure (Fontanals 1999, 2002), an approach inspired by Bouchard (1995), which is thought of as a “syntactically relevant conceptual structure” (Fontanals 1999: 3) and a level of abstraction with “meaning present in the syntactic representations themselves” (Bouchard 1995: 16). One property of a relational semantic structure is that the various relations between arguments are established in a syntactically relevant conceptual structure, not in the lexical entry. Although I will not focus on syntax, I assume, like Bouchard, a certain homomorphous relationship between syntactic structure and semantic structure (see also Áfarli 2007). Viewed this way, a relational semantic structure will constrain the interpretation of *sɔ* using structural location, that is, narrowing down the meaning of *sɔ* would be based on where in the structure an argument is located in relation to another. This approach is well suited to deal with the multiple meanings which the verb *sɔ* seem to convey.

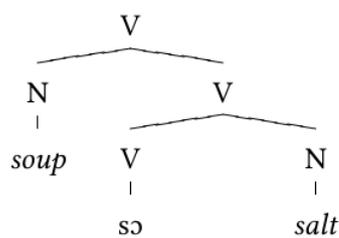
To what degree can a relational semantic structure constrain the interpretation of *sɔ*? It was shown in §2.2.1 and §2.2.2 that one interpretation of *sɔ* was the existential-locative ‘to be somewhere’, and yet another was the possessive ‘to have something’. Consider the structures of the fabricated examples in (9).

(9)

a.



b.



Even though the linear order of the existential-locative and the possessive sentence are reversed in (9), there are essential similarities between the two.<sup>14</sup> The general observation is that an argument which functions as subject in the possessive sentence will function as an object with a locative role in the existential one. The reason why (9a) would not be interpreted \**salt have soup* but as *salt is in soup* could be that a hearer relies on a surface cue, i.e. linear order, and that both (9a) and (9b) map the arguments to the same relational semantic structure. This is in line with Baron & Herslund (2001: 86) who argue that the exact meaning of a relation, in this case existential or possessive, depends “upon the semantic link between the subject and object”. According to them, there are three different kinds of semantic link for a possessive sentence, which they identify as a denotative inclusion, i.e. “a relation where the denotation of the object noun is included in the denotation of the subject noun”: a) when the object noun is part of a part-whole relationship, b) when the object noun denotes (part of) the possession of the subject noun, which is typically the case with an animate subject noun and non-relational object noun, and c) when the object noun constitutes a semantic feature of the subject noun so that the two form a chain of isotopic inclusion (Baron & Herslund 2001: 87).<sup>15</sup> It is when one of these three semantic links is established that a denotative inclusion is actualised, that is, when a possessive proposition of the form “X has Y” gets interpreted. Thus, what appears to be operating in (9) is a psychological process whereby encyclopedic knowledge affects the likelihood of certain construal (Clark, 1996). Like the semantic link of Baron & Herslund in a) above, a particular piece of encyclopedic knowledge says that the soup/salt relationship consists of one having an ingredient (i.e. soup) and the other being an ingredient (i.e. salt). The relationship is a type of part-of relation, where one is an ingredient or component of another, but not vice-versa (see Winston et al. 1987: 425).

This exposition is intended to show that the conceptualisation of the arguments’ realisation and their mutual relations play an important role in narrowing down the lexical concept. Conforming to the semantic links of Baron & Herslund

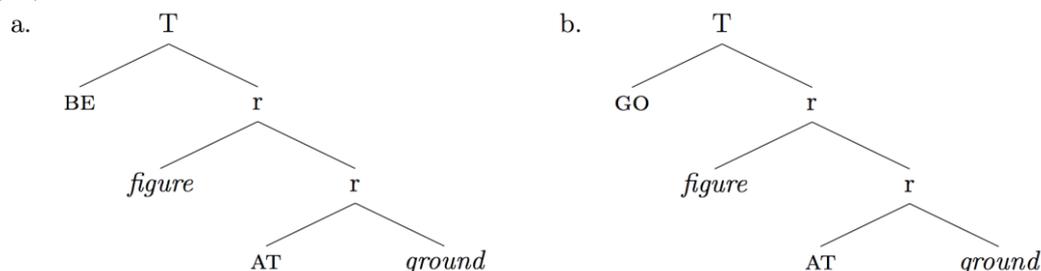
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<sup>14</sup> In both sentences a proposition states the existence of something at some place. In fact, the observation that ‘possession’ has its origin in the primitive notion of ‘existence’ has long been presented in the literature. Benveniste, for instance, suggested that French *avoir* is an inverted *être* (Benveniste 1966; Bach 1967; Lyons 1967; Jung 2011; Freeze 2001; Wang & Xu 2013). Bach (1967: 479-483) and Freeze (2001: 943) illustrate with data from Hindi, Tagalog, Finnish, Scots Gaelic, among others languages, the formal identification of existential and possessive verbs cross-linguistically, and both authors demonstrate that one can derive existential and possessive sentences from a common structure. Welmers (1974: 310) writes that “possession is a special case of location in Akan and Ewe”.

<sup>15</sup> If denotative inclusions are learned independent of language, alternatives to the one provided by in Baron & Herslund (2001) can be imagined.

(2001), these relations are meaningful and can be implemented in a syntactically-relevant semantic structure. One can imagine a common relational semantic structure as the one in (10a).<sup>16</sup>

(10)



It is postulated that when one of the three denotative inclusions of Baron & Herslund (2001) is triggered in the mind of the hearer, it activates a possessive reading. Otherwise a sentence predicated by *sə* determines by default an existential-locative reading. Put another way, since the object of *sə* in (9b) can be in a part-of relation with its subject, a possessive reading is derived. The relational semantic structure in (10a) can thus be seen as a common relational semantic structure where both the meaning of (9a) and (9b) can reside.

Although this suggestion covers two usage values of *sə*, two others remain. First, recall that the motion sense of *sə*, exemplified in §2.2.3, is based on translations that use verbs like *zoo* ‘enter’, *wa lu* ‘come out’, *kaali* ‘go’, and *tele* ‘reach’. In the examples provided, *sə* co-occurs with individual locations in object position. Generally, what differentiates a motion verb from an existential-locative one is that the former involves a transition. This is reflected in Talmy’s split of the category MOTION into motion and non-motion/static location (Talmy 2000). There are two analytic options for deriving the motion sense. The first is shown in (10b), where the relational semantic structures illustrate that an existential-locative and a motion sense of *sə* differ only in terms of the nature of the relational element associated with the head of the T node. The relation between the figure and the ground is still a basic

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<sup>16</sup> Details on Relational Semantic Structure (RSS) can be read in Fontanals (1999); Fontanals & Simón (1999); Fontanals (2002). In (10), *r* stands for a “basic spatial relation”. The relation is headed by AT, which “relates two non-relational elements into our cognitive space” (Fontanals 1999: 3), and a figure entity occupies the same relative position or area in space as a ground entity. The component standing for *T* is to be interpreted as a transitional relation. Fontanals writes that *T* is a semi-relation since ‘is’ has no specifier, but one complement. In some cases it can “be regarded as a transition between two complete relations *R* and *r*.”

spatial relation, the difference between the two frames is that (10a) reflects a static/non-motion relation while (10b) reflects a dynamic/motion relation.

The second analytic option is to say that, if the object of *sɔ* is a location, context inference alone can explain why consultants used motion verbs in the Chakali translation. For instance, in (3a) and (3b), given that the objects of *sɔ* are viewed as locations, a hearer needs to know the location of the agent prior to the event to establish whether *sɔ* has to be interpreted as a static situation type or not. In (3c) and (3d) it is likely that the concept of ‘road’ activates more motion-like situations than static ones. Based on the corpus data and the one in (3) I am more inclined to prefer the second analytic option. So unless proven otherwise, the relational semantic structure in (10b) is unavailable.

In §2.2.4, the transfer sense of *sɔ* was said to be found in serial verb constructions, but that it could also occur on its own, especially in clause chaining. It is believed that the interaction of two linguistic levels is responsible for the interpretation of the transfer sense. The first is a pragmatic enrichment where prior context allows for a physical action situation to be interpreted as opposed to a static situation: (4) and (6) are examples where the Chakali transfer verbs used in the translations suggest a pragmatically motivated interpretation. The second is a construction encoded in a relational semantic structure and deals specifically with *sɔ* in the  $v_1$  position of a serial verb construction, as exemplified in (5). Similar to what is proposed in Lefebvre (1991), I assume that a serial verb construction in which *sɔ* functions as the first verb, a causation component is introduced, such that a ‘causer causes a figure to VERB a ground’.<sup>17</sup> This construction is common in many West African languages (Collins 1997; Ameka, 2006).

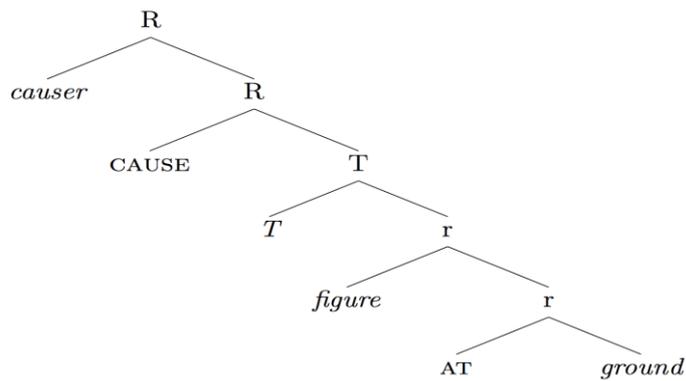
Notice that the CAUSE relational element in (11) is the head of a source relation *R* which extends the frame of (10): it introduces a causer argument in the specifier of the relation *R*, which in turn takes a *T* structure as complement.<sup>18</sup>

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<sup>17</sup> Originator is another term employed for the same idea (Borer, 1994); other names for the same CAUSER role in the literature are antagonist, trajector, and instigator.

<sup>18</sup> In Fontanals (1999), *R* “can be considered to be a source relation in the sense that its complement can come into existence by virtue of being immediately related with the superior *R*, whose specifier can be interpreted as the ‘originator’.”

(11)



It may be expected that *sɔ* is used to satisfy that verbal function in a manipulative serial verb construction; on the one hand, the causer is an animate entity and the ground a location. The figure always needs to be affected or manipulated, so it must be located by the causer in order to be affected. On the other hand, ‘take’ is a goal-based causative of ‘have’, and ‘have’ is the result state of ‘take’ (Viberg 2010). A construction like the one in (11), where the T structure and the external argument are related by *sɔ*, a predicate otherwise capable of expressing existential-locative, possessive, and motion meanings, is a reasonable assumption.

Denotations of arguments and relational semantic structures together cannot distinguish all possible usage values. Apart from the *sɔ* in  $v_1$  position of a serial verb construction and the transitive *sɔ*, linear order and functional elements alone do not offer cues for disambiguation. For instance, in the fabricated sentences (12a) and (12c), an ambiguity cannot be avoided: in these two sentences there is no cue that can help in distinguishing whether there is transition or not. Also, a *sɔ*-relation between a +HUMAN entity and a thing which can also function as location can be interpreted with an existential-locative, possessive, or motion meaning, i.e. *John sɔ<sub>be.at</sub> a house* vs. *John sɔ<sub>have</sub> a house* vs. *John sɔ<sub>go</sub> a house*.

- (12) a. John *sɔ* road.  
‘J. is at the road’
- b. John *sɔ* money.  
‘J. has money’
- c. John *sɔ* road.  
‘J. goes to the road’

- d. John sɔ money sɔ road.  
 ‘J. puts money on the road’

To summarise, relational semantic structures like those offered in (10a) and (11) can narrow down the lexical-conceptual representation of sɔ in (7) by specifying a situation type and structuring the arguments. Encyclopedic knowledge affects the likelihood of certain construals, which could be read from relational semantic structures. For instance, to account for (12 a-b) when the complement of the basic spatial relation AT is construed as a part-of, possession-of, telic role, included-in, or kin-of in relationship with the element of the specifier, a possessive sentence would be interpreted, otherwise an existential-locative reading is activated. Despite that, sɔ can remain ambiguous and activation of specific meaning is influenced by non-sentential linguistic or non-linguistic context. In the next section we will look closely at how discourse structure and context inference are involved in concept narrowing.

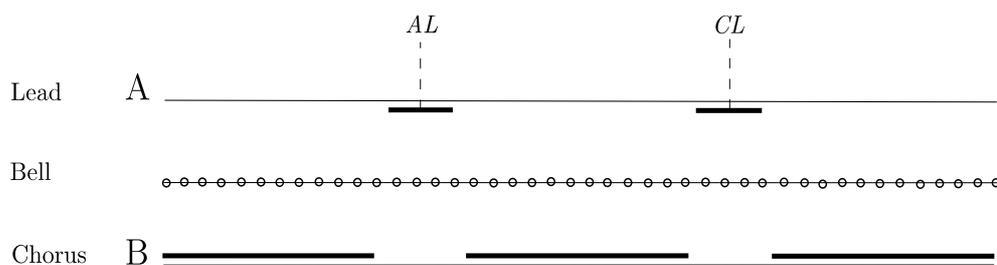
### 3.2 Discourse Structure and Context Inference

The primary modality of Sigu is song. To my knowledge, the nature of Sigu discourse structure – its mode and organisation – has a partial parallel in the Novus Ordo, where the priest provides explanation in the language of the congregation after having first used Latin. “If lay people are attending, the priest may go to the pulpit and read the Epistle and the Gospel aloud in the vernacular language” (Trigilio et al. 2011: 92). Figure 1 illustrates the binary form of an idealised lead-and-chorus type of song.<sup>19</sup> The first and last columns in the top box represent the order of the lead (A) and chorus (B). The middle column, showing the vertical sequence of numbers 4 (1) and 12 (3), presents a mapping between the ‘measure’ and the verse and chorus, i.e. 4 bell strikes or 1 group for a lead sequence, and 12 bell strikes or 3 group for a chorus.

**Figure 1:** Binary-strophic form: verse alternation contrasted with a recurring chorus and idealized verse-chorus-verse structure

<b>A</b> verse <sub>AL</sub>	4 (1)	Lead
<b>B</b>	12 (3)	Chorus
<b>A</b> verse <sub>CL</sub>	4 (1)	Lead
<b>B</b>	12 (3)	Chorus

<sup>19</sup> ‘Idealised’ because the length of the lead time can vary, with under-lap and over-lap between lead and chorus.



In Figure 1, *AL* stands for alternate language and *CL* for common language. It illustrates that while singing the lead can pass from one language to another. An observation gathered when attending and transcribing the verbal performances is that each language has a function. On the one hand, the alternate language is sacred; it is the language of the shrine, it has power, it is protected by protocols, it is not understood by everyone, it is an art form, etc. On the other hand, the common language is the everyday language, the language of the people. Choice of language is up to the singer himself, but it is usually the language with which he feels the audience will be more comfortable. It is Chakali if the performance is on Chakali land among Chakali, but as soon as various ethnicities are present, Waali is used.

In §3.1 it was argued that prior context is necessary in order to infer a motion sense. The same sort of inference was said to be involved in the transfer interpretation when *sɔ* appears as the main predicate, because no cues can favour a transfer or a possessive interpretation. Disambiguation is highly dependent on prior context and decision hypotheses, which are based on information coded in at least two languages. This is what I call real-time translation (or consecutive interpretation), as opposed to the translations offered by the consultants after the performance.

The common language clarifies the message encoded in the alternate language. Since Sigu has a small lexicon and a near absence of functional elements, it is fair to say that any common language of the area is more expressive than Sigu, so that bringing some precision to the message may require a common language. A second reason can be that while the members of the audience may all be initiated into the spiritual group, they are not all equally familiar or acquainted with Sigu. The singer may therefore wish to clarify details of his narration for those who do not fully understand. Therefore the common language, consciously or unconsciously chosen, is the most appropriate language in their repertoire to express certain things given the linguistic background and proficiency of the audience. Consequently, in a Sigu performance, the non-immediate linguistic context is supplied by at least two different languages. But significantly, in the case of interpretation and ambiguity resolution the

common language helps contextualize meaning. The short excerpts in (13) provide concrete examples.

- (13) a. Sunguruma: 00:02:52.60 - 00:03:04.18  
*A<sub>AL</sub>*: *kùnú gbàmpálèrìm sò n dānī*  
 lit. father war-garment *sò* me  
*A<sub>CL</sub>*: ‘dí ò jéná lááltāyātā tìn né *dúó* ò hàbòò ní kẹ̀j’  
 ‘That his father war garment is on his back’
- b. Tanihige: 00:06:15.15-00:06:20.85  
*A<sub>AL</sub>*: *náátárá ní sò wògówògú*  
 lit.(if) person *sò* money  
*A<sub>CL</sub>*: ‘háálì dī nár *kpágá* mólébié’  
 ‘Even if someone has money’

The lyrics in (13a) are from a song about a tortoise boasting about his shell and trying to challenge everyone, especially a bird. The shell is referred to here as ‘father’s war garment’. In (13a) the singer chose to change his narrative point of view: the line in Sigu (*A<sub>AL</sub>*) is revealed through the first-person (i.e. the narrator is also a character) but the line in Chakali (*A<sub>CL</sub>*) is revealed through the third-person. The singer uses the common language and picks up the proposition of the preceding verse, expands upon and clarifies it. Based on what has been proposed in §3.1, if the first person pronoun is treated as a location, *sò* could be interpreted with an existential-locative or a motion sense. Using the common language in the performance itself, the singer narrows down the meaning of *sò* by translating it with the Chakali existential-locative copula *dúó*. Similarly, (13b) illustrates a case where *sò* could receive a possessive or transfer reading in the Sigu verse, but the singer expresses the proposition intended with the possessive verb *kpaga* in the common language.

Hence the use of the common language may be thought of as a strategy to make explicit in order to reproduce what is obvious using a common language, but less straightforward using the alternate language. However, it would be wrong to think of this transition from one language to the other as being constant. Therefore the audience cannot rely on a systematic and continuous translation of Sigu into a common language.

The physical context must be considered as a potential constraint on the interpretation of *sò*. One aspect of physical context is gesture: the singer is also a narrator who expresses information in gestures, either supported or not by words. So arm and hand gestures can narrow down interpretations as well. For instance, iconic gestures representing a transition (i.e. manner of motion, upward or downward path, etc.) will look different compared to those representing stative eventualities. Gestures

must have limited impact, however, since songs are performed in partial darkness, under the rays of the moon. More importantly, for this paper, the translators had no access to visual data. Another aspect of physical context is the one established in a narrative. It is only when a hearer shares the world of the singer that he or she is able to assign the meaning(s) intended efficiently. For instance, because *sɔ* can predicate over many types of individuals (i.e. as shown in §2.2.1 to §2.2.3), a set of assumptions about the narrated world is needed to resolve deictic expressions, and this is often cued by the imagined physical context described in a narrative. Thus, a narrative description builds up in the discourse; the hearer draws physical context data from the narrative description, and is able to assign status to deictic expressions which in turn may allow certain *sɔ* interpretations while excluding others.

A speaker-singer and hearer-audience must draw from the discourse structure and content and narrated settings. A language learned with little exposure and practice and with fewer lexical and grammatical coding strategies in comparison with the languages of the area is likely to rely more extensively on pragmatic enrichment and non-conventional means of communication. A similar argument is made for pidgins in Mühlhäusler (1986: 137-138). Real-time translation in songs, domain specific knowledge of details of particular Sigu events (e.g. whose death, location, cause and manner of death; who sacrifices; what has he or she brought to the shrine; etc.), and the narrated universe can all be involved in establishing the specific *sɔ*-meaning. Obviously more work is needed on the role of pragmatic enrichment and non-conventional means of communication in Sigu performance.

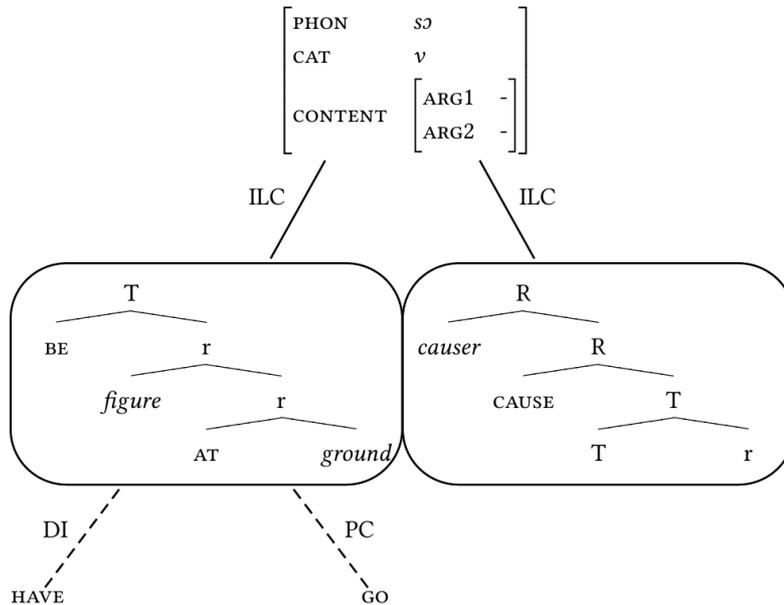
#### **4 Conclusion**

The main methodological obstacle lies in the nature of Sigu. Its investigative potential does not really allow the use of elicitation and other field linguistic methods. Yet, even if Sigu could be accessed and studied like a ‘natural’ language, it is important to remember that the production and interpretation of *sɔ* by the singers and audience respectively are settled simultaneously or consecutively in singing performances, not in conversation. Thus a first analysis based on the texts of songs and their translation is deemed appropriate and representative. Another potential methodological drawback is the fact that the bulk of the translations are the product of two individuals, so that the choice of Chakali words in the exercise and their representativeness may not be optimal. Nevertheless, whatever selection a translator makes, it always seems to appear within the proposed sense groups. This is borne out in the performance itself, and was brought up in §3.2 under the notion of real-time translation.

To recapitulate, the analysis in §3 assumes an underspecified lexical-conceptual representation as a generic level accessible to a variety of meaning

intentions. Its combinability potential is always two, i.e. ARG1 and ARG2. The labels on the branches in (14) stand for the interpretation strategies which were described as responsible for narrowing down the underspecified lexical concept.

(14)



The BE-transitional relational semantic structure hierarchizes the individuals filling the place holders ARG1 and ARG2, and establishes a basic spatial relation between a *figure* and a *ground*. One of the cues exploited is found in the immediate linguistic context (ILC): the object of the verb *sɔ* must be a potential location to locate the participant interpreted as the *figure*. The hypothesis is that the default interpretation of transitive *sɔ* is a existential-locative meaning. A denotative inclusion (DI) is actualised when the denotation of the object noun can be conceived as being included in the denotation of the subject noun. Triggering a denotative inclusion requires encyclopedic knowledge, which is normally argued to be fixed by experience (see also *Idealized Cultural Models* in Lakoff 1987). The possessive meaning was said to be accessible only if a denotative inclusion could be established. The underspecified lexical concept has no inherent transitional component but acquires one from context. For a sentence to be interpreted as a motion event rather than a non-motion one, it was suggested that aspects of previous context (PC) are needed to allow for the enrichment of the transitional component. None of the information available in the immediate linguistic context can act as clue in interpreting a motion or

non-motion event. If the phases of a transfer schema are viewed as being initiated with a HAVE perspective (Wildgen 2005: 416), then one may question the interest of having the CAUSE component directly linked to the underspecified lexical concept instead of having it derived from the HAVE component. First, as I argued in this article, the manipulative serial verb construction in Chakali (i.e. *x CAUSE y verb z*) is a pervasive and omnipresent linguistic construction which must be used by the speakers of the alternate language. Secondly, the construction is unique because it is the only [NP *v*<sub>1</sub> NP *v*<sub>2</sub> NP]-construction found in the Sigu corpus, and its first verb is exclusively *sɔ*. These are the motives for my proposal to classify the relational semantic structure of manipulative serial verb construction as a meaning representation accessible, and not derived from HAVE. Notice that the place holders for ARG1 and ARG2 are satisfied by a causer and a transitional relation, the former being an entity and the latter a relational event. That is not claiming that the meaning of the first verb of a manipulative serial verb construction and a possessive meaning are not related conceptually (even perhaps diachronically in Chakali).

The subjective and pre-theoretical eventuality group *existential*, *possessive*, *motion* and *transfer* are analysed as two frame senses, a transitive BE-transitional and a manipulative serial verb construction, the former being further narrowed down by denotative inclusion and previous context. The use of prior and physical contexts was argued to be sometimes unavoidable and sometimes helpful for interpreting expressions and relations. A singer can clarify his story using a common language, therefore translates the predications of the Sigu sentences with no other alternative than more precise predicates available in the common language. In general, the proposed approach is very flexible as it can, in principle, make use of many levels of linguistic and non-linguistic processes, thus relying less on a list of memorised senses for a single form.

Finally, in considering the validity of theories such as relexification/relabeling (Muysken 1981; Lefebvre 1988; Wittman & Fournier 1996; Lefebvre 2014), paralexification (Mous 2001) and Full Transfer/Full Access (Schwartz & Sprouse 1996) to interpret lexically-manipulated language data, I asked how lexical features of the L1's verbal lexemes are copied into the lexically-manipulated language. Although the question of mapping is not addressed specifically in this article, there is a general tendency to assume that vocabulary replacement is equivalent to a one-to-one mapping of syntactic and semantic features plus relabeling (Lefebvre 2014: 10, but see Dixon 1971). The article suggests the idea that a lexically-manipulated language may not necessarily map one-to-one to their L1 in vocabulary replacement. Instead the various usage values of *sɔ* either suggest a many-to-one mapping between Chakali and Sigu, or a different view on the lexical semantics of verbs altogether. In particular, it exposes a deficiency of vocabulary replacement theories as models for

linguistic manipulation design and genesis by showing that the lexical organisation of a lexically-manipulated language may not necessarily be found in the speakers' L1. If several verbal lexical items are copied onto a single one in the alternate language and then relabeled, the details of the operation which modulates meanings in a many-to-one fashion are not made explicit in any of the theories mentioned. Although I have proposed an analysis where *so* can accommodate meanings which initially seemed hard to unify, to my knowledge no other languages of the area possesses a form capable of expressing existential-locative, possessive, motion, and transfer meanings in one and the same word. Therefore, the lexical concept *so* and the usage values it is capable of expressing challenge a relexified/re-labeled analysis of lexically-manipulated languages. It would be interesting to find a language that encodes and processes linguistic knowledge similarly in order to better understand *so* in Sigu and to shed light on lexical manipulation.

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## **CONJOINT AND DISJOINT VERB ALTERNATIONS IN DAGBANI**

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### **Abstract**

The goal of this paper is to understand the nature and functions of aspectual suffixes of Dagbani, a language belonging to the South-Western languages of the Western Oti-Volta subgroup of the Gur group of languages. The paper considers the morphology of the verb and how it may be correlated with readily observable syntactic features of the language such as the presence or absence of certain arguments. The aspectual suffixes have different realisations which call for the presence or absence of certain structural arguments such as NP complements and adjuncts referred to as conjoint (CJ) and disjoint (DJ) verb forms respectively. I also propose three accounts in an attempt to account for the function(s) of the conjoint and disjoint alternations: the incorporated pronoun hypothesis, the medio-passive hypothesis, and the focus hypothesis, and conclude that the CJ/DJ forms are directly correlated with focus. It is concluded then that the CJ form correlates with focus on post-verbal materials, while the DJ focuses on the verb. The paper also discusses certain post-verbal particles whose distribution is affected by the aspectual markers. I give the paper a comparative flavour by drawing data from other languages of the Oti-Volta subgroup (excluding the Eastern languages) to buttress my claim based on empirical evidence that the phenomenon discussed is quite pervasive in this subgroup of Gur languages. The analysis is basically from a theory-neutral perspective. I conclude that the interaction between the aspectual suffixes and the sentence structure of Dagbani is (at least superficially) very similar to the so-called 'short/long' or 'conjunctive/disjunctive' verb which has been argued to be phenomenal in a number of Bantu languages.

**Key Words:** Dagbani, aspect, sentence structure, conjoint, disjoint, focus hypothesis, Gur.

## 1. Introduction

This paper seeks to analyse and understand the nature and functions of suffixes and sentence structure in Dagbani (South Western Oti-Volta), a central Gur language spoken by the Dagbamba in Northern Ghana. The canonical word order of Dagbani is basically Subject, Verb, Object (SVO), also called Agent Verb Object. Dagbani has three major dialects which include: **Tomosili**, (the Western dialect) spoken in Tamale and its surroundings, **Nayahali** (the Eastern dialect), spoken in and around Yendi, and **Nanuni**, which is also spoken around Bimbilla and its surroundings. Noticeable dialectal differences are basically phonological and lexical without any known syntactic/structural differences. The data for the study is drawn from two different sources: data taken from students' written works, and examples generated by the author using native speaker intuitions. The use of data from written texts has been motivated by the fact that in general, it is better to get someone else's speech in linguistic analysis, since it is not influenced by the particular research agenda. Though a native speaker of the **Tomosili** dialect myself, the generalizations concerning the verb morphology and its interaction with the sentence structure could not be limited to a particular dialect of Dagbani, since interactions with speakers of the other two dialects show that similar patterns exist in **Nayahali** and **Nanuni** as well.<sup>1</sup>

Though there is a terminological split amongst linguists regarding the concept "aspect", in this paper it is used to refer to the 'view-point aspect'. This is because when 'aspect' is used as a cover term in Gur languages, it always concerns the 'narrow' form. Adger (2004: 50) argues that the "semantic difference between ongoing and completed action is one of aspect". Natural languages basically distinguish between 'ongoing' and 'completed' actions denoted by the verb via the concept of aspect. Typologically, in most natural languages a two-way aspectual distinction is made,

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The Kusaal data was collected while I was in Bawku for fieldwork with support from the Ghana Institute of Linguistics, Literacy and Bible Translation in March and June 2006. I am grateful to my consultants: Moses Atiigah, Rev Joshua Sofo, Rev. James Abariga, Alice Abanga, Aaron Abuosi and George A. Alalbila of the Kusaal Language and Development Project for their patience in assisting me with the data collection. I also express my profound gratitude to Dr. Paul Schaefer of the Ghana Institute of Linguistics, Literacy and Bible Translation, Safaliba Project, for checking this paper for language.

between perfective and imperfective aspects. Traditionally, the imperfective aspect includes the habitual and progressive forms of the verb. The distinction between the perfective and imperfective forms of the verb is very important as they help users of a particular language to codify different situations associated with the action of the verb. I therefore define aspect as that grammatical property of verbs which indicates whether the action denoted by the verb is viewed as perfected or ongoing.

The correlation between verbal forms (morphology) and presence or absence of complements and adjuncts within the sentence structure has been noted to be a phenomenal property of Bantu languages: by Buell (2005, 2006), Nurse (2006), Creissels (1996), Givon (1975), van der Wal (2013), Sharman (1956), Voeltz (2004) among others. Different Bantu scholars have used different terminologies to refer to this verbal paradigm. For instance Buell and Riedel (2008) use *conjoint* and *disjoint*, Creissels (1996) uses the terms *conjunctive* and *disjunctive*, while in the Nguni languages, the terms *long* and *short* are pervasive. The conjoint form cannot appear clause-finally, while the disjoint form canonically does appear in clause-final position. For instance a Bantu syntactician, Van der Wal (2009: 217) submits that:

a very salient and easily detectable difference between the verb forms is their sentence-final distribution: the CJ forms need to be followed by some other element, while the DJ form can occur sentence finally, although it does not need to.

While research into Dagbani continues to attract attention in recent times, there are some areas that remain largely understudied. For instance, there is an interesting morphological feature of the verb that could broaden our understanding about Gur languages and natural languages in general. Specifically interesting about the morphology of the verb is the interaction between the verb morphology and sentence structure. A look at recent publications reveals that the ‘disjoint/conjoint’ theme is currently a much debated issue, also for non-Bantu languages. I will establish that the verb morphological feature of aspectual suffixation has some correlation with the syntactic consideration as to whether the verb occurs clause-finally or clause-medially, indicating that there is an interaction between verbal morphology and sentence form.<sup>2</sup>

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<sup>2</sup>Abbreviations used in this paper are: 1st, 2nd, 3rd for first, second, and third person respectively, ADJUN=adjunct, AFF=affirmative, ATR=advanced tongue root, CJ=conjunction, COMPL=completive aspect, DEF=definite, DJ= disjoint, FOC=focus, IMPERF= imperfective, NEG=negative, NP=noun phrase, PERF=perfective, PL=plural, PROG=progressive, POSS=Possessive, PST=past, PVP=post verb particle, QUAN=Quantifier, TRM= time reference marker, SG=singular.

Specifically, this work demonstrates that: (i) the marking of aspect is a morphological phenomenon in Dagbani, (ii) the perfective and imperfective aspect come in different morphological forms, (iii) there is a close relationship between aspectual suffixes and the presence or absence of certain arguments such as NP objects and adjuncts within the sentence structure, (iv) the distribution of the post-verb particles is affected by the purely surface consideration of whether the verb is final in the clause or not, (v) the conjoint/disjoint verb alternation can be accounted for using the focus hypothesis, and (vi) the interaction seen between the post-verb particles and the aspect system of Dagbani appears to be a typological phenomenon which can be observed in several other Gur languages in the Oti-Volta subfamily. Dakubu (1989) and Saanchi (2003) identify a similar verbal paradigm in Dagaare, a genetically related language, and use the terminologies ‘perfective A’, ‘perfective B’ and ‘imperfective A’ and ‘imperfective B’ to describe the phenomenon.

The discussion in this paper is structured as follows: section 2 discusses the verb morphology of Dagbani, highlighting the syntactic requirements of the conjoint/disjoint alternations, while section 3 discusses negation and the verbal paradigm. Section 4 investigates the correlation between ex-situ focus and the conjoint/disjoint forms; section 5 considers relativisation and the morphology of the verb form, while section 6 discusses possible accounts/uses of the CJ/DJ verb forms with a discussion on the interaction between the verbal paradigm and post-verb particles, drawing data from genetically closer languages and aimed at making some generalizations with regard to Oti-Volta typology. Section 7 concludes the paper with a summary of findings.

## 2. The Morphology of the Dagbani Verb

In Dagbani, there is no known work that discusses the aspectual suffixes of Dagbani and their interaction with the sentence structure. Though Olawsky (1999) rightly identifies the perfective and imperfective forms of the verb, he does not go into details such as the different morphological shapes and different syntactic requirements of the two forms. A brief overview of the morphology of the verb is crucial in understanding the phenomenon that is discussed in this paper. Morphologically, the Dagbani main verb may be identified by the forms shown in Table 1.

In Table 1, the forms in column E are verbal nouns derived via the use of the derivational suffix identified as **-bú**. This morpheme can be identified as the class marker **-bú**. Almost all Gur languages use class suffixes for marking verbal nouns (since the noun class suffixes very often display additional derivative functions); in O-V languages verbal nouns are derived preferably by means of **-bú**.

**Table 1: The forms of the Dagbani verb**

A CJ PERF	B DJ PERF	C CJ IMPERF	D DJ IMPERF	E Nominal	Gloss
kú	kú-yà	kú-rì	kú-rá	kú-bù	kill
dàm	dàm-yà	dàm-dí	dàm-dá	dàm-bú	shake
nyú	nyú-yà	nyú-rì	nyú-rá	nyú-bú	drink
pán	pán-yà	pán-dí	pán-dá	pán-bú	borrow
wɔrí	wɔrí -yà	wɔrí-tì	wɔrí-tá	wɔrí-bú	split
kɔhí	kɔhí -yà	kɔhí-rì	kɔhí-rá	kɔhí-bú	sell
dì	dì-yà	dì-rì	dì-rá	dì-bú	eat
tú	tú-yà	tú-rì	tú-rá	tú-bú	insult

Nicole (1999:4-5) makes a typological remark on the verb morphology of Gur languages and asserts that:

...the basic distinction is between an incomplete and a complete (or some cases neutral) forms, these forms often being distinguished by different suffixes, but also notably by tonal differences or vowel alternations...[v]erbs are generally verbo-nominal, that is they can be used both as verbs (on the addition of the appropriate aspect suffixes) and as nouns (on the addition of a class suffix)...very often, the form that is given as the 'infinitive' is really a nominal form, that is, a verb form, followed by noun class marker.

Nicole's arguments above on the verb morphology of Gur languages propose a two-way division, where the division may be indicated either by a suffix, and/or by tone. Accordingly, Nicole's description matches Dagbani very well since Dagbani marks the two-way distinction for the perfective and imperfective verb form by suffixes, as illustrated in Table 1. The proposal of a two-way contrast in the verb morphology is based on the observation that what other scholars have called the 'neutral' stem is identical to the conjoint perfective, both segmentally and supra-segmentally.

Naden (1988) gives a brief overview of the genetic classification of the Gur languages spoken in Ghana. His discussion does not exclude discussion on the verb. Naden (1988: 37) asserts that verbs in most Gur languages have 'two basic forms, perfective or neutral and imperfective'. He contends that in terms of morphology, there is basically a suffix that is attached to the neutral form of the verb to derive the

imperfective. I use the terminologies ‘imperfective’ and ‘perfective’ to refer to what has been termed as ‘incompletive’ and ‘completive’ respectively by some other scholars (cf. Osam 2003).

### 2.1. Illustrating the Conjoint/Disjoint Phenomenon in Dagbani.

This section illustrates the phenomenon of conjoint and disjoint verb forms using empirical evidence. Table 2 shows sentential illustrations of verbal alternations.

**Table 2: Sentential illustrations of Dagbani verbal alternations**

	CJ	DJ
IMPERF	<b>Bε kú-rì X</b> 3PL kill.IMPERF X ‘They kill, they are killing X.’	<b>Bε kú-rá</b> 3PL kill.IMPERF ‘They kill/are killing.’
PERF	<b>Chentiwuni chìm-Ø X</b> NAME fry.PERF X ‘Chentiwuni has fried X.’	<b>Chentiwuni chìm-yá</b> NAME chim.PERF ‘Chentiwuni has fried.’

The morphological alternation of the imperfective aspect is further illustrated in the sentences in (4) and (5).

4. a. **Bì-hí máá ò-rá** DJ  
child-PL DEF eat.IMPERF  
‘The children eat/are eating’.
- b. **\*Bì-hí máá ò-rá shìnkááfà** DJ  
child.PL DEF eat.IMPERF rice  
‘The children eat/are eating rice.’
- c. **Bì-hí gbí-rì vó-yà** CJ  
child.PL dig.IMPERF hole.PL  
‘Children dig/are digging holes’. (Salifu 2012: 7)
- d. **\*Bì-hí gbí-rì.** CJ  
child.PL dig.IMPERF  
‘Children dig/are digging.’
5. a. **Bε òàm-dí tì-hí gbá** CJ  
3PL shake.IMPERF tree.PL too  
‘They shake/are shaking trees too.’

- b. \***Bɛ** **dàm-dá** **tì-hí** **gbá** DJ  
 3PL shake.IMPERF tree.PL too  
 ‘They shake/are shaking trees too.’
- c. **Bɛ** **dàm-dá.** DJ  
 3PL shake.IMPERF  
 ‘They shake/are shaking.’
- d. \***Bɛ** **dàm-dí.** CJ  
 3PL shake.IMPERF  
 ‘They shake/are shaking.’ (Yakubu 2012: 18)

The evaluation of incompleteness or ungrammaticality of sentences (4d) and (5d) is because the aspectual suffix **-ri** is used and no linguistic material follows the verb. This suffix never occurs clause-finally, thus (4d) and (5d) appear to be incomplete and are ungrammatical. In contrast, the ungrammaticality of sentence (4b) and (5b) is because **-ra** is assigned a NP complement, **shinkaafa** ‘rice’ and **tìhi gba** ‘trees too’. The CJ/DJ verbal alternation in the imperfective aspect does not only affect the distribution of NP objects, but also adjunct phrases, such as adverbials (of manner, time and place etc) as illustrated in (6).

6. a. \***Chentiwuni** **dì-rá** **yìrìṅ** DJ  
 NAME eat.IMPERF carelessly  
 Chentiwuni eats/is eating carelessly.’
- b. **Chentiwuni** **dì-rì** **yìrìṅ** CJ  
 NAME eat.IMPERF carelessly  
 ‘Chentiwuni eats carelessly.’
- c. **Pàyi- bá** **dèm-dí** **kpè** CJ  
 woman.PL play.IMPERF here  
 ‘Women play here.’
- d. \***Pàyi- bá** **dèm-dà** **kpè** DJ  
 Woman.PL play.IMPERF here  
 ‘Women play here.’

The ungrammaticality of (6a) arises from the fact that the ‘disjoint’ form of the imperfective aspect occurs with an adjunct phrase, in this case the adverb of manner **yìrìṅ** ‘carelessly’. In sentence (6d) too, the ungrammaticality arises from the fact that the ‘disjoint’ form of the verb co-occurs with an adjunct of place **kpè** ‘here’. I earlier

argued based on empirical evidence that the ‘disjoint’ form canonically occurs in sentence final position, indicating that, syntactically, the disjoint aspectual suffix neither takes an NP object nor an adjunct.

The verbal alternation between the DJ and CJ forms is not only realizable in the imperfective aspect, but also in the perfective form of the verb. There are two different morphological forms of the perfective aspect, each of which comes with different syntactic requirements. The CJ perfective obligatorily requires an NP object or adjunct in its syntactic configuration; while the DJ perfective invariably marked with **-ya** does not occur with NP objects (whether full NP objects or pronoun objects). It can however, occur with adjuncts. This paradigm is shown in (7) and (8).

- |    |    |  |                              |                              |                           |                     |    |
|----|----|--|------------------------------|------------------------------|---------------------------|---------------------|----|
| 7. | a. | <b>Gòlí</b><br>moon                    | <b>máá</b><br>DEF            | <b>kpí-yà</b><br>die.PERF    |                           | DJ                  |    |
|    |    | ‘The month has ended.’                 |                              |                              |                           | (Salifu 2012:7)     |    |
|    | b. | <b>*Mandeeya</b><br>NAME               | <b>dá-yà</b><br>buy.PERF     | <b>búkù</b><br>book          |                           | CJ                  |    |
|    |    | ‘Mandeeya has bought a book.’          |                              |                              |                           |                     |    |
|    | c. | <b>Bì-hí</b><br>child.PL               | <b>máá</b><br>DEF            | <b>sà<sup>3</sup></b><br>TRM | <b>kú-yà</b><br>kill.PERF | <b>pàm</b><br>a lot | DJ |
|    |    | ‘The children killed a lot yesterday.’ |                              |                              |                           |                     |    |
|    | d. | <b>*Mandeeya</b><br>NAME               | <b>bú-yà</b><br>beat.PERF    | <b>ò</b><br>3SG.             |                           | DJ                  |    |
|    |    | ‘Mandeeya beat him/her.’               |                              |                              |                           |                     |    |
|    | e. | <b>*Mandeeya</b><br>NAME               | <b>duhí-yà</b><br>drive.PERF | <b>loori</b><br>lorry        |                           | DJ                  |    |
|    |    | ‘Mandeeya has driven a lorry.’         |                              |                              |                           |                     |    |
| 8. | a. | <b>Abu</b><br>NAME                     | <b>dá-Ø</b><br>buy.PERF      | <b>yìlí</b><br>house         |                           | CJ                  |    |
|    |    | ‘Abu has bought a house.’              |                              |                              |                           | Salifu (2012:8)     |    |

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<sup>3</sup>There are preverbal particles in Dagbani that mark the time reference of events: **sa** is one such particle which indicates that the action denoted by the verb is either a day away in the past or in the future. When it is to indicate that an action is a day away (in the future) it must occur obligatorily with the future particle **ni**.

- b. **Mikashini** **cháj- Ø** **vìenyelà** CJ  
 NAME go.PERF well  
 ‘Mikashini has gone well.’
- c. **Fati** **dugì- Ø** **kpè** CJ  
 NAME cook.PERF here  
 ‘Fati has cooked here.’
- d. \***Mikashini** **dì-Ø.** CJ  
 NAME eat.PERF  
 ‘Mikashini has eaten.’
- e. **Bì-hí** **máá** **dáá** **tú-Ø** **ò** CJ  
 child.PL DEF TRM insult.PERF 3SG  
 ‘The children insulted him/her (some time ago).’ Yakubu (2012: 6)
- f. \***Mikashini** **cháj- Ø** **púmpɔŋɔ**  
 NAME go.PERF now  
 ‘Mikashini went now.’

We observe in (7b) and (7d) that the DJ perfective cannot occur with NP objects (whether full NPs or pronominal NPs). The DJ perfective form is, however, compatible with adjuncts as in (7c). We also notice that the conjoint perfective form of the verb occurs with NP complements (8a). It does not only occur with full NPs as in (8a) but also pronominal objects as in (8e). It can also occur with manner adverbs as in (8b). Though the manner adverbial **vìenyelà** ‘well’ does not affect the grammaticality of the sentence in (8b), the grammaticality of sentence (8f) is affected by the time adverbial **púmpɔŋɔ** meaning ‘now’. My conclusion is that the DJ perfective form does not occur with all kinds of adjuncts.

With a critical look at the verbal paradigm so far discussed, a reader immediately notes that there seems to be something striking about these aspect markers. We notice for instance that the imperfective disjoint has the morphemes **-r-a/d-a/t-a** whilst the imperfective conjoint has the morphemes **-r-i/d-i/t-i**. With the perfective disjoint too, we could have **-y-a**. Comparing across forms, it seems reasonable for one to hypothesize that the **-r/d** is probably the imperfective marker whilst the **-a** is the marker of disjoint form and the **-i** could be analyzed as a marker of conjoint property. This claim of possible separate morpheme segmentation is shown in a more picturesque manner in (9) and (10).



- b.     **a**     **bie**     **di-re**           **la**     **a**     **sɪma**  
 DEF child eat-IMPERF AFF DEF meal  
 ‘The child is eating the meal.’
- c.     **a**     **bie**     **di-re-ŋ**  
 DEF child eat-IMPERF-AFF  
 ‘The child is eating.’
- d.     \***a**     **bie**     **di-re-ŋ**           **a**     **sɪma**  
 DEF child eat-IMPERF-AFF DEF meal

The ‘imperfective B’ according to Saanchi (2003:105) requires an obligatory object (3a) or adjunct (3b). It however, does not occur with pronouns object (9c). The ‘imperfective B’ does not also occur with post verb **la** or the clitic **-ŋ** as shown in the ungrammaticality of (9d).

10. a.     **a**     **bie**     **kuɔ-rɛɛ**                   **a**     **zie**  
 DEF child weed-IMPERF DEF place  
 ‘The child is weeding the place’.
- b.     **a**     **bie**     **di-ree**           **suŋ**  
 DEF child eat.IMPERF well  
 ‘The child is eating well’
- c.     \***a**     **bie**     **ŋmɪɛ-rɛɛ**     **ma**     **la**  
 DEF child beat.IMPERF 1SG AFF.  
 ‘The child is beating me.’
- d.     \***a**     **bie**     **kuɔ-rɛɛ-ŋ**  
 DEF child weed-IMPERF-AFF  
 ‘The child is weeding.’

These morphological alternations for the different aspect forms and their correlation with the sentence pattern of Dagbani shall be the focus of this paper.

### 3. Negation and the Verbal Paradigm

Negation in simple propositional logic is an operator that reverses the truth value of a proposition. Since negation is a fundamental grammatical feature of verb category, it is important to investigate the correlation between this verbal paradigm and negation. This is to establish how this verbal alternation manifests itself in

negative polarity sentences. Dagbani marks negation using preverbal particles **ku** and **bi** for future and non-future negation respectively. The interaction between negation and the verbal alternation is exemplified in the sentences in (11) through (14).

The ungrammaticality of sentences (14a) and (14c) indicates that the disjoint perfective form of the verb does not occur in negative sentences, leading to the conclusion that the negation morpheme **bi** is not compatible with **-ya**. Possibly, Manessy (1963) is right in assuming that **-ya** has a strong perfective connotation. This assumption is in accordance with observations from other languages, where a perfective notion is not compatible with negation. It has been argued that something which is negated is to be seen as neutral with regard to the aspectual perspective. However, this morpheme (which seems to be an old Gur inheritance according to Manessy) has undergone different developments in the languages in question and where it has developed into a focus marker; the notion of perfectivity has been weakened.

- |     |    |   |                   |                             |                                |                          |    |
|-----|----|---|-------------------|-----------------------------|--------------------------------|--------------------------|----|
| 11. | a. | <b>Bì-hí</b><br>child.PL                    | <b>máá</b><br>DEF | <b>kù</b><br>NEG            | <b>duhi-rí</b><br>drive.IMPERF | <b>loori</b><br>lorry    | CJ |
|     |    | ‘The children will not be driving a lorry.’ |                   |                             |                                |                          |    |
|     | b. | <b>Bì-hí</b><br>child.PL                    | <b>máá</b><br>DEF | <b>kù</b><br>NEG            | <b>duhi-rá</b><br>drive.IMPERF |                          | DJ |
|     |    | ‘The children will not be driving.’         |                   |                             |                                |                          |    |
|     | c. | <b>*Bì-hí</b><br>child.PL                   | <b>máá</b><br>DEF | <b>kù</b><br>NEG            | <b>dì-rá</b><br>eat.IMPERF     | <b>shìnkááfa</b><br>rice | DJ |
|     |    | ‘The children will not be eating rice.’     |                   |                             |                                |                          |    |
|     | d. | <b>*Bì-hí</b><br>child.PL                   | <b>máá</b><br>DEF | <b>kù</b><br>NEG            | <b>dì-rí</b><br>eat.IMPERF     |                          | CJ |
|     |    | ‘The children will not be eating.’          |                   |                             |                                |                          |    |
| 12. | a. | <b>Andani</b><br>NAME                       | <b>bì</b><br>NEG  | <b>ku-rá</b><br>kill.IMPERF |                                |                          | DJ |
|     |    | ‘Andani does not kill.’                     |                   |                             |                                |                          |    |
|     | b. | <b>*Andani</b><br>NAME                      | <b>bì</b><br>NEG  | <b>ku-rá</b><br>kill.IMPERF | <b>bua</b><br>goat             |                          | DJ |
|     |    | ‘Andani does not kill a goat.’              |                   |                             |                                |                          |    |

- c. **A bì v̄hí-rí yel-á** CJ  
 1SG NEG check.IMPERF matter.PL  
 ‘You don’t investigate issues.’ Yakubu (2012:16)
- d. **\*A bì v̄hí-rí.** CJ  
 2SG NEG check.IMPERF  
 ‘You don’t investigate.’
- e. **M bì d̄hí-rì ò.** CJ  
 1SG NEG feed.IMPERF 3SG  
 ‘I do not feed him/her.’ Yakubu (2012:16)
- f. **\*M bì d̄hí-rì.** CJ  
 1SG NEG feed.IMPERF  
 ‘I do not feed.’
13. a. **Abu bì d̄i-Ø shinkááfà** CJ  
 NAME NEG eat.PERF rice  
 ‘Abu has not eaten rice’.
- b. **Abu bì d̄i-Ø.** CJ  
 NAME NEG eat.PERF  
 ‘Abu has not eaten’
- c. **Bì-á bì chàŋ-Ø pùmpɔŋɔ** CJ  
 child.SG NEG go.PERF now  
 ‘A child has not gone now’
- d. **Bì-á bì chàŋ-Ø** CJ  
 child.SG NEG go.PERF  
 ‘A child has not gone’
14. a. **\*Bì-á máá bì chàŋ-yà** DJ  
 child.SG DEF NEG go.PERF  
 ‘The child has not gone.’
- b. **Bì-á máá bì chàŋ-Ø** CJ  
 child.SG DEF NEG go.PERF  
 ‘The child has not gone.’
- c. **\*Bì-á máá bì gbìhí-yà pùmpɔŋɔ** DJ  
 child.SG DEF NEG sleep.PERF now  
 ‘The child has not fallen asleep now.’

There is something worth noting about the manifestation of the conjoint forms in polarity sentences. It was earlier noted that the conjoint form does not appear clause finally, as it obligatorily requires some linguistic material to follow it. The grammaticality of (13b) and (13d) where the conjoint form occurs clause finally, however, indicates that this claim is not valid for negative polarity sentences. This then means that in negative polarity sentences, the conjoint perfective can appear in clause final positions. Detailed research is needed to understand this change of the syntactic requirement of the conjoint perfective form when it occurs with negation. The conclusion however, is that the morphological alternation is neutralized here in the CJ perfective form.

#### 4. Ex-situ Focus Marking and the Verbal Paradigm

This section investigates the correlation between the DJ/CJ verb alternation and ex-situ focusing strategies. Ex-situ focus is marked within the left periphery of the clause using focus markers **ka**, and **n** for non-subject and subject constituents respectively (Hudu 2006, 2012; Issah 2008, 2012; Olawsky 1999). The data in (15) and (16) illustrate how focus marking is coded in the imperfective form of the verb and its correlation with the verbal alternation.

- |     |    |                                       |                               |   |    |
|-----|----|---------------------------------------|-------------------------------|---|----|
| 15. | a. | <b>Bε</b><br>3PL                      | <b>tù-rí</b><br>insult.IMPERF | <b>mà</b><br>me                             | CJ |
|     |    | ‘They are insulting me.’              |                               |   |    |
|     | b. | <b>Màní</b><br>1SG (EMPH)             | <b>ká</b><br>FOC              | <b>bε</b> <b>tù-rá</b><br>3PL insult.IMPERF | DJ |
|     |    | ‘It is me (that) they are insulting.’ |                               |   |    |
|     | c. | <b>*Màní</b><br>1SG (EMPH)            | <b>ká</b><br>FOC              | <b>bε</b> <b>tù-rí</b><br>3PL insult.IMPERF | CJ |
|     |    | ‘It is me (that) they are insulting.’ |                               |   |    |
|     | d. | <b>Báni</b><br>3PL                    | <b>n</b><br>FOC               | <b>tu-ri</b><br>insult.IMPERF               | CJ |
|     |    |                                       |                               | <b>ma</b><br>me                             |    |
|     |    | ‘They are insulting me.’              |                               |   |    |
|     | e. | <b>*Báni</b><br>3PL                   | <b>n</b><br>FOC               | <b>tù-rá</b><br>insult.IMPERF               | DJ |
|     |    |                                       |                               | <b>mà</b><br>me                             |    |
|     |    | ‘It’s they who are insulting me.’     |                               |   |    |

16. a. **Bì-á máá dá-rì bù-hí máá kpè** CJ  
 child.SG DEF buy.IMPERF goat.PL DEF here  
 ‘The child buys/is buying the goats here.’
- b. **Bù-hí máá kà bε dá-rì kpè** CJ  
 goat.PL DEF FOC 3PL buy.IMPERF here  
 ‘It is the goats that they are buying here.’
- c. \***Bù-hí máá kà bε dá-rá kpè** DJ  
 goat.PL DEF FOC 3PL buy.IMPERF here  
 ‘It is the goats that they are buying here.’
- d. **Bì-á máá n dá-rì bù-hí máá kpè** CJ  
 child.SG DEF FOC buy.IMPERF goat.PL DEF here  
 ‘The child buys/is buying the goats here.’
- e. \***Bì-á máá n dá-rá bù-hí máá kpè** DJ  
 child.SG DEF FOC buy.IMPERF goat.PL DEF here  
 ‘The child buys/is buying the goats here.’

In (15b) when the object of the sentence **ma** ‘me’ is moved from the canonical position and brought to clause initial position, the verb form also changes from the ‘conjoint’ form **turi** ‘insulting’ to the ‘disjoint’ form **tura** ‘insulting’. This change in the form of the verb in (15b) is necessitated by the fact that the verb is now in the clause final position after the movement of the object. The ungrammaticality of the sentence in (15c) demonstrates the claim that even in focus constructions, the CJ verb form cannot occur clause finally, at least in the simple sentence. It is therefore seen that in (16b), where **buhí** ‘goats’ is moved to clause initial for purposes of coding focus, it is the CJ aspectual form **dari** ‘buying’ that is used. A descriptive account of this is that the verb still has an element **kpe** ‘here’ after it and so does not appear in the clause final position. In (16c), the sentence is ungrammatical because the DJ form of the imperfective is used when the verb is not in the clause final position. The author therefore contends that in focus constructions, the verbal alternations of disjoint and conjoint forms are active just as in canonical sentences.

Having taken a look at the interaction between the verbal alternation and focus constructions in imperfective aspectual forms, it is necessary to take a look at the nature of focus constructions in the perfective aspectual forms. This, it is hoped, will allow a more acceptable generalization on the manifestation of the discussed verbal alternation. In the data that follow, I discuss focus constructions in the perfective form of the verb. It should be recalled that I have indicated that Dagbani marks the

perfective aspect in two ways: via the use of the aspectual suffix **-ya** and the use of null morpheme **-Ø**. The realization of focus in the perfective aspectual paradigm is illustrated in the sentences under (17) and (18)

17. a. **Kayaba kú-yà** DJ  
 NAME kill.PERF  
 ‘Kayaba has killed.’ Yakubu (2012: 18)
- b. \***Kayaba n kú-yà** DJ  
 NAME FOC kill.PERF  
 ‘It is Kayaba who has killed.’
- c. **Kayaba n kú-Ø** CJ  
 NAME FOC kill.PERF  
 ‘It is Kayaba who has killed.’
- d. **Bì-á máá dá-Ø yílí** CJ  
 child.SG DEF buy.PERF house  
 ‘The child has bought a house.’
- e. **Yílí kà bì-á máá dá-Ø** CJ  
 house FOC child.SG DEF buy.PERF  
 ‘It is a house that the child has bought.’
- f. \***Yílí kà bì-á máá dá-yà** DJ  
 house FOC child.SG DEF buy.PERF  
 ‘It is a house that the child has bought.’
18. a. **Bì-á máá sá chaŋ-yà** DJ  
 child.SG DEF TRM go.PERF  
 ‘The child went yesterday.’ Yakubu (2012:22)
- b. \***Bì-á máá n sá chaŋ-yà** DJ  
 child.SG DEF FOC TRM go.PERF  
 ‘It is the child who went yesterday.’
- c. **Bì-á máá n sá chaŋ-Ø** CJ  
 child.SG DEF FOC TRM go.PERF  
 ‘It is the child who went yesterday.’
- d. **Bì-á máá duhi- rì loori** CJ  
 child.SG DEF drive.IMPERF lorry  
 ‘The child drives/is driving a car’

- e.     \***Loori**        **ka**    **bì-á**        **máá**   **duhi- rì**        CJ  
           lorry            FOC   child.SG        DEF   drive.IMPERF  
           ‘It is a car that the child is driving/drives’
- f.     **Loori**        **ka**    **bì-á**        **máá**   **duhi- rá**        DJ  
           lorry            FOC   child.SG        DEF   drive.IMPERF  
           ‘It is a car that the child drives.’

It is clear from the data in (17) and (18) above that the focus marker **n/ka** and the disjoint aspectual marker **-ya** cannot co-occur. Though the perfective CJ form of the verb does not occur clause-finally in the canonical sentence, in subject focus constructions this requirement is neutralised, and the CJ verb form occurs clause finally. It is striking, however, that the imperfective CJ, even in focus constructions, does not occur clause-finally. Even when it happens that the DJ form of the verb occurs with an adjunct (as discussed earlier), the paradigm described in (17) and (18) does not change. This is illustrated with data in (19).

19.   a.     **Bì-á**        **máá**   **sá**    **lú-yà**        **sòhálá**        DJ  
           child.SG        DEF   TRM   fall.PERF        yesterday  
           ‘The child fell yesterday.’
- b.     \***Bì-á**        **máá**   **n**    **sá**    **lú-yà**        **sòhálá**        DJ  
           child.SG        DEF   FOC   TRM   fall.PERF        yesterday  
           ‘It is the child who fell yesterday.’
- c.     **Bì-á**        **máá**   **n**    **sá**    **lú-Ø**        **sòhálá**        CJ  
           child.SG        DEF   FOC   TRM   fall.PERF        yesterday  
           ‘It is the child who fell yesterday.’
- d.     \***Sòhálá**   **kà**   **bì-á**        **máá**   **sá**    **lú-yà**        DJ  
           yesterday FOC   child.SG        DEF   TRM   fall.PERF  
           ‘It was yesterday that the child fell.’

It is observed from this description that there is a co-occurrence restriction between the focus markers and the suffix **-ya**. This conclusion suggests that the /a/ forms do not convey aspect only, but are aspect forms modified by an additional function morpheme.

Having seen that the focus markers **ka** and **n** are incompatible with the perfective aspectual marker **-ya** in simple sentences, there is the need to investigate the phenomenon in subordinate clauses. The fact that the verb in the matrix clause in

(20c) is suffixed with **-ya** is what is responsible for its ungrammaticality indicating that **-ya** and focus are mutually exclusive.

20. a. **Abu tɛhí-yà ní Jemima dì-Ø bìndírígù máá**  
 NAME think.PERF that Jemima eat.PERF food DEF  
 ‘Abu thought that Jemima has eaten the food.’
- b. \***Abu n tɛhí-yà ní Jemima dì-Ø bìndírígù máá**  
 NAME FOC think.PERF that Jemima eat.PERF food DEF  
 ‘It was Abu who thought that Jemima has eaten the food.’
- c. **Bìndírígù máá ká Abu tɛhí-Ø ní Jemima dì-yà**  
 food DEF FOC NAME think.PERF that Jemima eat.PERF  
 ‘It is the food that Abu thought that Jemima has eaten.’
- d. \***bìndírígù máá ká Abu tɛhí-yà ní Jemima dì-yà.**  
 food DEF FOC Abu think.PERF that Jemima eat.PERF  
 ‘It is the food that Abu thought that Jemima has eaten.’
21. a. **Abu tɛhí-yà ní bí-hì máá chàŋ-Ø dáà.**  
 NAME think.PERF that child.PL DEF go.PERF market  
 ‘Abu thought that the children have gone to the market.’
- b. **Bí-hì máá ká Abu tɛhí-Ø ní bɛ chàŋ-Ø dáà**  
 children DEF FOC Abu think.PERF that 2PL go.PERF market  
 ‘It is the children that Abu thought have gone to the market.’
- c. \***Bí-hì máá ká Abu tɛhí-yà ní bɛ chàŋ-Ø dáà.**  
 child.PL DEF FOC NAME think.PERF that 2PL go.PERF market.  
 ‘It is the children that Abu thought have gone to the market.’

It is also possible to focus the subject of an embedded clause, as in (21b) where the subject of the embedded clause, **bíhi maa**, ‘the children’, has been focused. An interesting issue that is worthy of mention is the ungrammaticality of sentences (20d) and (21c). A plausible explanation to the ungrammaticality of these sentences may be that there is some relation between focus movement and verbal morphology in subordinate clauses. It is then observed, based on (20c) and (21b) that the verb that immediately precedes the subordinate clause of a focus constituent cannot be morphologically marked with the disjoint completive or perfective aspectual marker **-ya** as that yields ungrammatical forms. There is thus a prohibition of the presence of **-ya** on the intermediate verb in Dagbani, as seen from data. It is observed based on

(20d) and (21c) that in successive cyclic movement, the verb in the matrix clause is invariably not marked with the perfective aspectual suffix **-ya**. When it is marked with the morpheme, the resulting structure is ungrammatical. Why **-ya** changes to conjoint form  $\emptyset$  in the matrix clause might therefore, be linked to prohibition on co-occurrence between focus and the **-ya** suffix.

### 5. Relativisation and the Verbal Paradigm

This section investigates the interaction between relativisation and CJ/DJ alternations. In relative clauses, the indefinite quantifiers **so/shɛba** for singular and plural animate/count nouns, respectively and **shɛli/shɛŋa** for singular and plural non-count nouns respectively, occur in their normal function as modifiers (indefinite quantifiers) of the antecedent, and the relative pronouns **ɲùn** and **dìn**, for living and non-living things respectively, occur within the relative clause to point back to the noun being modified. The relative pronouns also differ depending on whether the relativised element is singular or plural: **ɲùn** for singular and **bàn** for plural. Furthermore, the indefinite quantifiers also have the singular/plural and animacy dichotomy. When the indefinite quantifiers modify a noun in Dagbani, the noun loses part of it, usually the final syllable. For details on the indefinite quantifiers in Dagbani, see Issah (2013a).

I establish that the perfective DJ verb form does not occur in relativised clauses, be they relativised subjects as in (22b, 22d) or relativised objects as in (22f). Also, the imperfective DJ verb form does not also occur in relativised clauses, be they relativised subjects as in (23b, 23d) or relativised objects as in (23f). I conclude then that the DJ verb forms do not occur in relative clauses and that the CJ form cannot also occur clause finally even in relative clauses.

22. a. **Pàɲ'**      **só**      [**ɲùn** **dà-∅**      **lóórì**      **máá**]      **kpì-yá**  
 Woman      QUANRELPr      buy.PERF      lorry      DEF      die.PERF  
 'The woman who bought the car has died.'
- b. \***Pàɲ'**      **só**      [**ɲùn** **dà-yá**      **lóórì**      **máá**]      **kpì-yá**  
 Woman      QUANRELPr      buy.PERF      lorry      DEF      die.PERF  
 'The woman who bought the car has died.'
- c. **Bìndìrì' shɛlí**      [**dìn**      **máái. ∅**]      **bì**      **gálisí**  
 food      QUAN      RELPr      be.cold.PERF      NEG      be.plenty  
 'The food that is cold is not plenty.'

- d. \***Bindiri'** **shɛli** [dìn **máá-yá** **bì** **gálisí**  
 food QUAN RELPr be.cold.PERF NEG be.plenty  
 'The food that is cold is not plenty.'
- e. **Adam** **nyà-Ø** **bí'** **shɛba** [[bàn **chàŋ-Ø** **dáà**] **máá**  
 NAME see.PERF child QUANRELPr go.PERF market DEF  
 'Adam has seen the children who went to the market.'
- f. \***Adam** **nyà** **bí'** **shɛba** [bàn **chàŋ-yá** **dáà**] **máá**  
 NAME see.PERF child QUANRELPr go.PERF market DEF  
 'Adam has seen the children who went to the market.'
23. a. **Bu'** **shɛba** [bàn **gúú-rì** **máá**] **bì** **bàrá**  
 goat.SG QUANRELPr run.IMPERF DEF NEG be.big  
 'The goats that are running are not fat.'
- b. \***Bú'** **shɛba** [bàn **gúú-rà** **máá**] **bì** **bàrá**  
 goat QUANRELPr run.IMPERF DEF NEG be.big  
 'The goats that are running are not fat.'
- c. **Pàý'** **sò** [ŋùn **chìm-dí** **nìmdí** **máá**] **màlí** **lìyírì**  
 woman QUANRELPr fry.IMPERF meat DEF has money  
 'The woman who fries the meat has money (is rich).'
- d. \***Pàý'** **sò** [ŋùn **chìm-dá** **nìmdí** **máá**] **màlí** **lìyírì**  
 woman QUANRELPr fry.IMPERF meat DEF has money  
 'The woman who fries the meat has money (is rich).'
- e. **Nóómbì-h'** **shɛba** [bàn **yìyí-rì** **zaa**] **màlí** **ànfááni**  
 bird.PL QUANRELPr fly.IMPERF QUAN have benefits  
 'All flying birds have benefits (are beneficial).'
- f. \***Nóómbì-h'** **shɛba** [bàn **yìyí-rà** **zaa**] **màlí** **ànfááni**  
 bird.PL QUAN RELPr fly.IMPERF QUAN have benefits  
 'All flying birds have benefits (are beneficial)'

The distinction between CJ/DJ verb forms therefore represents a packaging in different morphology of verbs, distributional properties (syntactic requirements) and information structure. The canonical properties of the CJ/DJ distinction is therefore summarised in (24):

24.
  - a. the use of different verbal suffixes (morphology) of the verb
  - b. different distributional properties within the clause
  - c. codes different information structural notion (focus)
  - d. difference in interaction with post verbal particles.

## 6. Plausible Accounts of the Verbal Paradigm

This section attempts to give possible accounts for the CJ/DJ alternation within the Dagbani verbal paradigm. I develop three plausible explanations for this morphological alternation: the incorporated pronoun hypothesis, the medio-passive morpheme hypothesis and then the focus hypothesis. Of the three hypotheses, I contend that the focus hypothesis seems to be the most adequate in addressing accounting for the verbal paradigm in the language.

### 6.1. The Incorporated Pronoun Hypothesis.

The incorporated pronoun hypothesis is stated in (25).

25. A verb appearing in the DJ form has an incorporated pronoun, while a verb appearing in the CJ form has no incorporated pronoun.

With this proposal, we maintain that the perfective DJ morpheme **-ya** and the imperfective CJ markers **-ra** or its variant **-da** and **-ta** are analyzable as incorporated pronouns. Accordingly, a verb that occurs in the disjoint form has an incorporated pronoun thereby prohibiting its co-occurrence with NP objects and sometimes adjunct phrases, whilst the conjoint form of the verb lacks an incorporated pronoun. Within this hypothesis, it implies that there are different ways in which objects are structurally realized in Dagbani; either they appear in their canonical placement as sisters to the head of a verb phrase, or they are incorporated, or adjoined at the sentence level, in which case they are morphologically attached to the verb. However, we soon see that the correlation between CJ/DJ alternations and the presence or absence of incorporated pronoun is imperfect, suggesting that the proposed incorporated pronoun hypothesis does not address the problem on the function or this verbal alternation. The weakness of this proposal is revealed in the fact that the forms of the verbs that are said to have incorporated pronouns do occur in medio-passives as in the sentences under (26).

26.
  - a.
 

<b>Púú</b>	<b>máá</b>	<b>kó-yà</b>	DJ
farm	DEF	till.PERF	
			‘The farm is tilled.’

- b. **Dàm máá bí-yà** DJ  
 pito DEF cook.PERF  
 ‘The pito is cooked.’
- c. **Ʒírí bì kòhì-rá** DJ  
 lie NEG sell.IMPERF  
 ‘Lie is not sold.’
- Salifu (2012:18)

This observation is then taken to greatly weaken the proposal for an analysis in which the DJ aspectual suffixes **-ya** and **-ra/da/ta** are analyzable as incorporated pronouns. This calls for another proposal which I call the medio-passive morpheme analysis.

## 6.2. The Medio-passive Morpheme Hypothesis

27. A verb that is used in the disjoint form has a medio-passive morpheme, **-ya** and **-ra** while a verb used in the conjoint form has no medio-passive morpheme.

This observation is in accordance with the general structural feature of many Gur languages in that with dynamic verbs the canonical structure SVO may change to SV, but then the semantic role of S changes from agent to patient. However, different constraints are observed from language to language concerning the semantics of verbs as well of nouns in S position. For details see for instance, Reineke & Mieke (2005).

However, there is evidence to indicate that this hypothesis, just like the incorporated pronoun hypothesis, does not address the problem of the function of this morphological alternation. A problematic fact for this hypothesis is the selectional restriction on NP subjects before a structure can be assigned medio-passive reading. Accordingly, only inanimate nominals (subjects) can assign the disjoint forms of the verb a medio-passive reading. When the NPs used are animate ones, the resulting sentences would still have active readings and not passive readings as in (28).

28. a. **Mbaŋba** **kó-yà** DJ  
 NAME till.PERF  
 ‘Mbaŋba has tilled.’
- b. **Mbaŋba** **dì-yà** DJ  
 Mbaŋba eat.PERF  
 ‘Mbaŋba has eaten.’

Thus, the selective nature of the NP requirement in injecting medio-passivity into a sentence undermines the medio-passive morpheme analysis proposed to account for

the alternation. The morphological expression of medio-passivization on the verb is therefore also found only to occur with some lapses.

### 6.3. The Focus Hypothesis

This proposal argues that the CJ/DJ verb alternation is associated with focus. I contend therefore, that the CJ verb form marks focus on whatever follows the verb, while the DJ verb form encodes focus on the verb. One would not be far from right to argue then that the formal requirement that something follows the CJ verb form is because the information structure requirement that it focuses some post verbal material. This explains why the CJ form cannot occur at the end of a sentence (at least in the main clause), while the DJ form of the verb focuses the verb and so occurs clause-finally. By the tenets of this proposal, Dagbani has two types of in-situ focus strategies: namely syntactic focus strategy coded by use of post verbal particles **mi** and **la**, (Olawsky 1999, Issah 2013b, Hudu 2012), and morphological focus, which is marked using the CJ and DJ verb forms. I therefore, pursue an analysis according to which CJ focuses post verbal elements, while the DJ form correlate with narrow verb focus, as demonstrated in (29).

29. a. **Yí ch̀im-dá?**  
2PL fry.IMPERF  
'Do you fry?'
- b. **̀̀̀n, tí ch̀im-dá**  
yes 1PL fry.IMPERF  
'Yes, we fry.'
- c. **̀̀̀n, tí ch̀im-dí nỳlí**  
yes 1PL fry.IMPERF yam  
'Yes, we fry yams.'
- d. **Yí ch̀im-yá?**  
2PL fry.PERF  
'Have you fried?'
- e. **̀̀̀n, tí ch̀im-yá**  
yes 1PL fry.PERF  
'Yes, we have fried.'

In (29), we demonstrate the morphological coding of *in situ* focus in Dagbani. In (29b) for instance, the focus is on the verb **ch̀im**, 'fry' marked with the

imperfective CJ morpheme **-da**, while in (29c), the focus is marked on **nyuli** ‘yam’ and so the CJ morpheme **-di** is used. The same observation is made of (29e) where **-ya** marks focus on the verb. Thus, whether the verb or post-verb material is the focal element calls for specific verb suffixes.

In the literature, scholars have argued that there is a correlation between verb form and the marking of predicate focus. Schwarz (2008) makes draws similar conclusions for Buli and labels the strategy as morphological means of marking predicate focus, and Sharman (1956) also draws similar conclusions in Bantu.

An observation that further strengthens my proposal that CJ focuses post verbal NP objects, complements and adjuncts while the DJ focuses the verb itself is based on the distribution of post verbal elements which are associated with syntactic focus in the study of Dagbani grammar. I demonstrate that the distribution of these post verb particles is affected by interaction with the aspect system and the purely surface consideration of whether the verb is final in the clause or not. This paradigm is demonstrated in (30).

30. a. **Suhuyini** **dì-rí** **lá** **bìndírìgù** CJ  
 NAME eat.IMPERF FM food  
 ‘Suhuyini is eating/eats food.’
- b. \***Suhuyini** **dì-rí** **lá** CJ  
 NAME eat.IMPERF FM
- c. **Neindoo** **sà** **dì-rí** **mì** CJ  
 NAME TRM eat.IMPERF FOC  
 ‘Neindoo was eating (yesterday)’.
- d. \***Neindoo** **sà** **dì-rí** **mì** **bìndírìgù** CJ  
 NAME TRM eat.IMPERF FOC food

If it has so far been established that **-ra** and its variants occur clause finally while **-ri** and its variants occur when something must follow the verb, (at least in the simple sentence), then it stands to reason that **la** must be incompatible with **-ra** since the two have conflicting syntactic requirement. The incompatibility between the post verb **la** and the disjoint imperfective aspectual marker **-ra** explains the ungrammaticality of sentence (30a). The post verbal **mi** is also mutually exclusive with **-ra** and its variants. At least descriptively, one can suggest that the syntactic incompatibility between **-ra** and **mi** arises from the fact that the two have same syntactic features, they both occur clause finally (at least) in simple sentences and for

that matter, selecting one of them will suffice. This is evident in the ungrammatical sentence in (30b).

30. a. \***Suhuyini** **dì-rá** **lá** **bìndírìgú** DJ  
 NAME eat.IMPERF FOC food  
 ‘Suhuyini is eating/eats food.’
- b. \***Neindoo** **sà** **dì-rá** **mì** DJ  
 NAME TRM eat.IMPERF FOC  
 ‘Neindoo was eating (yesterday).’

I therefore conclude that the occurrence of the post verb **la** and **mi** within a sentence is dependent on the aspectual marker that occurs on a verb. It must be pointed out however, that pronouns differ in their syntactic relations with the post-verb particle **la** within the sentence structure of Dagbani. Pronouns, unlike full DPs, precede the post verb **la** instead of following it. This explains the ungrammaticality of sentences (31b) and (31d) where we have the pronouns **ba** ‘them’ and **ma** ‘me’ following **la** instead of preceding it as in sentences (31a) and (31c).

31. a. **Neindoo** **bú-rí** **bà** **lá** **kpè** CJ  
 NAME beat.IMPERF 2PL FOC here  
 ‘Neindoo is beating them here.’
- b. \***Neindoo** **bú-rí** **lá** **bà** **kpè** CJ  
 NAME beat.IMPERF FOC 2PL here.  
 ‘Neindoo is beating them here.’
- c. **Napodoo** **sà** **tú-Ø** **mà** **lá** **sòhàlà** CJ  
 NAME TRM insult-PERF 2SG FOC yesterday  
 ‘Napodoo insulted me yesterday.’
- d. \***Napodoo** **sà** **tú-Ø** **lá** **mà** **sòhàlà** CJ  
 NAME TRM insult.PERF FOC 2SG yesterday.  
 ‘Napodoo insulted me yesterday.’

Issah (2013) argues that the syntactic variation of pronouns and the post verb **la** could be accounted for by either assuming that: (i) object pronouns are syntactically bound, or perhaps morphologically, as though in some sense they are suffixes in which case the object pronouns are clitics to the verb and (ii) that the weak pronominals always shift to the left of the **la** particle. This syntactic behaviour of weak pronouns when they co-occur with post verb particles has been established as a

phenomenon in another (related) Gur language, Dagaare (Hiraiwa and Bodomu 2008: 249-250), which has a phonologically similar post-verb **la**. In Table 3 we summarize the descriptive observations so far made on the CJ/DJ forms in Dagbani.

This verbal paradigm and its interaction with the post verb particles as discussed in section 4 is very relevant in regard to Oti-Volta typology. For instance, other (genetically) related Gur languages such as Gurene (Atintono 2004; Dakubu 2007, 2000) and Kusaal (Issah 2006) also have the post verb particles which interact with aspectual markers. Gurene has the particle **mɛ** which follows an imperfective form of the verb in the absence of an object, and also **la** which occurs when something must necessarily follow but not in the negative (like **ya**). Atintono (2004:132) asserts that:

the affirmative **mɛ** is also used after an imperfective verb if no object or adverb follows to indicate that the event is internally viewed as continuing.

On the distribution of the post verb **la**, Dakubu (2000: 61) argues that:

it never occurs with an intransitive verb or a verb whose Complement (which may be an NP, a pronoun, a locative NP or an entire clause is not expressed).

**Table 3: Summary of the syntactic requirements of the Dagbani verbal paradigm**

verb alternation	suffix	use in negative clauses	syntactic requirements	used with post verb particles	occurrence in relative clause
CJ PERF	-∅	occurs with negative clauses	requires obligatory NP object can take an adjunct	compatible with <b>mi</b> and <b>la</b>	occurs in relative clauses
DJ PERF	-ya	incompatible with negative sentences	cannot co-occur NP object is compatible with adjuncts	incompatible with <b>mi</b> and <b>la</b>	does not occur in relative clauses
CJ IMPERF	-ri/di/ti	compatible with negative clauses	needs an obligatory NP object is compatible with adjuncts	compatible with <b>mi</b> and <b>la</b>	occurs in relative clauses
DJ IMPERF	-ra/da/ta	compatible with negative clauses	cannot co-occur with NP object is incompatible with adjuncts	incompatible with <b>mi</b> and <b>la</b>	- does not occur in relative clauses.

Atintono (2004: 132) simply asserts that ‘the **yá** modifier occurs after the verb to mark the completion of the event. It affirms a verb that is perfective’. However, there is a slight difference in terms of how Gurunε and Dagbani treat their (-) **ya** marker. For instance, Dagbani orthography has always treated the perfective marker **-ya** as a suffix, while Gurene treats the **ya** as a post verb particle, rather than a suffix, because according to Dakubu (2007), it gets stress like the initial root syllable of a lexeme. The data below taken from Atintono (2004: 133) illustrate the distribution of the Gurunε post verb **ya**.

32. a.     **À**     **dí**     **yá**  
           S/he eat     COMPL  
           ‘S/he ate.’
- b.     \***À**             **dítí**             **yá**  
           S/he             eat.IMPERF COMPL
- c.     **À**             **wá’**             **yá**  
           S/he             dance             COMPL  
           ‘S/he danced.’
- d.     \***À**     **wá’ari**             **yá**  
           S/he dance.IMPERF     COMPL
- e.     \***À**     **dí**     **yá**             **dia**  
           S/he eat     COMPL             food

Descriptively therefore, the Gurunε post verb **ya** occurs clause finally just like its phonologically similar counterpart in Dagbani. It also does not occur with the imperfective aspect as evidenced in the ungrammatical sentences in (32b) and (32d). The distribution of the Gurunε post verb particles **la** and **mε** is illustrated below with data taken from Atintono (2004: 73).

33. a.     **Pɔka**             **la**     **wa’ari**             **mε**  
           woman             DEF     dance.PROG     AFF  
           ‘The woman is dancing.’
- b.     **Pugela la**     **dugeri**             **la**     **dia**  
           girl     DEF     cook. PROG     FOC     food  
           ‘The girl is cooking food.’

- c. **Naafu la nyuuri la ko'om**  
 cow DEF drink.PROG FOC water  
 'The cow is drinking water.'
- d. \***Naafu la nyuuri la**  
 cow DEF drink.PROG FOC
- e. **Bā'ara la diti la sagebo**  
 patient DEF eat.PROG FOC tuo  
 'The patient is eating tuo'.
- f. **Saana la daa kule mɛ**  
 visitor DEF PST go home AFF  
 'The visitor did go home.'

In Kusaal, a Gur language spoken in the Upper East region of Ghana, a similar paradigm exists, in the sense that Kusaal has the post verb particle **nɛ**, which follows the perfective form of the verb when something must follow, that is, the verb does not occur clause finally, (except for object pronouns) but never the conjoint imperfective form. In Kusaal too, the different morphological alternations call for different syntactic forms. It must however be pointed out that since the Agole Kusaal which I studied does not have the word-final vowels of the other languages, a distinction between **-ri** and **-ra** does not work for this language. The perfective form of the verb that is morphologically marked with **-∅** is almost always followed by post verb particle **nɛ**, an NP object or an adjunct (except the object is a pronoun object, when the pronoun will precede the post verbal **nɛ**) while the form that is marked morphologically with **-ya** needs neither an NP object nor an adjunct and so occurs only clause finally in the canonical sentence. The former is what is termed as perfective 'conjoint', while the latter is referred to as perfective 'disjoint'. This explains why the ungrammaticality of sentence (34b) where the aspectual suffix **-ya** is assigned an NP object **diib** 'food'. Also, in (34d) the post verb **nɛ** occurs clause finally where in principle, it requires an NP object. The ungrammatical sentence in (34e) is also borne out of the fact that **-ya** occurs with an adjunct **sunŋa** 'well'. Abubakari (2011) discusses similar observations.

34. a. **Ndego dūg-yá** DJ  
 Ndego cook.PERF  
 'Ndego has cooked.'

- |    |   |                             |                             |                       |    |
|----|---|-----------------------------|-----------------------------|-----------------------|----|
| b. | <b>*Ndego</b><br>Ndego<br>'Ndego has cooked food.'    | <b>d̄ŋg-yá</b><br>cook.PERF | <b>d̄īb</b><br>food         |                       | DJ |
| c. | <b>Ndego</b><br>Ndego<br>'Ndego has cooked food.'     | <b>d̄ŋg.Ø</b><br>cook.PERF  | <b>nē</b><br>PVP            | <b>d̄īb</b><br>food   | CJ |
| d. | <b>*Ndego</b><br>Ndego<br>'Ndego has cooked food.'    | <b>d̄ŋg.Ø</b><br>cook.PERF  | <b>nε</b><br>PVP            |                       | CJ |
| e. | <b>*B̄iḡ</b><br>Child<br>'The child has cooked well.' | <b>lá</b><br>DEF            | <b>d̄ŋg-yá</b><br>cook.PERF | <b>s̄ūḡḡā</b><br>well | CJ |

The distribution of the perfective aspectual marker **-ya** and **nε** in Kusaal is not different from what has been observed of **(-)ya** and **la** in Dagbani and Gurunε. This suggests that the syntactic requirement of these items could be described as being pervasive in Gur languages.

Just as we earlier observed of the post verb particles **la** in Dagbani and Gurunε, pronouns differ in their syntactic relations with the post verb particle **nε** within the sentence structure of Kusaal. When pronouns occur with the post verb **nε**, they precede the particle, unlike full noun phrases (NPs) which follow it. For instance, in sentences (35a) and (35e) the object pronouns **o** 'him/her' and **fu** 'you' precede the post verb particle **nε**. Sentences (35b) (35d) are ungrammatical because they have pronoun objects which follow **nε** rather than preceding them. This is illustrated in (35).

- |     |    |                                 |                     |                          |                    |                  |    |
|-----|----|---------------------------------|---------------------|--------------------------|--------------------|------------------|----|
| 35. | a. | <b>B̄iḡ</b><br>3SG              | <b>lá</b><br>DEF    | <b>b̄ú'</b><br>beat.PERF | <b>ō</b><br>3SG    | <b>nè</b><br>PVP | CJ |
|     |    | 'The child has beaten him/her.' |                     |                          |                    |                  |    |
|     | b. | <b>*B̄iḡ</b><br>3SG             | <b>lá</b><br>DEF    | <b>b̄ú'</b><br>beat.PERF | <b>nē</b><br>PVP   | <b>ō</b><br>3SG  | CJ |
|     |    | 'The child has beaten him/her.' |                     |                          |                    |                  |    |
|     | c. | <b>M̄</b><br>1SG.POSS           | <b>p̄úà</b><br>wife | <b>k̄v̄</b><br>kill.PERF | <b>f̄v̄</b><br>2SG | <b>nè</b><br>PVP | CJ |
|     |    | 'My wife has killed you.'       |                     |                          |                    |                  |    |

- d. \***M**            **púà**    **kōv**            **nē**    **fū.**    CJ  
 1SG.POSS    wife    kill.PERF    PVP    2SG  
 ‘My wife has killed you.’

Similar conclusions were drawn for the different syntactic relations that exist between pronouns and the post verb particle **la** in Dagbani and Gurunɛ. According to Naden (2005: 3) Mampruli, also a Gur language, also has the suffix **-ya** which “marks perfective very much in the sense of the English Perfect – past with present relevance.” The Mampruli data in (36) are taken from Naden (2005: 3) to illustrate the phenomenon in Mampruli.

36. a. **U kyaŋŋi Tammali.**            “He went to Tamale (but may be back now).”  
 b. **U kyaŋŋiya.**                        “He has gone (and is still away).”  
 c. **\*U kyaŋŋiya Tammali.**            “He has gone to Tamale.”  
 d. **\*U kyaŋŋiya soosa la.**            “He went yesterday.”  
 e. **U dugi sinkaafa.**                 “She cooked rice.”  
 f. **\*U dugi.**                              “She cooked.”

We could say based on the data in (36) that in Mampruli, just as observed of Dagbani, Kusaal and Gurunɛ, the perfective marker **-ya** occurs clause finally. From the comparative perspective, one would be right to conclude that the different realization of the perfective and imperfective aspect is not only unique to Dagbani, but also other genetically related languages. It was also observed that the presence or absence of post verb particles in Dagbani and other Gur languages such as Mampruli, Dagaare, Kusaal and Gurunɛ does interact with the aspect system of the languages. The distribution of the post verbal **la** in Mampruli is also demonstrated in (37).

37. a.        **U        dugri            la        sinkaafa.**  
           She    cooking        FOC    the rice  
           ‘She is/was cooking rice.’  
 b.        **\*U        dugri            la.**  
           She    cooking        FOC  
           ‘She is/was cooking.’

## 7. Summary and Conclusions

This paper set forth to discuss the verbal morphology of Dagbani with special attention on the correlation between verbal morphology and sentence structure.

Focusing on verbal inflection, the discussion centred on the relation between inflections and complement placement. It is established that the CJ/DJ verb form encodes differences in morphology, syntax and information structure. The CJ form of the verb obligatorily needs some element (NP object, adjunct) to follow it whereas the disjoint form can (but does not need to) be in sentence final position. The interaction between negation and the verbal alternation is also investigated. It was established that there is a co-occurrence relation between the perfective DJ form and negation as well as focus marking and the verbal paradigm.

In an attempt to account for the distribution of the conjoint and disjoint verb forms in Dagbani, three proposals were considered: the incorporated pronoun hypothesis, the medio-passive morpheme hypothesis and the focus hypothesis. I concluded based on empirical evidence that the CJ/DJ correlated with focus suggesting that the focus hypothesis best accounts for the CJ/DJ forms in Dagbani as has been established in other Gur and non-Gur languages.

A comparative flavour was injected into the work by looking at the verbal alternation and its interaction with the sentence structure in regard to Oti-Volta typology. Drawing on data from genetically related languages such as: Gurune, Kusaal, Mampruli and Dagaare, it is established that the interaction seen between the post-verb particles and the verbal paradigm of Dagbani appears to be a typological phenomenon which can be observed in several other Gur languages in the Oti-Volta subfamily. The paper therefore, contributes to the literature on verb morphology by bringing data from a lesser known language and related ones. This could consequently contribute to our knowledge of not only the verb morphology on Dagbani, but also, a cross linguistic contribution to the understanding of the verbal alternation and its correlation with sentence patterns in natural languages.

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## ANIMACY IN NKAMI

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### Abstract

Drawing from a large corpus of synchronic natural data, this paper provides a detailed descriptive account of animacy distinctions in Nkami, an endangered Ghanaian language, spoken in the Afram Plains of Ghana. It demonstrates the remarkable linguistic resources that speakers employ to distinguish animates from inanimates, to a large extent, and humans from non-humans, to a lesser extent. The phenomenon is ubiquitous in forms and behaviours of pronouns, demonstratives, nominal affixes, nominal modifiers, dispositional verbs in basic locative constructions, inter alia. Some cases of animacy neutralization are also discussed.

**Key words:** animacy, nominal affixes, pronouns, dispositional verbs, neutralization.

### 1. Introduction<sup>2</sup>

This paper attempts to provide a comprehensive description of animacy distinctions in Nkami. Animacy distinction is one of the most characteristic features of Nkami, and we believe of other Kwa languages of Ghana, particularly those of the Tano branch (Williamson and Blench 2000), which have not been given the needed attention. While almost every linguist who has discussed Akan pronouns talks about animacy distinctions in Akan (cf. Christaller 1875, Stewart 1963, Boadi 1976, Saah 1992, 1995; Osam 1994, 1996), perhaps one of the most comprehensive and systematic assays is Osam (1996). Osam (1996) presents evidence from the forms of pronouns and nominal affixes to demonstrate how Akan speakers distinguish between animate and inanimate entities. On the basis of the linguistic closeness of the two languages, Osam's account forms a good reference point for our discussion and it is severally referred to where necessary. Howbeit, this paper is not meant to be a comparison between Nkami and Akan; neither does it seek the provenance of the

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<sup>2</sup> This article has benefited immensely from the helpful comments and suggestions of an anonymous reviewer and the editor of this journal, Prof. Dakubu. The usual disclaimers apply.

structures/forms of Nkami, though we acknowledge that, looking at some of the striking lexical/structural similarities between the two languages, as would be observed in this paper, any future work in those directions may be necessary to ascertain how much of the similarities shared by the two languages are cognates or result from diffusion.<sup>3</sup>

The paper comprehensively enumerates and systematically canvasses linguistic resources that Nkami speakers employ to distinguish humans from non-humans and animates from inanimates. It would be evident that these distinctions are particularly overwhelming in forms and behaviours of pronouns, demonstratives, nominal affixes, nominal modifiers, and some dispositional verbs in basic locative constructions (BLCs). Domains in the language where some of the animacy distinctions have been neutralized are also canvassed. Due to the endangered nature of Nkami, as we observe in the ensuing section, our primary purpose in this paper is aimed at descriptive adequacy (cf. Dixon 1997, 2010). Portions of the data are taken from an on-going PhD dissertation which is part of a larger documentation project on Nkami. The database includes spontaneous spoken and elicited texts collected from about hundred speakers of varied backgrounds in the field. Annotation and verification of media data and texts were done in conjunction with a team of two adult Nkami speakers and several other language consultants.<sup>4</sup>

The rest of the paper is organized as follows. Sections three and four respectively discuss the forms, nature and behaviours of linguistic resources that Nkami speakers employ to distinguish between humans and non-humans, and animates and inanimates. Section five examines data from three domains where animate-inanimate distinctions have been neutralized, while section six provides a summary of the entire piece. Since Nkami is a little-known endangered language, the ensuing section briefly introduces the background of the language and people.

## **2. Nkami Language and People**

The name 'Nkami' refers to both a group of people and an endangered language spoken by about four hundred people residing in Amankwa, a resettlement community, which is a few kilometres away from the western shore of the Volta Lake in the North Afram Plains constituency of Ghana. There is however a greater number of **Nkamifuo** 'Nkamis' living outside the language region. Currently, the majority of Nkami children do not acquire Nkami as their first language; they first acquire Akan and

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<sup>3</sup> Such an enterprise would require not only an adequate knowledge of Nkami and Akan, but also of other Guang and Tano languages in general, and probably Ewe, another dominant language in the Nkami speaking community.

<sup>4</sup> The first author is indebted to my team members, Enoch Akuamoah and Kwaku Ketewa, and the entire people of Nkami for their warm reception and cooperation during the period in the field.

sometimes Ewe before they acquire Nkami.<sup>5</sup>

The orthography being used in this article conforms to the orthography developed recently for the Nkami language project, and is one of the efforts to present the language to the linguistic world. Until the first author started documenting Nkami very recently, linguists including foremost Ghanaian language documenters did not know the name ‘Nkami’.<sup>6</sup> There is enough linguistic evidence that supports the fact that Nkami should be placed in the South branch of the Guang languages group, a sub-family of the Kwa branch of the Niger-Congo phylum (Asante, in preparation). Apart from the language or more probably before it, the greatest thing that unites the Nkami people is the institution of Afram.<sup>7</sup> Presently, it is only through the worship and matters related to the Afram deity that the Nkami language is always used as the only medium of communication.

Linguistically, Nkami shares with neighbouring languages most of the areal-typological linguistic features. Like other South-Guang, but unlike North-Guang languages,<sup>8</sup> Nkami has both phonemic oral and nasal vowels. Consonants are produced at seven different places of articulation, and it has a phonemic voiceless double-articulated stop /kp/, unlike most Guang languages which have the voiced counterpart /gb/ too. It has two basic level tones (high and low) and manifests both lexical and grammatical functions of tone. It has a dominant CV syllable structure with other minor types: V, CVC and VC (where final C is a nasal or /w/) in descending frequency. It shows evidence of three major vowel harmonic processes, ATR, labial, and height, where the first is the dominant and the last two are epiphenomenal. Typical of most Guang languages (cf. Casali 2002, 2008), [+ATR] is the dominant feature, manifesting archetypical regressive assimilation within and across word boundaries. Words belonging to the well-known major word classes and several others such as adpositions, ideophones, interjections, routines and particles are all available in the language. It has no synchronic viable noun class system; one can at best talk about remnants of it. Like in other Kwa languages (cf. Dakubu 1988), affixation, reduplication and compounding are the dominant morphological processes, with verb features expressed by prefixes and verbal particles. The position of nominal modifiers, both word-level and clause-level, is post-nominal. Coding of ‘predicative’ properties is prototypically expressed through possessive/locative constructions (and

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<sup>5</sup> Notwithstanding, almost all adult Nkamis in Amankwa speak at least a little Nkami.

<sup>6</sup> The first author acknowledges the help of Mr. and Mrs. Peacock and the Nkonya Language Committee members for introducing Nkami to him.

<sup>7</sup> Afram is the name of a river and a powerful deity in Ghana. It is worshipped in many parts of Ghana but the head of Afram, Aframhema ‘wife of Afram’, comes from Nkami.

<sup>8</sup> We use South-Guang to refer to languages belonging to the Southern branch (e.g. Awutu, Efutu, Anum (Gwa), and North-Guang to refer to those belonging to the Northern branch (e.g. Gonja, Nawuri, Chumburung, Krachi) of the Guang family.

less via adjectives, verbs and nouns), while ‘attributive’ properties are mainly expressed through relative clause constructions. It has dominant AVO and SV clause types, and it is basically isolating with some agglutinating and a handful of fusional tendencies. It shows rich and archetypical cases of constructions involving multi-verbs and clause combinations such as serial verb, relative clause, complement clause and adverbial clause constructions. For instance, it manifests the very rare feature of relative clause constructions, known to occur in a handful of languages (probably less than ten universally and mainly Kwa languages), where the resumptive pronoun retention strategy is employed to obligatorily state relativized NPs in subject function within the relative clause.

### 3. Animate-Inanimate Distinctions

This section focuses on areas in the grammar where animate and inanimate distinctions are made. It is divided into two broad parts: the first relates to nouns and related items and the second is on dispositional verbs in basic locative constructions.

#### 3.1 Nouns and Related Items

##### 3.1.1 Subject pronoun

Nkami has a subject pronominal system that makes 1st, 2nd and 3rd person distinctions. Number distinction is also made for all persons. In (1) is a list of the subject pronouns in the language.<sup>9</sup>

(1)	Subject Pronouns					
	Person	Singular		Plural		
	1st	<b>mi</b>	‘I’	<b>ani</b>	‘we’	
	2 <sup>nd</sup>	<b>wu</b>	‘you’	<b>mmi</b>	‘you’	
	3rd animate	<b>ɔ-</b>	‘she/he’	<b>be</b>	‘they’	
	3rd inanimate	<b>ɛ-</b>	‘it’	<b>ɛ-</b>	‘they’	

As we observe in (1), Nkami distinguishes between animates and inanimates based on the forms of the third person subject pronouns. Thus, whenever a pronoun substitutes for a singular animate noun in subject slot of a clause, the pronominal form **ɔ-** ‘she/he/ it’ is employed, while **ɛ-** ‘it’ replaces inanimate referents. This is exemplified in (2-3).

<sup>9</sup> The following abbreviations are used: AGR = agreement, ANM = animate, ATR = advanced tongue root, DEF = definite article, DDD = distal demonstrative determiner, DDP = distal demonstrative pronoun, DEM = demonstrative, FOC = focus, FUT = future, HAB = habitual, IDENT = identity, INANM = inanimate, INDEF = indefinite, INTJ = interjection, NEG = negation, NOML = nominalizer, OBJ = object, PDD = proximal demonstrative determiner, PDP = proximal demonstrative pronoun, PDP = proximate distal prefix, PST = past, PRF = perfect, PL = plural, POSS = possessive, PRS = present, PROG = progressive, REL = relative marker, SG = singular subject.

- (2) a. **ɔkpli amu** bε-ba. → b. **ɔ-bε-ba.**  
 dog DET FUT-come 3SG.ANM-FUT-come  
 ‘The dog will come.’ ‘It will come.’
- (3) a. **ɲaw amu** bε-ba. → b. **ε-bε-ba.**  
 rain DET FUT-come 3SG.INANM-FUT-come  
 ‘The rain will come/it will rain.’ ‘It will rain/come.’

Thus, in (2b) **ɔ-** is used to replace the subject **ɔkpli** ‘dog’ in subject position because *dog* is animate, while **ε-** replaces **ɲaw** ‘rain’ in (3b) because *rain* is inanimate. Note that, out of context, the instigator of the event in (2b) can only refer to an animate entity while that of (3b) can only refer to an inanimate entity.

### 3.1.2 Lack of number distinction

Another animacy contrast that can be made about the personal subject pronominal system relates to number distinction of the third person. As shown in (1), whereas the third person animate subject pronoun has distinct forms **ɔ-** and **bε-** for singular and plural contrasts respectively, the inanimate counterpart has one form **ε-** for both singular and plural functions. Consider (3-4).

- (4) a. **Oyebi amu** bε-di. → b. **ɔ-bε-di.**  
 child DET FUT-sleep 3SG.ANM-FUT-sleep  
 ‘The child will sleep.’ ‘He will sleep.’
- (5) a. **ɲ-ɲebi amu** bε-di. → b. **bε-bε-di.**  
 PL-child DET FUT-sleep 3PL.ANM-FUT-sleep  
 ‘The children will sleep.’ ‘They will sleep.’

Thus, because the subject position of (4a) is occupied by a singular animate noun **oyebi** ‘child’, it is replaced with the singular animate pronoun **ɔ-**. On the other hand, the plural subject animate pronoun **bε-** substitutes for **ɲɲebi** ‘children’ in (5) because *children* is a plural animate noun. Conversely, in (6-7) the same form **ε-** is employed to supplant both the singular and plural subject nouns **oyi** ‘tree’ and **ɲɲi** ‘trees’ because *tree(s)* is inanimate.

- (6) a. **Oyi amu** bε-duidui. → b. **ε-bε-duidui.**<sup>10</sup>  
 tree DET FUT-burn 3SG.INANM-FUT-burn  
 ‘The tree will burn.’ ‘It will burn.’

<sup>10</sup> As we mentioned earlier, Nkami exhibits ATR harmony. As a result, there are two sets of vowels, [+ATR] [i, e, o, u] and [-ATR] [ɪ, ɛ, ɔ, ʊ], based on tongue root position. Typically, only vowels of a set pattern together in a phonological word. The dominant [+ATR] feature may assimilate regressively to preceding [-ATR] vowel(s). So, for instance, **ε-bε-duidui** is expressed as [ɛbeduidui] in surface form. However, for the purposes of clarity and consistency, this and many other phonetic details that do not have direct bearing on the discussion are ignored.

- (7) b. **ɲ-ɲi** **amɔ** bɛ-duidui. → b. **ɛ**-bɛ-duidui.  
 PL-tree DET FUT-burn 3SG.INANM-FUT-burn  
 ‘The trees will burn.’ ‘They will burn.’

### 3.1.3 Concordant subject marking

Another related distinction concerns subject agreement marking in Nkami. The third person plural subject pronoun **bɛ-** may be prefixed to a verb stem in a clause that already has a full plural noun in subject position, as shown in (8).

- (8) a. Anansi **mma** obu amɔ yɔ  
 spider stick/be fixed building DET self  
 ‘There is spider is on the wall.’
- b. Anansi bebiree **bɛ-mma** obu amɔ yɔ  
 spider many 3PL-stick/be fixed building DET self  
 ‘There are many spiders on the wall.’

Thus, **bɛ-** can serve as a bound pronoun in (8b) and be attached to the predicate **mma** ‘stick/be fixed’ to co-reference the plural subject **anansi bebiree** ‘many spiders’. It must be stated that this system of concordant subject marking is not obligatory in the language. Nonetheless, it is only acceptable if the plural subject NP is animate, as we have in (8b). In cases where the NP is inanimate, as (9b) illustrates, subject agreement marking is unacceptable.

- (9) a. Ntɪntar bebiree **mma** obu amɔ yɔ  
 cobweb many stick/be fixed building DET self  
 ‘There are many cobwebs on the wall.’
- b. \*Ntɪntar bebiree **bɛ-mma** obu amɔ yɔ

Thus, because the subject NP **ntɪntar bebiree** ‘many cobwebs’ is inanimate, **bɛ-** cannot be attached to the predicate **mma** for cross-referencing. Notwithstanding, speakers may show number agreement between the plural subject and the verb by reduplicating the verb stem, as shown in (9c).

- (9)c. Ntɪntar bebiree **mma.mma** obu amɔ yɔ  
 ‘There are many cobwebs on the wall.’

All things being equal, the use of the reduplicated form **mmamma**, instead of the simple form of the verb **mma**, indicates a greater amount/larger size of cobwebs than vice versa.

### 3.1.4 Possessive pronouns

Nkami has three persons in possessive pronouns, just like its subject pronouns.

There are also singular-plural number distinctions except for the third person inanimate, as shown in (10).

## (10) Possessive Pronouns

Person	Singular		Plural	
1 <sup>st</sup>	<b>mi</b>	‘my’	<b>ani</b>	‘our’
2nd	<b>w(u)</b>	‘your’	<b>mmi</b>	‘your’
3rd animate	<b>m(u)</b>	‘her/his’	<b>amu</b>	‘their’
3rd inanimate	<b>Ø</b>	‘its’	<b>Ø</b>	‘their’

Just as Osam (1996) notes on Akan, animacy distinction on possessive pronouns is best demonstrated in a type of possessive phrases that has relational nouns such as **eyu** ‘body/skin/self’ **elo** ‘inside’ **nkilelo** ‘side’ **asɪ** ‘under/beneath’ **ama** ‘back/behind’, **apɛsilo** ‘face/front’ as possessed nouns. In such phrases, whenever the possessor noun is animate, an independent possessive pronoun **mu** is overtly juxtaposed after the possessor noun to mark possession; however, when the possessor noun is inanimate, **mu** does not appear. Consider the examples in (11).

- (11) a. **Oyebi amu mu** yu lɛ-waa efi.  
 child DET POSS body PERF-wear dirty  
 ‘The child is dirty.’
- b. **Adaka amu Ø** yu lɛ-waa efi.  
 box DET body PERF-wear dirty  
 ‘The box is dirty.’

Thus, because (11a) has an animate possessor noun **oyebi** ‘child’, possession is overtly marked by placing an independent possessive pronominal marker **mu** after it and before the possessed noun **yu** ‘body’. However, because the possessor noun **adaka** ‘box’ (11b) is inanimate, possession is covertly marked, indicated by the null symbol “Ø”. Moreover, the possessor NPs **oyebi** ‘child’ and **adaka** ‘box’ can be omitted and replaced with pronouns, as in (12a-b).

- (12) a. **Mu** yu lɛ-waa efi.  
 POSS body PERF-wear dirty  
 ‘She/he is dirty.’
- b. **Ø** eyu lɛ-waa efi.  
 body PERF-wear dirty  
 ‘It is dirty.’

Predictably, in (12a) because the antecedent possessor NP **oyebi** ‘child’ is animate, the possessive pronoun **mu** substitutes for it; however, in (12b) **adaka** ‘box’ attracts null representation because it is inanimate. In other words, out of context, the antecedent of **mu** in (12a) can only refer to an animate entity, but speakers will

understand the possessive construction in (12b) **eyu lewaa efi** ‘it is dirty’ to be talking about an inanimate referent because it does not have an overt possessive pronoun. The analysis here is quite different from that by Osam (1996) for similar data in Akan. Making an observation about the phenomenon, Osam (1996: 195) notes that “when the possessor noun is animate, a full pronoun is used; but when it is inanimate we only get a pronominal prefix which incidentally is of the same form as the subject pronominal prefix”. He went on to provide the following set of examples (13-14) to demonstrate the difference.

- (13)a. **Kofi** ho a-ye fi. → b. **Ne** ho a-ye fi.  
 Kofi body PRF-be dirty 3POSS  
 ‘Kofi is dirty.’ ‘He is dirty.’
- (14)a. **Adaka no** ho a-ye fi. → b. **ε**-ho a-ye fi.  
 box DET body PRF-be dirty it-body  
 ‘The box is dirty.’ ‘It is dirty.’

The difference between the two analyses lies in the treatment of the representation of the inanimate antecedent **adaka** ‘box’ in (12b) and (14b). If we were to go by Osam’s analysis, the initial vowel **ε-** of **eyu** ‘body/skin’ would be treated as a pronominal prefix just as it is done for Akan in (14b). For us, the initial vowel is an inanimate nominal prefix and not a pronominal prefix. Just like other nominals beginning with the nominal prefix **ε-** in both languages, **ε-** is deleted in (11, 12a) and (14a) because **eyu** and **εho** appear within utterances. However, in cases where nominals containing the prefix **ε-** appear at sentence-initial position, such as those in (12b) and (14b), **ε-** is always overtly realized. This analysis is given further support when additional data involving possessed relational nouns that do not begin with the **ε-** prefix in both languages are brought forth in (15-16).

- (15) Nkami  
 a. waase amu ama le-waa efi. → a<sup>1</sup>. ama le-waa efi.  
 dress DET back PRF-wear dirty  
 ‘The back part of the dress is dirty.’ ‘It (back) is dirty.’
- b. waase amu nkilelo le-waa efi. → b<sup>1</sup>. nkilelo lewaa efi.  
 side  
 ‘The side of the dress is dirty.’ ‘It (side) is dirty.’
- (16) Akan  
 a. ataade no akyi a-ye fi. → a<sup>1</sup>. akyi a-ye fi.  
 dress DET back PRF-be dirty  
 ‘The back part of the dress is dirty.’ ‘It (back) is dirty.’



- (20) a. **Kaa no** nyinaa a-ba. → b. **Ne** nyinaa a-ba (**\*nyinaa** a-ba).  
 car DET all PRF-come 3SG.POSS  
 ‘All the cars have arrived.’ ‘They have all arrived.’

Thus, whereas Nkami employs zero marking, Akan overtly marks inanimate subject NPs modified by the quantifier **fɛɛfɛ** ‘all’ with the 3SG possessive pronoun **ne** ‘his/her/it’.

### 3.1.6 The third person object pronouns

One source of animacy distinction that has received much attention, especially in Akan (cf. Christaller 1875, Stewart 1963, Boadi 1976, Saah 1992, Osam 1994, 1996) is the behaviour of the third person object pronoun. Nkami’s object pronominal forms are the same as those of possessive pronouns in (9). As occurs in Akan (and probably in most Tano languages of the Kwa branch), whenever an animate object noun is pronominalized, the pronoun is always overt and co-references its antecedent in number; however, when an inanimate object is pronominalized, it is always null. Consider the examples in (21-22).

- (21) a. Kofi bɛ-sɔ **ɔkplɪ amu**. → Kofi bɛ-sɔ **mu**.  
 Kofi FUT-buy dog DET 3SG.ANIM.OBJ  
 ‘Kofi will buy the dog.’ ‘Kofi will buy it.’  
 b. Kofi bɛ-sɔ **m-kplɪ amu**. → Kofi bɛ-sɔ **amu**.  
 Kofi FUT-buy PL-dog DET 3PL.ANIM.OBJ  
 ‘Kofi will buy the dogs.’ ‘Kofi will buy them.’
- (22) a. Kofi bɛ-sɔ **ɔfɔdʒɪ amu**. → Kofi bɛ-sɔ **∅**.  
 Kofi FUT-buy broom DET  
 ‘Kofi will buy the broom.’ ‘Kofi will buy it.’  
 b. Kofi bɛ-sɔ **mfɔdʒɪ amu**. → Kofi bɛ-sɔ **∅**.  
 Kofi FUT-buy PL-broom DET  
 ‘Kofi will buy the brooms.’ ‘Kofi will buy them.’

As the data reveal, while the animate object pronouns **mu** ‘she/he/it’ and **amu** ‘them’ replace their antecedents **ɔkplɪ** ‘dog’ and **mkplɪ** ‘dogs’ in (21a-b), both **ɔfɔdʒɪ** ‘broom’ and **mfɔdʒɪ** ‘brooms’ receive zero marking in (22a-b) because *broom* is inanimate.

Osam (1996) makes an interesting observation about a limitation on this distinction in Akan which is worth commenting. Like Nkami, in Akan the animate noun **odwan** ‘sheep’ is replaced by **no** ‘him/her/it’ in (23), but the site of the antecedent **dua** ‘tree’ is null in (24) because *tree* is inanimate.

- (23) Kofi bɔ-tɔn **odwan no**. → Kofi bɔ-tɔn **no**.  
 Kofi FUT-buy sheep DET 3SG.ANIM.OBJ  
 ‘Kofi will sell the sheep.’ ‘Kofi will sell it.’

- (24) Kofi bɔ-tɔn **dua no**. → Kofi bɔ-tɔn **ɔ**.  
 Kofi FUT-buy tree DET Kofi FUT-buy  
 ‘Kofi will sell the tree.’ ‘Kofi will sell it.’

Osam observes that this distinction is compromised when an inanimate direct object noun is immediately followed by a temporal or locative adverb in a sentence, as shown in (25).

- (25) a. Kofi bɔ-tɔn **dua no** ɔkyena. → b. Kofi bɔ-tɔn **no** ɔkyena.  
 Kofi FUT-buy tree DET tomorrow K. FUT-buy 3INANM.OBJ tomorrow  
 ‘Kofi will sell the tree tomorrow.’ ‘Kofi will sell it tomorrow.’

Thus, because the inanimate object **dua** ‘tree’ is followed by the temporal adverb **ɔkyena** ‘tomorrow’, its site is required to be overtly expressed by the pronoun **no** in (25b). In other words, out of context, **Kofi bɔtɔn no ɔkyena** is ambiguous in Akan since **no** could either refer to an animate or inanimate antecedent, contrary to the observation in (24) that **no** substitutes for only animate object antecedents. Following Givon’s (1984) functional framework on pragmatic notion of topicality, Osam offers an explanation for the phenomenon. He notes:

The reason the presence of an adverbial element in the post object position ... triggers the presence of the inanimate object pronoun is that since the direct object is more topical than an adverbial item, and since the immediate postverbal position defines direct objecthood in Akan, if the pronoun is not overtly present it would create the impression that the adverbial element is more topical than the direct object NP. It is as if the inanimate object pronoun finds its topicality status threatened and so it has to make a physical appearance in order to assert its status. (Osam 1996: 162).

Though the functional explanation provided by Osam sounds apt for the phenomenon in Akan, it is inappropriate for Nkami since the site of an inanimate object in Nkami is always covertly marked even when it (the object) is immediately followed by an adverb. This is exemplified in (26).

- (26) a. Kofi bɛ-fɛ **oyi amɔ** ɔtʃɛ.  
 Kofi FUT-buy tree DET tomorrow  
 ‘Kofi will sell the tree tomorrow.’  
 b. Kofi bɛ-fɛ **ɔ** ɔtʃɛ (\*Kofi bɛ-fɛ **mɔ** ɔtʃɛ).  
 Kofi FUT-buy tomorrow  
 ‘Kofi will sell it tomorrow.’

Thus, in Nkami the presence of the temporal adverb **ɔtʃɛ** ‘tomorrow’ does not

trigger the presence of the inanimate object pronoun **mu**, with the view of entrenching the object's position as more topical than the adverb's position. Thus, the distinction is necessitated by the different rankings of two constraints by the languages:

- i. TOPICALITY- requires that the overt statement of constituents in a clause be based on topicality hierarchy.
- ii. ANIMACY - requires that the overt statement of constituents in a clause be based on animacy hierarchy.

Thus, whereas Akan considers the constraint on TOPICALITY to be 'very crucial' and therefore ranks it higher than the constraint on ANIMACY, Nkami considers the constraint on TOPICALITY to be 'less crucial' and thus ranks it lower than the 'more crucial' one on ANIMACY.

### 3.1.7 Demonstrative Pronouns

The next source of animacy distinction is based on the structure and behaviour of demonstrative pronouns. Demonstrative pronouns in Nkami are deictic words that can function as the only element in an argument position of a clause (cf. Diesel 1999, Dixon 2010). Nkami has a relatively large set of four demonstrative pronouns which are divided into two pairs, proximal: **ɛna/ɔna** and distal: **mu/maamu**, based on their spatial semantics. The proximal demonstrative pronouns (PDP) **ɛna/ɔna** indicate some relative closeness to the deictic centre while the distal demonstrative pronouns (DDP) **mu/maamu** denote the opposite. More importantly, based on the semantic notion of animacy, a distinction can be made for each pair, as (27) illustrates.

- (27) a. Mɪ-kpa **tɪɪ ja.** → Mɪ-kpa **ɔna.**  
 1SG-like goat PDD                      1SG-like ANM.PDP  
 'I like this goat.'                      'I like this.'
- b. Mɪ-kpa **waase ja.** → Mɪ-kpa **ɛna.**  
 1SG-like dress PDD                      1SG-like INANM.PDP  
 'I like this dress.'                      'I like this.'

Thus, the PDP **ɔna** is used for animate referents, while **ɛna** is used for inanimate referents, as shown in (27a) and (27b) respectively. Likewise, an identical distinction can be made for the distal demonstratives; **mu** and **maamu** are used for animate (28a) and inanimate (28b) referents respectively.

- (28)a. Mɪ-kpa **tɪɪ amu** → Mɪ-kpa **mu**  
 1SG-like goat DDD                      1SG-like ANM.DDP  
 'I like that goat.'                      'I like that.'

- b. Mɪ-kpa **waase amu** → Mɪ-kpa **maamu**  
 1SG-like dress DDD 1SG-like INANM.DDP  
 ‘I like that cloth.’ ‘I like that.’

Thus, **ɛpa** and **mu** replace the animate referent **tɪɪ** ‘goat’ in (26a and 27a), while **ɛpa** and **maamu** substitute for the inanimate **waase** ‘dress’ in (26b and 27b).

### 3.2 Dispositional Verbs in Basic Locative Constructions

Ameka (2007: 1066) defines a basic locative construction (BLC) as “a non-elliptical clause that represents the answer to a ‘where-search’ question”. Nkami employs approximately twenty contrasting locative verbs in BLCs and hence may be classified as a multi-verb language on the basis of the number and types of verbs used in BLCs (cf. Levinson and Wilkins 2006, Ameka and Levinson 2007). Similar to an essay by Ameka (2007) on Likpe, there are several factors that come into play when deciding on ‘competing’ verbs to localize specific locative scenes: number, speaker’s competence, speaker’s desire to be referentially precise, animacy, inter alia. We only examine the role animacy plays in the selection of verbs for localizing entities (Figures) on reference objects (Grounds).

#### 3.2.1 *Tige* versus *tie* ‘be.located on base’

Both **tige** and **tie** ‘be.located on base’ are ‘sitting’ verbs that are used to talk about Figures that take support on the surface from their base. Thus, the Figure is generally seen as one that assumes a sitting position. The difference between the two is that **tige** is used to talk about inanimate Figures while **tie** is employed for animate Figures. Typically, **tige** is used to describe locative configurations such as ‘utensil on fire’, ‘chair on its base’, ‘cup on a table’, as (29) illustrates.

- (29) **Kɔɔpu/adzuro amu tige**      ɔkpɔnɔ/odza      amu      su.  
 cup/food      DET      be.located      table/fire      DET      on  
 ‘The cup/food is on the table/fire.’

Conversely, **tie** localizes a person on a sitting position, whether on a wall, chair, table, tree, etc., or an animal sitting on its base.

- (30) **Naajɪmɪ Anto/ɔkplɪ amu tie**      obu      amu      ɔnɔ.  
 grandfather      NAME/ dog      DET      be.located      building      DET      mouth  
 ‘Grandpa Anto/the dog is sitting at the entrance of the house.’

#### 3.2.2 *Yiri* versus *yi* ‘be.standing/stand’

Nkami has two ‘standing’ verbs **yi** and **yiri** that are used to characterize entities in relatively upright/vertical positions in relation to horizontal surface. The difference between the two is that generally **yi** is used for inanimate entities, while **yiri** for

animates.<sup>12</sup> For instance, **yi** is used to describe trees and erected structures such as buildings, flag poles, and referents of relatively high heights such as vehicles, bicycles, and fridges, as exemplified in (31).

- (31) a. **Oyi yi** bɔpɔ amɔ yu.  
 tree stand mountain DET self  
 ‘There is a tree standing on the mountain.’
- b. **Obu yi** ɛbã amɔ lɔ.  
 building stand fence DET inside  
 ‘There is a building (standing) in the fence.’

**Yiri**, on the other hand, is used to localize animates of relatively upright positions such as a person or an animal standing on its feet, as illustrated in (32).

- (32) a. **ɔpɪri amɔ yiri** obu amɔ su.  
 man DET stand building DET on  
 ‘The man is standing on the building (roof).’
- b. **ɔkplɪ amɔ yiri** ɛfa amɔ lɔ  
 dog DET stand bush DET inside  
 ‘The dog is standing in the bush.’

### 3.2.3 *Dɛɛ* ‘be.lying/lie’ versus *wudɔɪ* ‘lie/spread/coil’

Unlike the previous pair of locative verbs which may be said to constitute animacy or near animacy pairs, **dɛɛ** and **wudɔɪ** do not. Among other things, **dɛɛ** ‘be.lying/lie’ is used to characterize both animate and inanimate objects in horizontal position with whole or larger part of the body touching the reference object (e.g. table top and bed surface). Thus, it typically characterizes scenarios such as ‘pen lying on table’, ‘dog lying on its side’ and ‘a person lying on a mat’, as exemplified in (33).

- (33) **Oyebi/pen amɔ dɛɛ** ɔkpɔnu amɔ su.  
 boy/pen DET lie table DET on  
 ‘The boy/pen is lying on the table.’

Howbeit, **wudɔɪ** ‘lie/spread/coil’ is prototypically employed to localize flexible entities like a fabric on a surface (34a), and unquantifiable substances and particles such as liquids, grains, and sand/gravels, as (34b) illustrates.

- (34)a. **Otɛbi/tɛgɔ amɔ wudɔɪ** mpa amɔ su.  
 cloth/rag DET lie bed DET on  
 ‘The cloth/rag is (lying) on the bed.’

<sup>12</sup> Birds appear to be exception since speakers generally tend to localize them with **yi** rather than **yiri**.

- b. **Ntʃu/ɲasɪ** **wudʒɪ** tankɪ amɔ lo.  
 water/sand lie barrel DET inside  
 ‘There is water/sand in the tank.’

Apart from these prototypical characterizations, it appears that in all other situations the two verbs contrast (Asante, in preparation). For our purpose here, however, we only focus on their difference in terms of animacy. Thus, although we have indicated that **dɛɛ** ‘be.lying/lie’ is used to localize both animate and inanimate Figures in horizontal configuration with whole or larger part of the body touching the Ground, whenever the inanimate Figure being localized is non-singular or unquantifiable, **wudʒɪ**, rather than **dɛɛ**, is employed. For example, observe in (35) that the same verb **dɛɛ** is used for both singular (35a) and plural (35b) referents because the Figure **ɔsa** ‘human being’ is animate.

- (35) a. **ɔsa** **ku** **dɛɛ** esulo.  
 human being INDEF lie ground  
 ‘There is a person lying on the floor.’
- b. **Asa** **bebiree** **bɛ-dɛɛ** esulo.  
 human being many 3PL-lie ground  
 ‘There are many people lying on the floor.’

Like animates, if an inanimate Figure (here ‘pen’) being localized is singular, as shown in (36a), **dɛɛ** is again used. The use of **wudʒɪ** is inappropriate in such situations, as indicated by the asterisk on the sentence in brackets. However, whenever the inanimate Figure is non-singular **pen bebiree** ‘many pens’, as shown in (36b), **wudʒɪ** rather than **dɛɛ** is employed.

- (36) a. **pen dɛɛ** esulo. (\***pen wudʒɪ** esulo.)  
 pen lie ground  
 ‘There is a pen (lying) on the floor.’
- b. **pen bebiree wudʒɪ** esulo. (\***pen bebiree dɛɛ** esulo.)  
 pen many lie ground  
 ‘There are many pens on the floor.’

In a nutshell, **wudʒɪ** complements **dɛɛ** to localize non-singular/unquantifiable inanimate Figures that are deemed to be in lying position.

#### 4. Human versus Non-human Distinctions

This section focuses on items speakers use to talk about and distinguish between human and non-human referents. Specific areas looked at include: nominal prefixes, concordant subject marking, identity suffixes **anaamu/neemu**, indefinite pronouns **ɔku/eku**, numeral modifier **ba-**, indefinite possessor particle **ke**, and the sitting verbs **tie/tʃma** ‘live’.

#### 4.1 Nominal Prefixes

In congruence with the general tendency, majority of the linguistic items identified in our database are nouns. Synchronically, there is no clearly distinct noun class system in Nkami; at best, one can talk about residues of it. Most nouns have a nominal prefix, which is a vowel or a homorganic nasal. Generally, the following vowels /e, ε, o, ɔ/ are selected for singular nominal prefix marking, while /a/ and homorganic nasals /m, ɱ, ŋ, ɲ, n/ are selected for plural marking.<sup>13</sup> /ɪ, i, u, u/ do not serve as nominal prefixes, unlike other South-Guang languages such as Nkonya where the front high vowels /ɪ, i/ occur as prefixes of some nouns, though sparingly. Looking at the behaviour of nominal prefix marking in Nkami, a generalization can be made that nominals that refer to humans only take ɔ-/o- singular prefixes, while non-human nouns may take any of the singular nominal prefixes. Thus, whereas human nouns do not take e-, ε-, a- nominal prefixes<sup>14</sup>, non-human nouns do in addition to ɔ-, o-. Consider the following human nouns.

(37) Human nouns only take ɔ-/o- prefixes:

o-bi	'child'	o-kisi <sup>15</sup>	'god'
ɔ-sa	'human being'	ɔ-fɔ	'visitor'
ɔ-ɲɪ	'man'	ɔ-tʃɪ	'woman'
o-kunu	'husband'	o-ɲi	'mother'
ɔ-ka	'wife'	ɔ-sɪ	'father'
ɔ-daamu	'friend'	ɔ-sia	'in-law'
ɔ-kua	'co-wife'	ɔ-tabu	'hunter'

Though there are several nouns referring to animals that also take ɔ-/o- prefixes, as exemplified in (38a), there are also some others that take e-/ε- in (38b), and a- in (38c).

(38) a. Nouns referring to animals that take ɔ-/o- prefixes:

o-boobi	'bird'	o-nini	'python'
ɔ-kileɪ	'cat'	ɔ-dɔ	'a type of fish'
ɔ-kwaabi	'a type of fish'	ɔ-sratʃe	'a type of fish (like mudfish)'
ɔ-kpli	'dog'	ɔ-tete	'a wild animal like tiger'

b. Nouns referring to animals that take ε-/e- prefixes

<sup>13</sup> The use of vowel (V) nominal prefix similarly to South-Guang languages, rather than the CV nominal prefix system of the North-Guang languages (cf. Stewart 1970, Snider 1990), is one of the reasons we adduce for the placement of Nkami in the South-Guang.

<sup>14</sup> **Adako** 'concubine/girl friend' is an exception.

<sup>15</sup> As in many Ghanaian cultures such as Akan, there are some entities in Nkami such as **okisi** 'god' and **ɔtʃoma** 'ghost' which are culturally believed to be '(super) human beings' and so do take the human prefixes.

<b>esi</b>	‘a type of fish’	<b>elu</b>	‘bush animal resembling goat’
<b>emoli</b>	‘termite’	<b>efuɔ</b>	‘monkey-like animal’

c. Nouns referring to animals that take **a-** prefix

<b>abibe</b>	‘grasshopper’	<b>apese</b>	‘porcupine-like animal’
<b>apii</b>	‘a yellowish fish’	<b>akpe</b>	‘antelope-like animal’
<b>apofra</b>	‘a type of fish’	<b>atefle</b>	‘cockroach’

Similarly to nouns referring to animals, inanimate nouns may take **ɔ-/o-** prefixes in (39a), **ɛ-/e-** in (38b) or **a-** in (39c)

(39) a. Inanimate nouns that take **ɔ-/o-** prefixes:

<b>odi</b>	‘heart’	<b>osi</b>	‘waist’
<b>ɔɔida</b>	‘chin’	<b>otugo</b>	‘buttocks’
<b>odzo</b>	‘yam’	<b>oyi</b>	‘tree/wood’
<b>ofi</b>	‘age/year’	<b>ɔsowli</b>	‘land’
<b>ofutju</b>	‘soup’	<b>okpesie</b>	‘mortar’

b. Inanimate nouns that take **ɛ-/e-** prefixes:

<b>ewiasi</b>	‘earth/world’	<b>efu</b>	‘fear’
<b>ebi</b>	‘time’	<b>edalo</b>	‘metal/money’
<b>eka</b>	‘debt’	<b>elɔ</b>	‘song’
<b>ɛju</b>	‘head’	<b>ɛkɔnɔ</b>	‘neck’
<b>ɛwi</b>	‘testicles’	<b>ɛkpā</b>	‘bow’
<b>ewei</b>	‘home’	<b>emuɔ</b>	‘clay’

c. Inanimate nouns that take **a-** prefix:

<b>ama</b>	‘back’	<b>atile</b>	‘hand’
<b>abow</b>	‘thorns’	<b>adu</b>	‘medicine’
<b>aya</b>	‘leg’	<b>abi</b>	‘seeds/pebbles’

To reiterate the point thus far, Nkami shows the human-nonhuman distinction here because while human nouns take only **ɔ-/o-** as prefixes, non-human nouns may take any of the singular nominal prefixes in the language.

A further distinction can be made for the plural nominal prefixes. Generally, whereas human nouns take **a-**, non-human animate nouns take homorganic nasal **N-** as plural nominal prefixes. In (40a) are pairs of singular-plural human nouns, while (40b) are non-human.

(40) a. Human nouns take **a-** plural prefix:

SG	PL	Gloss	SG	PL	Gloss
<b>o-bi</b>	<b>a-bi</b>	‘child’	<b>o-kisi</b>	<b>a-kisi</b>	‘deity’
<b>ɔ-sa</b>	<b>a-sa</b>	‘human being’	<b>ɔ-fɔ</b>	<b>a-fɔ</b>	‘visitor’
<b>ɔ-nɔmi</b>	<b>a-nɔmi</b>	‘man’	<b>ɔ-tʃi</b>	<b>a-tʃi</b>	‘woman’

ɔ-ka	a-ka	‘wife’	ɔ-si	a-si	‘husband’
ɔ-sia	a-sia	‘in-law’	ɔ-daamu	a-daamu	‘friend’
ɔ-kua	a-kua	‘co-wife’	ɔ-tabu	a-tabu	‘hunter’

b. Non-human animate nouns take N- plural prefix:

SG	PL	Gloss	SG	PL	Gloss
oboobi	m-boobi	‘bird’	ɔ-kletɪ	ŋ-kletɪ	‘cat’ <sup>16</sup>
ɔ-dabɔ	n-dabɔ	‘duiker’	ɔ-kplɪ	m-kplɪ	‘dog’
e-moli	m-moli	‘termite’	e-lu	n-lu	‘bush goat’
a-bibe	m-bibe	‘grasshopper’	a-hwɪa	n-hwɪa	‘a game’

## 4.2 Loss of Nominal Prefixes

Synchronically, there is a sizable number of nouns in Nkami which do not have nominal prefixes, as exemplified in the following human and non-human nouns below.

(41)a. Human nouns without prefixes:

<b>bleɲaw</b>	‘chief’	<b>dzaasihmɪ</b>	‘sub-chief’
<b>nifahmɪ</b>	‘sub-chief’	<b>benkumhmɪ</b>	‘sub-chief’
<b>naɲmɪ</b>	‘grandpa/chief’		

b. Non-human nouns without prefixes:

<b>fawie</b>	‘tiger’	<b>bamfuru</b>	‘vulture’
<b>kɪlebrɪ</b>	‘chicken’	<b>klalɪ</b>	‘grasscutter’
<b>klɔgɔlɪ</b>	‘mouse’	<b>kpaaburɪ</b>	‘rat’
<b>latʃe</b>	‘gorilla’	<b>lenge</b>	‘crocodile’
<b>sɪalɪ</b>	‘monkey’	<b>lofo</b>	‘deer’
<b>sɪanɪ</b>	‘sheep’	<b>sapa</b>	‘a type of fish’
<b>tɪlɪ</b>	‘goat’	<b>tʃitʃie</b>	‘a type of fish’
<b>frɛlɪ</b>	‘bush cattle’	<b>dumura</b>	‘monkey-like animal’

As the data in (41) exemplify, the dominant majority of nouns that have lost their prefixes are non-human animate nouns. In fact, except for nouns relating to chieftaincy titles, as exemplified in (41a), one does not find human nouns that have lost their prefixes. Moreover, the chieftaincy nouns may not be considered exceptions at all because with the exception of **bleɲaw** ‘chief’ the others are all traceable loanwords from Akan.

<sup>16</sup> Generally, whereas animals that are close to home, e.g. **ɔkletɪ** ‘cat’, **ɔkplɪ** ‘dog’ and **oboobi** ‘bird’, have forms that are different from Akan, those that reside in the forest such as **ɔdabɔ** ‘duiker’, **abibe** ‘grasshopper’ and **ahwɪa** ‘a game animal’ have similar/same forms with Akan. It looks likely that not only are the names of the latter loanwords from Akan, but also the original settlement of Nkamis did not have those ‘forest/wild’ animals. Another possibility, though less likely, is that Nkami speakers have replaced the native names of such ‘forest/wild’ animals with Akan names.

### 4.3 The Identity Suffixes **-anaamu/-nɛɛmu**

Nkami, like some other Kwa languages such as Akan and Nkonya, has some nominals that have dual affixes; that is, some nominals simultaneously take prefix and suffix. This is so because the presence of a nominal suffix is dependent on the presence of a nominal prefix. Thus, all native nouns that have suffixes also have prefixes. There are a couple of nominal suffixes in the language but our attention here is on the identity suffixes **-anaamu/-nɛɛmu**, which help classify entities that share similar qualities. The suffix **-anaamu** is employed to identify nominal categories of human reference (42a), while **-nɛɛmu** classifies non-humans (42b).<sup>17</sup>

(42) a. **-anaamu** goes on human nouns:

<b>ayɔ-anaamu</b>	‘thieves’	<b>mbɔrɔsɛ-anaamu</b>	‘elders’
<b>atʃuma-anaamu</b>	‘ghosts’	<b>asɪ-anaamu</b>	‘in-laws’
<b>afɔ-anaamu</b>	‘siblings’	<b>mbleɲaw-anaamu</b>	‘chiefs’

b. **-nɛɛmu** goes on non-human nouns:

<b>ntɪli-nɛɛmu</b>	‘goats’	<b>mkɔɔli-nɛɛmu</b>	‘dogs’
<b>baagi-nɛɛmu</b>	‘bags’	<b>amangu-nɛɛmu</b>	‘mangoes’

The distinction is well captured in an excerpt of a text provided by our main hunting consultant, Wɔfa Kimpo. After a catch of **onini** ‘python’, he demonstrates in a video the techniques for catching the python and other general information such as their habitat, eating habits and how they prey on other animals including humans. When he was asked about the benefits/uses of pythons, this is what he said:

(43) **ãã, Ntabu-anaamu** kɔ bɛ-ba a baa-bɛ-sɔ.  
 INTJ NAME-IDENT INDEF 3PL-come CFM 3PL.HAB-PDP-buy

Na mu bɔ lɔ kɛ bɛ-yɛɛ baa-fɔ kɔ bɔ  
 CONJ POSS do inside as.for 3PL-say 3PL.HAB-take INDEF do

**bag-nɛɛmu...** ɛna tɔku ɲa ɛɛ **bɛɛti-nɛɛmu,** ɛhẽẽ.  
 bag-IDENT CONJ thing DEM INTJ belt-IDENT INTJ

‘Well, some of the Northerners when they come, they buy. And as for what they use it to do, they say they use some for bags... and this thing... belts, yeah.’

### 4.4 Ba- and Numeral Modifiers

Nkami, like many Ghanaian language such as Akan, Logba and Nkonya, employs a decimal (base ten) number system. This is probably because speakers reckon quantities of items using their fingers, though the etymology of the word **edu** ‘ten’ has

<sup>17</sup> Note that, like some other words ending with rounded high vowel U, final U is usually not pronounced in fast speech, as happens in most Guang languages.

no phonetic relation with **atile** ‘hand’. The cardinal numbers from one to ten, which have cognates in many Kwa languages, are provided in (44).

(44)	<b>ɔkuli</b>	‘one’	<b>asie</b>	‘six’
	<b>apɔ</b>	‘two’	<b>asunu</b>	‘seven’
	<b>asa</b>	‘three’	<b>etwe</b>	‘eight’
	<b>ana</b>	‘four’	<b>akponɔ</b>	‘nine’
	<b>anu</b>	‘five’	<b>edu</b>	‘ten’

When counting or when the cardinal numbers are used as post-head modifiers of non-human nouns, they maintain the same form, as (45) exemplifies.

(45) a.	<b>ɔkpli</b>	<b>ɔkuli</b>	<b>kɛ</b>	<b>nɔ</b>	<b>ni</b>	<b>ɔ-bɛ-dɛ</b>	<b>tʃɪ?</b>
	dog	one	as.for	what	FOC	3SG-FUT-be able	catch
	‘As for only one dog, what (bush animal) can it catch?’						
b.	<b>Mɪ</b>	<b>a-sɪ-anaamɔ</b>	<b>bɛ-bɔ</b>	<b>obu</b>	<b>apɔ</b>		
	1POSS	PL-in-law-IDENT	3PL-have	house	two		
	‘My in-laws have two houses.’						

The same forms **ɔkuli** ‘one’ and **apɔ** ‘two’ are used in (45a-b) because they occur as post-head modifiers of non-human nouns **ɔkpli** ‘dog’ and **obu** ‘house’ respectively. However, when the modifying head noun is human, a functional word (a classifier) **ba** is attached to the numeral, as shown in (46).<sup>18</sup>

(46)	<b>Tʃɪ-se</b>	<b>ba-ana</b>	<b>kɛ</b>	<b>bɛ-bɛ-dɛ</b>	<b>bɔ</b>	<b>nɔ?</b>
	catch-NOML	AGR-four	as.for	3PL-FUT-be.able	do	what
	‘As for four policemen, what can they do?’					

Thus, **ba** is attached to **ana** ‘four’ in (46) because the modifying noun **tʃɪse** ‘policeman’ is a human noun. Moreover, when the numeral slot is occupied by the numeral question word **ammɪ** ‘how many/much’, **ba** is introduced provided the head noun has human reference, as (47) demonstrates.

(47)	<b>Mɪ</b>	<b>a-sa</b>	<b>ba-ammɪ</b>	<b>ni</b>	<b>mɪni-ba?</b>
	2PL.OBJ	PL-person	AGR-how.many	FOC	2PL-come
	‘How many of you (people) did come?’				

In most of these constructions, the head noun could be omitted leaving **ba-** alone. Observe, for instance, the omission of **ɔsa/asa** ‘person/people’ (indicated by  $\emptyset$ ) in

<sup>18</sup> Akan has a similar form **ba** with similar function, which according to Osam (1996) traces its source from the Akan noun **ba** [ɔba] ‘child’. Looking at their similarity in form and semantics (i.e. **ɔba** ‘child’ and **ba** ‘human agreement marker/classifier’), that thesis sounds reasonable. However, one is not certain if same can be said about Nkami since the word for child in Nkami is **obi**, not **ɔba**. As a reviewer rightly suggests, it looks likely though that **ba** is one of the several items borrowed from Akan. The irony, however, is that it appears to the first author that synchronically the use of **ba** is more frequent and entrenched in Nkami than Akan.

(48a-b).

- (48) a. Mɪnɪ            ∅   **a-ba**   **ammɪ**            nɪ            mɪnɪ-ba?  
 2PL.OBJ                    PL-AGR how many   FOC            2PL-come  
 ‘How many of you (people) did come?’
- b. Mɪ                ∅   **ɔ-ba**   **ɔkuli**    kɛ            mɛ-ɛ-dɛ            bɔ   nɔ?  
 1SG.OBJ                    SG-AGR one        as.for        1SG-FUR-be able   do   what  
 ‘As for me (alone), what can I do?’

Note that when **ba** occurs without the modifying head nouns **ɔsa/asa** ‘person/people’ in (48a-b), it acquires the plural **a-** and singular **ɔ-** nominal prefixes of its head nouns. Moreover, **a-ba** and **ɔ-ba** appear more independent in (48a-b) as they are not pronounced as part of the following numeral **ammɪ** ‘how much’ and **ɔkuli**. Nonetheless, the reader should not misconstrue **a-ba** and **ɔ-ba** as independent nouns meaning ‘person/people’ since they cannot occur independently without a numeral or the numeral question word **ammɪ**. For instance, though the sentences in (49a-50a) are acceptable because **asa** ‘people’ is the head noun, those in (49b-50b) are infelicitous because **aba** appears alone as the head noun without modifying numeral.

- (49) a. **A-sa**            yɔ        bɔ        mfasɔɔ.  
 PL-person        body        have        importance  
 ‘Human beings/people are important/useful.’
- b. \***A-ba**            yɔ        bɔ        mfasɔɔ.  
 PL-AGR        body        have        importance  
 ‘Human beings/people are important/useful.’
- (50) a. Kofi    ma-a-kpa            **a-sa**            kɔraa.  
 Kofi    1SG -NEG-like        PL-person        at.all  
 ‘Kofi does not like human beings at all (he is antisocial).’
- \*Kofi    ma-a-kpa            **a-ba**            kɔraa.  
 Kofi    1SG-NEG-like        PL-AGR        at.all  
 ‘Kofi does not like human beings at all.’

#### 4.5 The Non-human Possessed Particle **kɛ**

Additional evidence of human-nonhuman distinction comes from one of the several uses of the multi-functional particle **kɛ**. **Kɛ** may be used as a possessed pronoun in place of a possessed noun, as shown in (51).

- (51) a. Mɪ        **obu**        nɪ.                    →        b. Mɪ        **kɛ**        nɪ.  
 1POSS   house   is.this                    1POSS   PART   is.this  
 ‘This is my house.’                                    ‘This is mine (my own is this).’

- c. **ɔkplɪ** amɔ dʒi Kofi **kɛ**.  
 dog DET be Kofi PART  
 ‘The dog is for Kofi (Kofi’s own).’

Thus, **kɛ** here translates to mean something like ‘own’ and it can substitute for possessed nouns. For instance, it replaces **obu** ‘house’ (51a) and **ɔkplɪ** ‘dog’ in (51b). However, this function of **kɛ** is limited to only non-human nouns, as shown in (51). For instance, observe that (52b) and (52c) are infelicitous because **kɛ** substitutes for **obi** ‘child’ and **ɔtʃɪbi** ‘girl’ respectively.

- (52) a. Mɪ **bi**<sup>19</sup> ni. → b. \*Mɪ **kɛ** ni.  
 1POSS child is.this 1POSS PART is.this  
 ‘This is my child.’ ‘This is mine (my own is this).’
- c. \***ɔtʃɪbi** amɔ dʒi Kofi **kɛ**.  
 girl DET be Kofi PART  
 ‘The girl is for Kofi (Kofi’s own).’

#### 4.6 Indefinite Pronouns **ɔku**/**ɛku**

Yet more evidence of human-nonhuman distinction is seen in the behaviour of the indefinite pronouns **ɔku** and **ɛku**. They are based on the form **ku** ‘indefinite determiner’ used to specify unknown or unspecified quantities of entities. **ɔku** is used for entities of human reference while **ɛku** is used for inanimates, as illustrated in (53).

- (53) a. **ɔku** ba mi.  
 someone come.PST here  
 ‘Someone came here.’
- b. **ɛku** baale.  
 some be.good  
 ‘Some are good.’

**ɔku** in (53a) can only index a human being, while **ɛku** in (53b) can only index a non-human item. Moreover, an enclitic **adʒɛ** may be attached to the indefinite pronouns to derive **ɔkuadʒɛ** ‘everyone’ and **ɛkuadʒɛ** ‘each one’. Examples (53a-b) are altered here as (54a-b).

- (54) a. **ɔku = adʒɛ** ba mi.  
 someone=PART come.PST here  
 ‘Everyone came here.’
- b. **ɛku = adʒɛ** baale.  
 some=PART be.good  
 ‘Each one is good.’

#### 4.7 The ‘Sitting’ Verbs **tie**/**tfɪma**

In section 3.2.1, we observed that the two ‘sitting’ verbs **tɪgɛ** and **tie** differ on the basis of animacy; **tɪgɛ** is generally used to localize inanimate Figures while **tie** localizes animate Figures. Nonetheless, we show here a situation where **tie** localizes only humans but not non-human animates. **Tie** has an allolexical form **tfɪma** which is used in all other situations save the present continuative. As happens in some

<sup>19</sup> Human noun prefixes **ɔ-/o-** delete when they occur after possessive pronouns.

languages such as Akan, Logba (Dorvlo 2008), and Likpe (Ameka 2007), **tie** and **tʃma** can both be extended to talk about settlements in which case they index ‘live/settle in a place’, rather than the postural meaning of ‘be.located on base/sit’, as we saw in section 3.2.1 above. Consider the following.

- (55) a. Kofi **tie** Shanghai.  
 Kofi live.PRS Shanghai  
 ‘Kofi lives in Shanghai (?Kofi is sitting in Shanghai).’<sup>20</sup>
- b. Kofi **tʃma** Shanghai.  
 Kofi live.PST Shanghai  
 ‘Kofi lived in Shanghai (\*Kofi sat in/at Shanghai).’

When **tie** and **tʃma** are extended to talk about settlements, it appears that the category of referents that can be localized with **tie** is limited to humans. Thus, native speakers generally disapprove of (56a), for instance, where the referent that does the ‘living’ is **ɔkpli** ‘dog’, a non-human. In order to characterize a similar scenario for animals, the verb **tʃu** ‘come from/originate’ is used, as (56b) illustrates.

- (56) a. \*ɔkpli amu **tie** Kimpo mu ewie.  
 dog DET live.PRS Kimpo POSS house  
 ‘The dog lives in Kimpo’s house.’
- b. ɔkpli amu **tʃu** Kimpo mu ewie.  
 dog DET come.from Kimpo POSS house  
 ‘The dog comes from/lives in Kimpo’s house (It is for Kimpo).’

Thus, Nkami speakers appear to have the conception that *living*, in the sense of *settlement*, is a purposeful act that requires creatures of ‘higher minds’ to undertake. The dog, as well as all other animals, does not have that capacity and so can only ‘originate from’ a place (or be owned), and thus cannot be said to be ‘living/settling’ in a place.

## 5. Neutralization

This section canvasses three domains where some of the animacy distinctions discussed in this article have been compromised in the grammar. They relate specifically to the forms and behaviours of the third person subject and object pronouns.

### 5.1 3SG Pronoun *ɔ* in the Habitual

Unlike the future, progressive and perfect, the habitual is not morphologically marked in Nkami. Syllables in a grammatical/phonological word, consisting of a

<sup>20</sup> This interpretation (sitting) appears to be only appropriate if the distance between Shanghai and the speaker’s location is not far, and the Figure (Kofi) will return to the deictic center a short period (most likely within the same day) after the speech.

subject pronoun and a verb stem, generally associate with high tones when a sentence is said in the habitual, as (57) exemplifies, where **pwie** is ‘leave/exit’ and the initial items are subject pronouns.

- (57) a. **mí-pwíé** ‘I leave (go out).’  
 b. **wó-pwíé** ‘You leave (go out).’

Besides, there appears to be an emerging habitual marker **ɔɔ-** which we suspect to be a fusion of the third person singular pronominal prefix **ɔ-** and a previously existing habitual marker. It is incipient because, apart from the third person, many speakers also use it when the subject of a sentence is the first person plural pronoun **ani** ‘we’, as (58) illustrates.<sup>21</sup>

- (58) a. Ama **ɔɔ-pwie.** ‘Ama leaves (goes out).’  
 b. **ani-ɔɔ-pwie.** ‘We leave (go out).’

Away from the excursus, as we observed in section 3.1.1, Nkami makes animacy distinctions in 3SG subject pronouns through the usage of **ɔ-** for an animate referent and **ɛ-** for an inanimate referent. For convenience, the distinction is further illustrated in (59), where **ɔ-** substitutes for the animate referent **ɔtʃi** ‘woman’ (59a), while **ɛ-** supplants the inanimate **owi** ‘sun’ (59b).

- (59) a. **ɔtʃi amu** lɛ́-pwie. → **ɔ-lɛ́-pwie.**  
 woman DET PROG-leave 3ANM-PROG-leave  
 ‘The woman is leaving.’ ‘She is leaving.’  
 b. **owi amu** lɛ́ -pwie. → **ɛ-lɛ́ -pwie.**  
 sun DET PROG-leave 3INANM-PROG-leave  
 ‘The sun is appearing.’ ‘It is appearing.’

This distinction is upheld in all tense-aspects save the habitual. Currently, the 3SG subject pronoun for both animate and inanimate referents is realized as **ɔɔ-** in the habitual. Consider (60) which is a reproduction of (59) in the habitual.

- (60) a. **ɔtʃi amu** ɔɔ-pwie. → **ɔɔ-pwie.**  
 woman DET AGR.HAB-leave 3SG-HAB-leave  
 ‘The woman leaves/goes out.’ ‘She leaves/goes out/appears.’  
 b. **Owi amu** ɔɔ-pwie. → **ɔɔ-pwie.**  
 sun DET AGR.HAB-leave 3SG.HAB-leave  
 ‘The sun appears.’ ‘It appears.’

Thus, presently speakers of Nkami use **ɔɔ-** for both animate and inanimate

<sup>21</sup> Some speakers, especially the elderly, show dislike for the use of **ɔɔ-** with the first person plural pronoun **ani** ‘we’.

referents in the habitual, such that  $\text{ɔɔpwie}$  in (60) could either index ‘she (woman) goes out /leaves/appears’ or ‘it (sun) appears’.

## 5.2 3SG Pronoun *a-* in the Future and the Habitual Negatives

Another source of animacy neutralization in the 3SG subject pronominal forms is evident in the future and habitual negative situations. Precisely, both the third person animate and inanimate subject pronouns  $\text{ɔ-}$  and  $\text{ɛ-}$  are realized as *a-* in both the future and habitual negatives. Consider the following.

- (61) a.  $\text{ɔɔfi amu}$      $\text{mà-ba.}$                      $\rightarrow$                      $\text{a-mà-ba (*ɔ-mà-ba).}$   
           woman DET    FUT.NEG-come                    3SG-FUT.NEG-come  
           ‘The woman will not come.’                    ‘She will not come.’
- b.  $\text{ɲaw amu}$      $\text{mà-ba.}$                      $\rightarrow$                      $\text{a-mà-ba (*ɛ-mà-ba).}$   
           rain DET        FUT.NEG-come                    3SG-FUT.NEG-come  
           ‘The rain (it) will not rain.’                    ‘It will not rain/come.’

As we observe in (61), the distinction between  $\text{ɔ-}$  and  $\text{ɛ-}$  is neutralized in the future negative since both are currently produced as *a-*. Unlike the habitual aspect as treated in section 5.1, the trigger of change from  $\text{ɔ-/ɛ-}$  to *a-* is deducible from the phonological environment. Thus, the pronominal mid vowels  $\text{ɔ-/ɛ-}$  are realized low *a-* because of the influence from the low vowel in the future negative morpheme  $\text{mà}$ .<sup>22</sup> Identical phenomenon occurs in the habitual negative here.

- (62) a.  $\text{ɔɔfi amu}$      $\text{má-ba.}$                      $\rightarrow$                      $\text{a-má-ba (*ɔ-má-ba).}$   
           woman DET    HAB.NEG-come                    3SG-HAB.NEG-come  
           ‘The woman does not come.’                    ‘She does not come.’
- b.  $\text{ɲaw amu}$      $\text{má-ba.}$                      $\rightarrow$                      $\text{a-má-ba (*ɛ-má-ba).}$   
           rain DET        HAB.NEG-come                    3SG-HAB.NEG-come  
           ‘It does not rain.’                    ‘It does not rain/come.’

Observe that the difference between the future and habitual negatives is one of tone; while the future negative morpheme  $\text{mà}$  associates with a low tone, that of the

<sup>22</sup> The reader should not misconstrue that anytime  $\text{ɔ-}$  and  $\text{ɛ-}$  precede a *Ca* syllable (e.g.  $\text{ɔsa}$  ‘human being’  $\text{ɔ-ba}$  ‘he should come’ and  $\text{ɛ-ba}$  ‘it should come’),  $\text{ɔ-}$  and  $\text{ɛ-}$  change to become *a-*. As we have already indicated above, the domain of application of this lowering process is the habitual and future negative clauses, where the trigger of assimilation is the habitual/future negative markers  $\text{má-/mà}$  and the target(s) of assimilation is the third person singular subject pronouns  $\text{ɔ-/ɛ-}$ . We suggest that the low vowel of  $\text{má-/mà}$  triggers the change of  $\text{ɔ-}$  and  $\text{ɛ-}$  to become *a-* in (62) because when  $\text{má-/mà}$  are replaced with the progressive  $\text{mɔnɛ-}$ , perfect  $\text{mɔntri-}$  and the past  $\text{mɔn-}$  negatives, as shown in (1a), (1b) and (1c) respectively,  $\text{ɔ-}$  and  $\text{ɛ-}$  remain unchanged.

- (1) a.  $\text{ɔ-mɔnɛ-ba}$      $*[\text{a-mɔnɛ-ba}]$                     ‘She/he is not coming.’  
       b.  $\text{ɔ-mɔntri-ba}$      $*[\text{a-mɔntri-ba}]$                     ‘she/he has not come.’  
       c.  $\text{ɛ-mɔn-ba}$          $*[\text{a-mɔn-ba}]$                     ‘It did not come.’

habitual negative **má** associates with a high tone.

### 5.3 The 3SG Object Pronoun versus Ambitransitive Verbs

The final source of animacy neutralization adduced here comes from the form and behaviour of the 3SG object pronoun **mu**. Recall from section 3.1.6 that, generally, whereas the site of an animate object NP is obligatorily replaced with the object pronoun **mu** when pronominalized, that of an inanimate object receives zero marking  $\emptyset$ . For the sake of convenience, we repeat examples (20a-21a) here as (63a-b), where **mu** replaces **ɔkpli** ‘dog’ (animate), and  $\emptyset$  substitutes for **ɔfɔdɔɪ** ‘broom’ (inanimate).

- (63) a. Kofi bɛ-sɔ **ɔkpli amu**. → Kofi bɛ-sɔ **mu**.  
 Kofi FUT-buy dog DET Kofi FUT-buy 3SG.ANM.OBJ  
 ‘Kofi will buy the dog.’ ‘Kofi will buy it.’
- b. Kofi bɛ-sɔ **ɔfɔdɔɪ amu**. → Kofi bɛ-sɔ  $\emptyset$ .  
 Kofi FUT-buy broom DET Kofi FUT-buy  
 ‘Kofi will buy the broom.’ ‘Kofi will buy it.’

This distinction is however curtailed when the main verb in the clause is an ambitransitive verb. The phenomenon is illustrated with the verb **fɪ** ‘lose/disappear’; where (64a) is the underlying sentence and (64b-c) derive from it.

- (64) a. Kofi lɛ-fɪ **ɛdalo amu**.  
 Kofi PRF-lose money DET  
 ‘Kofi has lost the money’
- b. \*Kofi lɛ-fɪ  $\emptyset$ .  
 ‘Kofi has lost it.’
- c. Kofi lɛ-fɪ **mu**.  
 ‘Kofi has lost it.’
- d. Kofi lɛ-fɪ  $\emptyset$ .  
 ‘Kofi is lost/has disappeared.’

Based on the animacy constraint regarding the 3SG object pronoun, example (64b) **Kofi lɛfɪ** which has a null representation of the antecedent object NP **ɛdalo** ‘money’ should have been the appropriate replacement of the underlying sentence **Kofi lɛfɪ ɛdalo amu** (64a). However, this is not so; rather, it is (64c) **Kofi lɛfɪ mu**, which overtly replaces the antecedent object with **mu**, which appropriately indexes the meaning contained in (64a) (i.e. ‘Kofi has lost the money’). However, since example (64c) has an overt object pronoun **mu** ‘him/her/it’, it is ambiguous. That is, out of context, **mu** could refer to an animate or inanimate referent; hence, **Kofi lɛfɪ mu** could either index: ‘Kofi has lost it (e.g. money: inanimate)’ or ‘Kofi has lost it (e.g. sheep: animate)’. In other words, the constraint on animacy distinction requiring that

only the site of an animate object NP receives an overt object pronominal marking while that of an inanimate receives zero marking is compromised, since the verb **fɪ** ‘lose/disappear’ requires speakers to obligatory fill the slot of an antecedent object NP with the object pronoun **mu** irrespective of its animacy status.

The ambiguity/neutralization created by the violation of the animacy constraint on object pronominalization is, however, permitted because of the transitivity value of the verb involved, **fɪ** ‘lose/disappear’. **Fɪ** is an ambitransitive verb which can be used both transitively (64a) and intransitively (64d). Like other ambitransitive verbs in the language, **fɪ** has different interpretations depending on whether it is used transitively or intransitively in a clause. For instance, when used intransitively in (64d) (i.e. **Kofi lefɪ** ‘Kofi has disappeared/is lost’), the understanding is that it is the intransitive subject (S) **Kofi** who has undergone the change/state expressed by the verb **fɪ** ‘lose/disappear’. However, when used transitively (64a, c), it is the object argument (O) **ɛdalo** ‘money’ which undergoes the change/state denoted by the verb. Put differently, in order to avoid the ambiguity or difficulty of deciding whether it is the (S) or (O) which undergoes a change/state expressed by **fɪ**, Nkami speakers rather violate the constraint on animacy by overtly stating the position of an inanimate antecedent object NP. Thus, the constraint requiring that the transitivity value of **fɪ** be obeyed ranks higher than one that requires animacy status of objects be maintained in the language. Other verbs that behave like **fɪ** include: **mumonu** ‘crumble/squeeze’, **kɪlaga** ‘tilt’, **bie** ‘burst’, **duidui** ‘char’ to ‘burn’, **bra** ‘break’, **tʃidza** ‘spoil’, **pira** ‘injure/wound’, **suru** ‘be of age/spoil’, **doŋ** ‘soak’, **ɲa** ‘grimace/go bad’, **wili** ‘become cold’, **tã** ‘plug’, **wu** ‘blunt/die’, **pɔŋ** ‘close’ and **tʃɪni** ‘wake’.

## 6. Conclusion

An attempt has been made in this paper to reckon and explain in detail the range of linguistic resources that Nkami speakers employ to distinguish humans from non-humans, and animates from inanimates. It has provided rich and varied evidence particularly in forms, nature and behaviours of pronouns, demonstratives, nominal affixes, nominal modifiers, dispositional verbs in basic locative constructions, among others. Areas where some of the animacy distinctions have been neutralized were also canvassed.

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## **A SOCIOPHONETIC STUDY OF YOUNG NIGERIAN ENGLISH SPEAKERS**

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### **Abstract**

This study examines the variable use of r-liaison and boundary consonant deletion processes in the speech of young Nigerian speakers of English. This is with a view to confirming the hypothesis that continuous speech processes (CSPs) can be socially differentiated in a speech community. A sample of 180 young educated Nigerian English (NigE) speakers, evenly stratified into gender and class, voiced 19 utterances and a short passage into digital recording devices and filled in 180 copies of a structured questionnaire. All tokens of r-liaison and consonant deletion produced at word and morpheme boundaries were identified and analysed statistically, using the Analysis of Variance (ANOVA). The only speech variation observed in the data was between male and female speakers in boundary consonant deletion, ( $F(1, 176) = 6.24, p = .013$ ). The findings did not sufficiently demonstrate variability in the speech patterns of young NigE speakers in relation to r-liaison and boundary consonant deletion processes.

**Key words:** connected speech, sociophonetics, r-liaison, boundary consonant deletion, Nigerian English.

### **Introduction**

Elaborate attention has not been paid to social variation research in the L2 varieties of English (Huber and Brato 2008). In Nigeria, for instance, most variationist studies have been confined to the level of education or region of speakers (Brosnahan 1958, Jibril 1982, Sogunro 2012). This is not unconnected with the cynicism of scholars on the applicability of the Labovian model to the multilingual environment of most L2 societies.

First, Labov's studies were carried out among native speakers who were mainly monolinguals, and so there was no issue with the speakers' mastery of the language. Second, the kind of elaborate social class system upon which his studies

were based is non-existent in Nigeria. Besides, factors like wealth and political status do not usually correlate with competence in the use of English in the L2 setting, as education is not necessarily a key factor of success.

Nevertheless, all aspects of the Labovian model and its methods are very relevant to the Nigerian sociolinguistic environment. In the first instance, its ethnic/regional approach to variation is appropriate in Nigeria which is made up of different ethno-linguistic groups. This is because speech production can vary according to ethnicity or region of speakers (Guy 1981, Horvath 1985, Jibril 1979, 1982; Labov 1966, Trudgill 1974). Again, Labov's (1963, 1966, 1990, 1991) position that speakers' gender and age are key factors of speech variation is relevant to any speech community, given human biological and cultural differences.

Lastly, although social class is much more pronounced amongst the native speakers of English, it cannot be completely discounted in the L2 setting. The reason is that class difference is inherent in every society, though at varying levels and in terms of different factors ranging from economic to cultural and political, and Nigeria cannot be an exception. The Nigerian society, for instance, is essentially polarised into haves and have-nots on the basis of economic and political advantages that a class has over the other. This determines to a large extent the quality of education, level of social exposure and opportunities available to members of each class, which may, in turn, influence their speech.

Given the above scenario therefore, it becomes imperative to begin to pay attention to class as a social variable in the L2 setting. This is the course this study attempts to chart by examining the use of r-liaison and boundary consonant deletion processes in the speech of young Nigerian speakers of English in order to establish possible correlations of these features with gender and social class in NigE.

### **Research Questions**

The study intends to answer the following research questions:

- (a) Do gender and class variations exist in young NigE speakers' use of the r-liaison process?
- (b) Does the boundary consonant deletion process correlate with gender and social class of young NigE speakers?

### **Connected Speech Processes**

Words are not usually spoken in isolation but in a fluent continuous stream. In connected speech therefore, discreteness of segments marked by phonemes is usually neutralised, as sounds tend to slur into one another (Pike 1948). Adjacent segments do influence each other in varying degrees, especially at morpheme and word boundaries in rapid, casual speech (Nolan and Kerswill 1990, Roach and Widowson 2001). The

modifications that occur to segments in fluent speech may be phonemic alterations or simple allophonic realisations whereby less prominent consonants, vowels, or syllables in words are altered or deleted; contiguous sounds resemble each other, or a sound is inserted into another (Kerswill 1985). Sometimes, the resultant sound may even be alien to the phonemic inventory of the language in question. Nolan and Kerswill (1990) buttress this claim with the example of an English utterance: *I don't suppose you could make it for five*, transcribed phonemically as /ai deunt səpəuz ju: kod meik it fə: faiv/, but which becomes [nspeuzxebme:xiffaiv] through the processes of reduction, lenition, assimilation and deletion when rendered in rapid speech.

These processes by which the explicit, dictionary-type forms of sounds are converted to the phonetic properties of fluent speech by a variety of reduction and simplification processes (Nolan and Kerswill 1990) are what are technically referred to as connected speech processes (CSPs). Among these are assimilation, reduction, elision (deletion), lenition, liaison (linking), epenthesis (insertion), juncture, and so forth.

The occurrence of CSPs has largely been traced to a number of sources. One of them is articulatory economy, which is an attempt to maximise articulatory ease when pronouncing adjoining sounds in connected speech (Abercrombie 1967, Foulkes 2006). It has been established that very fast speech may lead to articulation of shorter duration, increased overlap, and greater articulatory undershoot (Foulkes 2006).

On the contrary Ohala (1983) is of the opinion that changes in speaking rate cannot affect all sounds equally, since the degrees of inertia and speed movement of the articulators are not the same. He believes that CSPs are rather products of limitation of the speech mechanism and/or operations of aerodynamic principles in the vocal tract. In other words, these processes result from variation in the structures of the vocal tract. Citing the example of stops which usually change to affricate in the environment of close vowels or palatal /j/ (e.g. the pronunciation of *tune* as [tʃʌn] in some varieties of British English), he argues that such sound change is not articulatorily motivated but is due to the aerodynamics of the vocal tract setting.

Again, the idea of mechanical determination of CSPs has been proved inadequate. CSPs have been discovered to differ from one language, dialect or individual to another (Byrd 1994; Laver 1994); whereas, the innate constraints of the vocal tracts are universal (Foulkes 2006). For instance, regressive voicing assimilation is not permitted in RP, whereas it is found in some Scottish accents (e.g. the medial consonant cluster in *birthday* may be pronounced [-ðd-]) and in French (e.g. /avek/ may become [aveg] in “avec vous” [aveg vu]). CSPs, then, are determined by language-specific rules which dictate what particular processes are to be allowed in a particular language or dialect (Byrd 1994, Kerswill 1987, Laver 1994, Nolan & Kerswill 1990).

It is for this reason that Kerswill (1985, 1987) opines that CSPs can be socially differentiated depending on regional affiliation, age, sex and socio-economic class of speakers; and may be employed or avoided by members of a particular sociolinguistic group. This study, therefore, attempts to examine such variation in two connected speech processes (r-liaison and boundary consonant deletion) among young NigE speakers, differentiated by gender and social class.

### **R-liaison in Nigerian in English**

R-liaison and consonant deletion are two of the connected speech processes found at varying degrees in NigE. R-liaison, comprising linking and intrusive /r/, refers to insertion of /r/ in-between two adjacent vowels to fill a hiatus at word boundary for euphonic purposes (Oladipupo 2014a, Skandera & Burleigh 2005). In linking /r/, an orthographic *r* is articulated in-between the contiguous vowels, e.g. *for ever* [frə və], *after a while* [æftrə wail]; while *r* is absent but pronounced in the same position in intrusive /r/, e.g. *media event* [mi:dɪər ɪvent], *idea of* [aɪdɪər əv].

In NigE, r-liaison is not so pervasive. The few scholars (e.g. Awonusi 2004, Oladipupo 2014a, b; Simo Bobda 2007) who have attempted to explore its operation are unanimous that this feature of speech is not heard very often among NigE speakers. Awonusi (2004), for instance, is of the view that the linking /r/ usage in Nigerian English Accent is consistent with RP only in such short phrases as *for a while, here and there, after all*, etc., while the intrusive /r/ is not found at all. This sentiment is also shared by Simo Bobda (2007) who claims that NigE does not observe the r-insertion rule (the phonological rule governing applications of linking /r/ at word boundaries in RP) as found in words like *four o'clock* [fɔ: ɒklɒk], and far away [fa: əweɪ].

Oladipupo (2014a) identifies linking and intrusive /r/ as connected speech processes found in NigE but categorises them as minor processes used sparingly by a minority of speakers in Nigeria. He attributes the low occurrence of r-liaison to the tendency for NigE speakers to pronounce every word as distinct as possible in connected speech (due to the syllable-timed rhythm of NigE where each syllable tends to occur at regular time intervals) and a lack of awareness for the speech feature in NigE.

However, Oladipupo (2014b) does not only establish the claim that r-liaison is scarcely found in NigE, he also examines further its social and linguistic distribution in educated Yoruba English (EYE), a sub-variety of NigE, and finds that the feature shows evidence of social and linguistic patterning. It correlates with the adults' speech and occurs, predominantly, in-between grammatical items, such as *there are, more of you* and *after a while*, where the feature has been lexicalised due to continuous use. In

view of this discovery, the present study extends inquiry into the social variation of r-liaison to representatives of young speakers in the entire country.

### **Consonant Deletion in Nigerian English**

Boundary consonant deletion is a process by which consonant clusters at word or morpheme boundaries are simplified in connected speech by deleting one or more of the clusters to maximise ease of articulation, e.g. [faun faɪv] *found five*, [dʒʌs wʌns] *just once*.

Previous studies are agreed that the consonant deletion process is a common phenomenon in NigE (Jibril 1982, Oladipupo 2014c) and indeed in African English accents generally (Simo Bobda 2007). Citing instances of postvocalic, syllable/word final and coda cluster deletion of certain consonants (e.g. [sɪstɪ] *sixty*, [tʃaɪl] *child*, [ə taɪms] *at times*, [kʊ sʌfə] *could suffer*), Jibril (1982) confirms this fact and associates the trend with fast speech or the need for consonant cluster simplification (the need to reduce a cluster of consonants word-internally or at a boundary).

Oladipupo (2014c) is also of the opinion that NigE, like many other varieties of English (native and non-native), tends towards elision of consonants at word and morpheme boundaries, especially at the coda position of the first of two contiguous words, e.g. [kep kwaiət] *kept quiet*, [dʌn baɪ] *don't buy*. He, however, attributes this trend to consonant cluster reduction, rather than fast speech. The present study, however, is an attempt to examine the social distribution of this feature of speech amongst young Nigerian speakers which previous studies did not pay attention to.

### **Sociophonetic Variation**

While sociolinguistics deals with all aspects of language variation, sociophonetics studies only socially-conditioned phonetic variation in speech that correlates with social factors like speaker's gender, age or social class (Honey 1997, Foulkes and Docherty 2006). The goal of sociophonetic research is to blend both sociolinguistic and phonetic methods, techniques and principles with a view to establishing that language variation is not only systematic but also embedded with social meaning (Hay and Drager 2007). In doing this, sociophonetic work has been interacting with other fields of study like first and second language acquisition, forensic linguistics, dialectology, conversation analysis and computational linguistics, among others (Foulkes and Hay 2015).

The emergence of this research tradition has been spurred by the view that language varies, especially at the phonetic level. It is generally held that speech variability may be influenced by speakers' social backgrounds – gender, age, social class and ethnicity (Labov 1966, McCarthy 2012). But beyond these factors, variation

in speech has also been accounted for by groups and social networks affiliation (Milroy 1987, Eckert 2000) and communicative context which comprises linguistic style or register of speech, social context, the topic of discussion, the addressee and the intention of the speaker (Foulkes 2006).

Sociophonetic research is not limited to speech production, but also extends to speech perception (Foulkes 2006, Clopper & Pisoni, 2005, Thomas 2002). Specifically, extensive work has been done on segmental variation from both auditory and acoustic perspectives (e.g. Alan and Stuart-Smith 2011; Kendall & Fridland 2011, Schrimpf 2013). A few studies have also been conducted to capture regional and social speech variation at the suprasegmental level, especially on aspects of intonation (Warren 2005), rhythm (Carter 2005) and tonal alignment (Nolan 2002). Sociophonetic variation has also been reported in the subsegmental aspects of speech, in forms of the relative duration, strength or temporal coordination of articulatory gestures (Docherty & Foulkes 2005, Foulkes & Docherty 2006, Nolan & Kerswill 1990, Scobbie 2005).

In NigE, studies that employ the sociophonetic tradition to examine the subsegmental features of connected speech are very scarce. This study, therefore, is an attempt to explore this research dimension. The focus on young speakers is motivated by the fact that they are usually regarded as linguistic innovators and agents of change, and their speech patterns can provide insight into the direction of sound change in a speech community (Kerswill 1996).

### **Methodology**

A sample of 180 young educated NigE speakers (between 18 and 35 years) was drawn, through stratified and purposive techniques, from the six geo-political zones in Nigeria (North West, North East, North Central, South West, South East and South-South). This was with a view to selecting participants who are representative of young speakers of English across the entire country.

The participants comprised students of public and private higher institutions as well as members of the National Youth Service Corps (fresh graduates observing the one-year mandatory service to the nation) in those parts of the country. The choice of students and graduates was motivated by the need to sample educated speakers for the research. The young speakers so selected from all the geo-political zones were stratified into gender and social class without consideration for their ethnic backgrounds (male-low class: 45 speakers; male-high class: 45 speakers; female-low class: 45 speakers; female-high class: 45 speakers).

Their social class statuses were determined based on such indices as family socio-economic background, parents' occupation, school type (high fee-paying private university or low-cost public university), access to wealth and international exposure;

all derived from the questionnaires administered to each of them. For instance, the parents of high social class speakers were high-ranking entrepreneurs, professionals and senior management staff of their organisations. The high social class participants themselves were undergraduates and graduates of high fee-paying private universities in Nigeria, and had had the privilege of travelling to Europe and the Americas for the summer on several occasions; a fact that lends credence to their parents' class status. Parents of participants in the low social class category, on the other hand, were low-income earners, while the speakers themselves were not as privileged as the other group.

The researcher and his trained research assistants visited the participants in their various institutions and places of primary assignment and administered to them, on one-on-one basis, 180 copies of a structured questionnaire and a test comprising 19 utterances and a short passage (see the Appendix), both containing potential r-liaison and boundary consonant deletion sites. The questionnaire was meant to verify and identify their social backgrounds (whether male or female; low or high social class).

Having been informed of the purpose of the research and assured of the confidentiality of their responses, they were instructed to voice, into digital recording devices, Test 1 as responses to certain questions from the researcher and produce Test 2 as naturally as possible. The initial attempt of each participant was recorded and then played back to verify whether the conversations sounded casual and natural enough. The final recording was made after that had been ascertained

### The Data

The relevant items, extracted from Tests 1 and 2, are shown in Table 1 and Table 2 below.

**Table 1. R-liaison process**

Item	Liaison Type
Peter <u>at</u>	Linking /r/
<u>more of</u> him	"
after <u>a</u> while	"
<u>their</u> action	"
<u>wore a</u> black dress	"
inquire <u>about</u>	"
colour <u>of</u>	"
<u>for</u> all	"

there are	"
over eat	"
power-assisted	"
law and order	Intrusive /r/
idea of it	"
media event	"

---

Table 2. Boundary Consonant deletion

doesn't she	won't do it	kept quiet	exact colour
test drive	don't buy it	jumped well	equipped with
fixed price	found five	old man	cold launch
seemed glad	robbed both	advertised car	

### Statistical Analysis and Results

All cases of r-liaison (linking and intrusive /r/) and consonant deletion produced by the participants at morpheme and word boundaries were allotted 1 mark each, while absence of liaison and deletion was assigned 0. The scores were analysed statistically, using the Analysis of Variance (ANOVA), based on gender and class of speakers. The two dependent variables (r-liaison and boundary consonant deletion) were analysed separately and their results were reported before discussion.

#### R-Liaison

In view of the small number of tokens of r-liaison produced by the participants, we decided to combine the individual scores for linking and intrusive /r/ for the purpose of calculating the mean scores for gender and class variables in r-liaison. Table 3 shows the breakdown of the mean scores.

Table 3. Mean scores for r-liaison by gender and class variables

Gender	Class		Gender agg. means
	Low	High	
Male	0.889	0.800	0.844
Female	0.822	1.044	0.933

Class agg. means	0.856	0.922
		Grand Mean
		0.889

Table 3 suggests that only a little difference existed between male and female speakers. While the males had a mean score of 0.844, the females' score was slightly higher (0.933). The same trend was found between the two social classes. The high class speakers had only a little higher mean score (0.922) than the low class (0.856). In order to determine the significance of the results, therefore, a univariate Analysis of Variance (ANOVA) was carried out, with participants' scores as the dependent variable and gender and class as independent variables, using the IBM SPSS statistics 20 package. The ANOVA results are presented in Table 4 below.

**Table 4. Results of ANOVA analysis for r-liaison**  
**Tests of Between-Subjects Effects**

Dependent Variable: R-liaison

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	1.644 <sup>a</sup>	3	.548	.459	.711
Intercept	142.222	1	142.222	119.120	.000
Gender	.356	1	.356	.298	.586
Class	.200	1	.200	.168	.683
Gender * Class	1.089	1	1.089	.912	.341
Error	210.133	176	1.194		
Total	354.000	180			
Corrected Total	211.778	179			

a. R Squared = .008 (Adjusted R Squared = -.009)

The ANOVA results in Table 4 confirmed absence of gender variation, ( $F(1,176) = 0.298, p = .586$ ); class variation, ( $F(1,176) = 0.168, p = .683$ ); and group interaction, ( $F(1,176) = 0.912, p = .341$ ). This implies that no variation was found amongst the participants in r-liaison usage.

### Boundary Consonant Deletion

The mean scores for the independent variables (gender and class) were calculated from the individual scores in boundary consonant deletion process. Table 5 shows the mean scores for each of the social variables.

**Table 5. Mean scores for consonant deletion by gender and class variables**

Gender	Class		Gender agg. means
	Low	High	
Male	8.844	10.178	9.511
Female	8.756	8.356	8.556
Class agg. means	8.800	9.267	
	Grand Mean		9.033

Table 5 reveals a considerable difference between male and female participants in boundary consonant deletion. Aggregated mean scores of 9.51 for males and 8.56 for females suggest that the incidence of boundary consonant deletion was higher amongst male participants than female participants. On the other hand, the class difference was smaller. While low class speakers had an aggregated mean score of 8.80 the high class had 9.27. Table 6 below shows the results of ANOVA performed to test the significance of these mean scores.

**Table 6. Results of ANOVA analysis for boundary consonant deletion**  
**Tests of Between-Subjects Effects**

Dependent Variable: Boundary Consonant Deletion

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	84.689 <sup>a</sup>	3	28.230	4.286	.006
Intercept	14688.200	1	14688.200	2230.263	.000
Gender	41.089	1	41.089	6.239	.013
Class	9.800	1	9.800	1.488	.224
Gender * Class	33.800	1	33.800	5.132	.025
Error	1159.111	176	6.586		
Total	15932.000	180			
Corrected Total	1243.800	179			

a. R Squared = .068 (Adjusted R Squared = .052)

The results of ANOVA analysis in Table 6 above show that, at 0.05 significant level, there was a significant variation between the mean scores of male and female speakers relative to boundary consonant deletion, ( $F(1, 176) = 6.24, p = .013$ ); whereas, no significant class difference was found, ( $F(1, 176) = 1.49, p = .224$ ). This implies that male speakers significantly deleted consonants at word and morpheme

boundaries more than female speakers, while both the low and the high class participants had equal tendency towards deletion. However, the table also reveals gender-class interaction effect,  $F(1, 176) = 5.13, p = .025$ , which means that social class differed significantly between both sexes: male high, with a mean score of 10.178, used boundary consonant deletion more than female high with 8.356 (see Table 5). This shows that the gender variation was due to differences between male and female high class speakers.

### **Discussion and Conclusion**

The findings of this study have shown that neither gender nor class variation was found in the speech of the participants (young NigE speakers) relative to r-liaison usage, and that only the speech of male speakers, especially that of the high social class, was found to correlate with boundary consonant deletion. In the light of these findings vis-à-vis related submissions in sociophonetic research therefore, this study has not sufficiently demonstrated variability in the speech pattern of young NigE speakers in relation to r-liaison and consonant deletion.

To start with, it is usually claimed in the sociophonetic tradition that female speakers use more standard or prestigious speech variants and fewer low-status forms than males (Hudson 1996, Labov 1990), and that the speech of members of higher social classes correlates with the standard forms, while vernacular forms are most prevalent among the lower social classes (Labov 1966). In view of this, a higher usage of r-liaison (being a prestige variant) would have been expected not only from female speakers but also from high class participants. However, this was not the case, as neither gender nor class variation was exhibited in this CSP, which demonstrates an equal status for r-liaison usage amongst the participants, irrespective of gender and class.

This implies that young NigE speakers, regardless of their gender and class affiliations, do not differ in r-liaison usage. The educational advantage and social exposure of the high class over the low class does not, in any way, translate to superior performance in the use of this prestigious feature of speech. This trend, which corroborates Oladipupo's (2014b) earlier finding that r-liaison does not correlate with gender and class in educated Yoruba English (a sub-variety of NigE), cannot be separated from the fact that r-liaison is scarcely used in NigE, especially amongst young speakers who lack exposure to it both in school and in the community (Oladipupo 2014b, c).

The only variation observed in the whole data was found between male and female young speakers in boundary consonant deletion, where the male speakers deleted more boundary consonants than their female counterparts. Again, no variation was observed between low and high class speakers altogether, although the gender-

class interaction showed significant variation between male high and female high class speakers; that is, male from high social class significantly used boundary consonant deletion more than females of the same social class.

The gender difference can be traced to the need to achieve articulatory economy on the part of male speakers. Elision is considered a phonetically motivated process that is characteristic of connected speech, in that it enhances the ease of articulation (Hannisdal 2006). That males significantly deleted more boundary consonants than females, therefore, implies that male speakers (especially from high social class) are more receptive to natural phonological processes and are articulatorily more economical than female speakers, who tend to be more careful and formal in speech (Labov 1963, 1966; Hudson 1996).

Overall, the study has demonstrated that Kerswill's (1985, 1987) observation that CSPs may be socially differentiated in a speech community is not fully supported in NigE, especially in relation to young speakers' variable use of r-liaison and consonant deletion in connected speech. This is because only very little variation was observed in the data.

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## Appendix

### TEST 1

<b>Researcher</b>	<b>The participant</b>
1) <i>Have you ever met Peter?</i>	I've met Peter at the station
2) <i>How many boys are there?</i>	There are ten boys
3) <i>What do you know about the girl?</i>	She's a good girl
4) <i>Sir, she is looking for you. teacher?</i>	Why? Doesn't she know her
5) <i>Why not ask him to do it?</i>	He won't do it
6) <i>Did he say something?</i>	No, he kept quiet
7) <i>I want more food, please!</i>	Eeh! you mustn't over-eat
8) <i>How many did you find?</i>	I found five
9) <i>Is he a young man?</i>	No, he is an old man
10) <i>Did you enjoy your launch?</i>	That was cold lunch
11) <i>Did he look sad?</i>	No, he seemed glad
12) <i>Did they rob the Mall?</i>	No, but they robbed both banks
13) <i>How did I jump?</i>	You jumped well
14) <i>What do you want from your husband?</i>	I want more of Him
15) <i>Did you meet him at that time?</i>	I met him after a while
16) <i>What can you say about their action?</i>	Their action is wrong
17) <i>What is the main duty of the police?</i>	They maintain law and order



## THE MANAGEMENT OF WRITER-READER INTERACTION IN NEWSPAPER EDITORIALS

*Mamonaheng Francina Selloane Ntsane*

### Abstract

This study investigates the management of interaction between the writer and the readers in newspaper editorials. It aims at exploring how editorial writers include the readers as participants in the discourse while maintaining their authorial persona. It investigates how the readers are aligned and disaligned with the views of the writer. Using the Engagement system of the Appraisal framework (Martin 2000, and Martin and White 2005), the study explores how dialogically expansive and contractive resources are used in this respect in editorials from different newspapers.

The study employed both qualitative and quantitative approaches. The findings show that contractive resources are slightly more used than expansive resources. The slight difference suggests that the editorial writers try to maintain a balance between bringing in the readers in a communicative event and maintaining their authority as the writers. The findings also indicate that Engagement resources are used in the same way by different newspapers. There is also no clear difference between newspapers from Lesotho and South Africa. This is because *Public Eye* (Lesotho), *Sunday Times* and *Mail Guardian* (both from South Africa) use the same style. *Lesotho Times* (Lesotho) is the only paper using a different style. It follows a more conversational tone and its arguments are somewhat subjective.

**Keywords:** appraisal, engagement system, dialogic contraction, dialogic expansion

### Introduction

The term 'interaction' refers to a dialogic pattern where the sender and the receiver are regarded as participants in a discourse. Since written discourse is different from face-to-face interaction, a writer shows interaction with the readers through the use of linguistic resources. The writer shows awareness of his/her readers by pulling them into the discourse as participants. Bakhtin (1986: 91) views written discourse as engaging with the audience by responding to something, affirming something, anticipating possible responses or objections, and seeking support. He asserts that the dialogic nature of a text recognises the existence of other worlds outside that of the

speaker or writer. That is, certain uses of language maximise dialogic space by initiating responses from the addressee, while other uses attempt to limit or restrict dialogue in that they do not prompt any response, such as in the case where the speaker anticipates an encountering response. In such situation, “the entire utterance is constructed, as it were, in anticipation of encountering this response” (Bakhtin 1986: 94). In some cases, the speaker/writer tries to channel the response in the way that the speaker/writer wishes.

In the same manner, Thompson (2001: 60) views a text as a record of a dialogue between the writer and the reader in that the writer enacts the roles of both participants in the unfolding dialogue. That is, writers attempt to guess what kind of information the readers expect from a text and they also anticipate the readers’ questions or reactions to what is written. Thus, the writer can create solidarity by demonstrating an understanding of the reader’s attitude towards a certain issue. Alternatively, the writer can manipulate the reader by spelling out questions that the ‘corporate’ reader ought to be expecting to be answered and therefore, encouraging the reader to accept the direction that the text is taking.

When writing a text, Thompson (2005: 312) points out that the writer needs to successfully construct a coherent text and an appropriate persona in a given text. Furthermore, the writer should convey an authoritative tone to persuade the readers of his/her expertise and knowledge of the subject, while at the same time showing an appropriate awareness of the readers. That is, in a communicative event, there is a need to maintain a balance between showing authority within a communicative event while at the same time acknowledging the possibility of an alternative voice.

### **Theoretical Framework**

The study is based on the theory of Appraisal developed by Martin (2000) and later revised by Martin and White (2005). According to Martin and White (2005), Appraisal is concerned with how writers or speakers approve or disapprove, support, abhor, applaud and criticise and with how they position their readers to do likewise. It is concerned with construction of shared feelings and values and how linguistic resources are used to create shared emotions and values. Appraisal is concerned with how writers take particular authorial roles or identities, as well as with how they align or disalign themselves with potential readers. In the context of this study, Appraisal refers to the willingness of the writer to entertain divergent or convergent positions or to open a platform for a dialogue.

The Appraisal Theory proposes a taxonomy which includes the system of Attitude, Graduation and Engagement. The focus of the study is the Engagement system. According to Martin and White (2005: 107), Engagement comprises all locutions which provide the means for the authorial voice to position itself with

respect to other voices and hence to engage with alternative voices in a communicative context. That is, these are the resources through which the speaker adopts a particular position and how they interact with potential readers. Engagement resources are interactive in that they acknowledge the presence of other voices by engaging with alternative views. The role of Engagement resources is to regulate the dialogic space in the sense that they are a means by which textual voice represents itself by acknowledging, engaging with, challenging or aligning itself with other utterances.

Within the system of Engagement, there are two main broad categories: Heteroglossia and Monoglossia. Heteroglossia gives an allowance for alternative viewpoints, whereas Monoglossia does not allow for viewpoints other than the author's. Monoglossic utterances are basically known as "bare assertions". However, Monoglossic texts are considered to be dialogic in that they make certain presuppositions about the audience's point of view (White 2001:18, Martin and White 2005:102). The focus of this chapter is exclusively Heteroglossia.

Heteroglossic utterances are further divided into dialogic expansion and dialogic contraction. Within this framework, dialogic expansion refers to the degree in which an utterance opens a dialogic space for alternative voices. It refers to the way in which the author opens a space for dialogue. There are two main categories of dialogic expansion: *entertain* and *attribute* (Martin and White 2005: 102).

According to Martin and White, dialogic contraction refers to the way in which an utterance actively challenges, refutes or restricts dialogic space. Dialogic contraction is divided into two main sub-categories: Disclaim and Proclaim. Disclaiming resources are a way through which a text positions itself as being at odds with or rejecting a contrary position. This is done through negation (*Disclaim: Deny*) and concession (*Disclaim: Counter*). The resources of *Proclaim*, on the other hand, allow the speaker to subscribe to a particular position, in some cases ruling out competing or alternative ones. That is, these resources limit the scope of dialogic alternatives in the on-going discourse. Proclaim comprises three sub-types namely, *Concur*, *Pronounce* and *Endorse* (2005:117).

The current study aims at identifying Engagement resources that are used in newspaper editorials and also how these resources are used. It also tries to identify the relationship between the choice of editorial genre and the choice of the used resources.

## **Methodology**

The study on which this chapter is based employed both qualitative and quantitative approaches. The qualitative method involves an in-depth, detailed analysis of texts. In particular, this approach allows insights into the texts that are not

available through a quantitative approach. The close analysis of texts has been useful in this study in exploring the way Engagement resources were used in the editorials to manage interaction between the writer and the reader. In the quantitative method, the approach is on the frequencies or numbers in order to arrive at an overall picture of the distribution of the resources. The approach has been useful in identifying Engagement resources used in editorials and, more importantly, in the comparative analysis.

The data for this chapter were collected mainly from printed newspapers. It was collected from a sample of 44 newspaper editorials from Lesotho (*Public Eye* and *Lesotho Times*) and South Africa (*Sunday Times* and *Mail and Guardian*). The researcher also used online editorials when it was difficult to get hold of some newspaper publications. The sample included editorials that were published every first week of the month. This sampling technique allowed elimination of bias. It avoided a selection of interesting topics or the area of interest only. It also provided a wider scope of issues covered in each newspaper within that period. It was observed that the topics of the editorials are mainly political. The study first identified the engagement resources used in these newspaper editorials and then compared their use in individual newspapers in order to establish the similarities and differences in employment of the Engagement resources in Lesotho and South African newspapers.

### Analysis of Expanding Resources

Table 2 shows that of dialogically expansive resources, Entertain was the most frequently used. It occurs three times as frequently as other expansive resources. In this category: "...the authorial voice indicates that its position is but one of a number of possible positions and thereby, to a greater or lesser degree, makes dialogic space for these possibilities" (Martin and White 2005: 104).

**Table 2: The overall use of Expanding Resources**

Expanding Resources			
Newspaper	Entertain	Attribution	
		Acknowledge	Distance
Lesotho Times	128 (45%)	23 (26%)	0
Mail & Guardian	50 (18%)	18 (20%)	0
Public Eye	57 (20%)	23 (26%)	2 (100%)
Sunday Times	48 (17%)	25 (28%)	0
Total	280 (100%)	89 (100%)	2 (100%)

Within dialogically expansive resources, Modality is one of many strategies

that the editorial writers use to open up the dialogic space. It opens up a dialogic space by entertaining other possibilities. Editorial writers use modals of probability to show the possibility of something happening or possibility of something happening presently, in the past or in future, thus opening up dialogic space, as there is no guarantee that something will happen. Examples (1) and (2) illustrate this point.

- (1) The power battles that ravaged the party are **likely** to persist (LT).
- (2) The student's defiance, and determination to see the school principal sacked was not only shocking for pupils still so young, but also reflected badly on their parents who should have intervened timeously and ensured that classes continued while whatever problems that **might** have existed, were being looked into (PE)

There is also the use of modal expressions that show capability or ability, as shown in examples (3) and (4). These modals are used to open up dialogic space for divergent or convergent views.

- (3) Her failure to do so **can** only strengthen the hooligans' hand, as it paints them as being so powerful that even a national minister is afraid of venturing into the area (ST).
- (4) The new LCD leadership has a chance to show that it **can** heal the wounds of the vicious fights, unite the party and win this election on the bases of policies (LT).

Other modal expressions that were frequently used are those that are referred to as strong modals. They include modals of recommendation, necessity and obligation, as in examples (5) to (7).

- (5) Election observers and monitors from the regional bloc **must** be on the ground weeks before the actual voting (LT).
- (6) But we **urgently need** a sense that South Africa is more than a sum of its divisions –racial, financial or factional... (M&G).
- (7) It **should** realise that, until it answers the public's legitimate questions, this story will not just go away (ST).

Although less obviously dialogically expansive, these modal expressions are classified as values for Entertain as they are individually based. As a result, they are subjective. According to Martin and White (2005: 111), these modals explicitly ground the demand in the subjectivity of the speaker; the obligation is based on the assessment by the speaker.

The use of high values of modals of obligation and recommendation, as seen in examples (6) to (7), is far more pronounced in *Lesotho Times* while in other papers,

these high values of modals of obligation are used in moderation. This preference, according to White (2001: 3), is linked with more powerful speakers in an unequal status relationship. This means that, instead of treating the readers or the addressee on equal footing, as mentioned earlier, *Lesotho Times* takes an opportunity to influence or coerce or sway the readers in the direction that it wishes. These modals often portray a relationship of control and compliance/ resistance rather than a relationship of offering information or viewpoints. Thus, in this case the writer/speaker seeks to control the actions of the reader/ addressee.

In the Entertain category, there is also a frequent use of *mental process verbs*. These verbs are dialogic because they show a subjective view of the speaker through a strong commitment to the proposition. However, the speaker still recognises that there are people who may not share the same view, as in examples (8) to (9).

(8) We **believe** time has come to deliver a better, much more meaningful life to our people (LT).

(9) We **doubt** that any additional value will come from investigations now under way into what the government must- and should- have known many months ago (M&G).

The use of these mental verbs in some cases is meant to show anticipation or an objection of divergent views; in that case the views are used to fend off the objection. When used in that way, the mental verbs are categorised as dialogically contractive in that they limit dialogic space for alternative views. This is discussed further in later sections.

Apart from the use of mental process verbs there is also the use of evidentials. Evidentials are used to show that the proposition put forward is but one of many. Therefore, dialogic space is expanded for such alternatives, as seen in examples (10) to (11).

(10) This calculated political assault on the Constitutional court...**appears** to have been brought about by a succession of rulings against the state (ST).

(11) The paranoid, **it seems**, have taken control of the asylum, imposing on the entire country a regime of insane inverted rules (M&G).

Although low in frequency, highly committed forms such as “certainly”, as in example (12), are used.

(12) Their demands are **certainly** justified (LT).

The use of the intensifier *certainly* is dialogically expansive, as it shows an element of doubt on the part of the speaker. Halliday (1994: 362), for example, remarked “we

only say we are certain when we are not”. Such forms are said to disguise an element of doubt in relation to the point of view being advanced.

Moving from the Entertain category, Acknowledge under Attribution was the second most frequently used in the dialogically expansive category. Acknowledgements are obviously dialogic in that they bring other voices into the text and represent the authorial voice as engaging with other voices. Martin and White (2005: 115) make a distinction between neutral and non-neutral attribution. In neutral attribution, the writer does not show alignment with the material being attributed and this type is typical of hard news. On the other hand, non-neutral attributions are more implicated in the issues of solidarity and alignment, as the writers explicitly show their stance towards the attributed material; this is typical of argumentative texts such as editorials. These types of attributions were most frequent in *Lesotho Times* editorials than in other newspaper editorials. Non-neutral attributions are illustrated in examples (13) to (15).

(13) **The proponents of such dire purges** argue that this will create stability and unity in the ANC (M&G).

(14) ...**the ANC’s senior administrator, Gwede Mantashe, made the astonishing statement** that “what the ANC cannot win in the courts it will win in the street (ST).

(15) Last week, **the association made a halfhearted announcement** Vodacom had allegedly committed themselves to bankrolling all the country’s four leagues, once again (PE).

There are also neutral attributions where the authorial voice has used communicative process verbs such as *said*, *argued*, *reported*, *stated*, *insisted* and *suggested*, as is the case in examples (16) and (17) .

(16) Weinberg **argued** that he was merely presenting the written submission which had already been approved by the committee for the session (ST).

(17) Public Works **announced** that it is investigating who leaked embarrassing internal documents on the Nkandla development (M&G).

Unlike examples (12) and (15), examples (16) and (17) illustrate neutral attributions in that the reporting verbs record what actually happened. The authorial voice is disassociated from the proposition of the attributions; therefore the reader may interpret the writer as having “nothing investing the position being advanced in the reported material” (White 2005: 115). These types of attributions allow the writer to become detached from relationships of alignment and disalignment.

There are also formulations which are categorised as hearsay. In this case as well, the authorial voice does not seek to influence the reader, as the reader might regard the attributed material as unfounded. The attributed material may, however, be believable to the readers as they are believed by the authorial voice, since it carries some authority. In this case, the dialogic space is opened for alternative voices: the writer brings into the texts other voices and engages with them interactively, as illustrated in example (18).

(18) This, we are **told**, is exactly what has happened at ST James- a place where fear has now made teachers and learners so suspicious of each other (PE).

The category of Attribute: distance involves formulations in which the writer explicitly distances the authorial voice from the attributed material (Martin and White 2005: 113). This is the least frequently used sub-category of Attribution, as illustrated in examples (19) and (20).

(19) Those who **claim** to be privy to the goings-on went even further by posting the flag of this new party (LT).

(20) It **claims** [that] it cannot speak freely because some requested information is market sensitive, even while it plays host to an unfolding, slow-motion train wreck (M&G).

In example (19), the writer detaches him/herself from the group that “claims” to know what is going on in the LCD party. As a result, the authorial voice distances him/herself from the claims made by this group. This came after there were rumours that the party was going to split. Nobody knew whether this was true or not but there were people on the inside who could tell what was going on. Instead of putting it as a fact, the writer only considered the “goings-on” as claims. That is, the writer distances himself from the claims of the party split. In example (20), however, the writer disassociates him/herself from the actual attribution.

### The Analysis of Dialogically Contractive Resources

**Table 3: The overall use of Contracting Resources**

Newspaper	Disclaim		Proclaim		
	Deny	Counter	Concur	Pronounce	Endorse
Lesotho Times	75 (40.0%)	33 (31.1%)	10 (40.0%)	38 (57%)	2 (25.5%)
Mail & Guardian	36 (19.0%)	27 (25.4%)	6 (24.0%)	13 (19.4%)	3 (37.5%)

Public Eye	41 (22.0%)	20 (19.0%)	9 (36.0%)	11 (16.4%)	3 (37.5%)
Sunday Times	35 (19.0%)	25 (24.0%)	0	5 (7.4%)	0
Total	187 (100%)	105 (100%)	25 (100%)	67 (100%)	8 (100%)

Table 3 indicates that overall, disclaiming resources are employed more than proclaiming resources. This is probably because most of the editorial comments were criticising the government, political leaders, service delivery institutions and other social actors. In the Disclaim category, the more frequently used sub-category is that of Disclaim: Deny (64 percent) than Disclaim: Counter (46 percent). Dialogic alternatives are confronted, overwhelmed or otherwise excluded. Denial is used to reject claims/beliefs/views of others, as seen in the examples (21) and (22).

(21) It should also have communicated more clearly its belief that the song is a historical artefact, **not** a contemporary rallying cry (M&G).

(22) The government **cannot** arm-twist employers to pay unsustainable wages (LT).

Denial is also used to respond to actions of others with reference to something that should have been done but was not done and it is also used to show something that happened (at the time of publication) that should have not happened, as illustrated in examples (23) and (24).

(23) Perhaps because he **did not** declare strongly enough his support for Zuma, he is now an enemy: you're either for Zuma or against him (ST).

(24) **Never** in its history has the LCD become such a playground for power hungry political schemers (LT).

The findings have also revealed that Denial can be directed towards the third party, away from the current writer-reader relationship, as demonstrated in example (25).

(25) A meeting held yesterday by members of JSC **failed** to come-up with a position on what action to take with regards to the issue (PE).

In this case, the non-act is performed by the JSC, which is the third party in the communicative event. The reader, who is the second party in the event, is being informed by the writer. In such cases, the reader is assumed to be taking the same stance as the writer who informs the reader and, in turn, the reader accepts the information.

In other cases, the denial is against the addressee/reader specifically against the views/beliefs which the writer assumes that at least some of the members of his/her audience will be subject to, as seen in example (26).

(26) It is **no** exaggeration to say they have forever changed the way the world views those who have lost one or both limbs (ST).

Here the writer anticipates possible objections from a putative reader. As a result, the writer minimises the space for such objections. The writer probably anticipates that the readers will think that he/she is exaggerating. Thus, he minimises dialogic space for that. By fending off the objections, the writer directly engages with the readers and the readers are seen as aligned with the writer.

The sub-category of *Disclaim: Counter* also features in newspaper editorials. Countering options is dialogic in the same way as denials in that they invoke a contrary position which is said not to hold and they project particular beliefs or expectations onto the reader, as illustrated in (27) and (28).

(27) **In spite of** that admission he inexplicably **still** went ahead and issued an order for her release (LT).

(28) With such damning allegations against him, they should have long demanded his suspension. **However**, they seem hell-bent on shielding him at all cost (ST)

Within this sub-category, there were also rhetorical pairs of Deny: Counter. All the newspapers make use of these pairs. The resources of Disclaim: Deny and Counter project on to the reader particular beliefs or expectations. According to White (2005: 120), countering resources are mostly aligning in that they construe the writer as sharing particular beliefs with the reader, as seen in example (29).

(29) We **do not** need a charismatic authoritarian to weld us together under a nationalist flag, or a singer of lullabies to urge us to find unity in diversity. **But** we urgently need a sense that South Africa is more than the sum of its divisions – racial, financial or factional – and that we know, for all of our manifold difficulties, where we are going (M&G).

In this case, the denial rejects certain assumptions of the needs of the community (as affirmed by the inclusive pronoun **we**) and then the counter which affirms the assumed relationship. The writer here aligns the authorial voice with the readers by representing himself as conveying ‘community concerns’ rather than his own, individual views.

*Sunday Times*, on the other hand makes an unusual combination of Entertain+ Counter+ Deny (although not in that particular order), as seen in examples (30) and (31).

(30) There **seems** to be a concerted effort from some of the country's most powerful politicians, **not** only to save Mdluli from criminal prosecution, **but** to see him become the country's top cop (ST).

(31) With such damning allegations against him, they should have long demanded his suspension. **However**, they **seem** hell-bent on shielding him at all cost (ST).

The paper appears to be mitigating the force of its accusations. This could be because Mdluli (at that time) was yet to be found guilty, and therefore the paper did not want to accuse anybody of something that had not yet been proven. However, if indeed Mdluli was being protected, whether he was guilty or not, the paper could have pointed out the facts as they are. In the end, they would be protecting him because he was innocent or guilty. Here the paper failed to take a stance, and as such failed to position the reader by allowing space for divergent views when it should have not.

Also occurring are resources of Proclaim through which the writers represented the authorial voice as highly warrantable and thus limit a space for alternative views. Within this category the authorial voice in this particular case has shown personal investment in the views being advanced and increased interpersonal cost for alternative views. These are called subjective pronouncements, which show a subjective assessment on the part of the writer/speaker as seen in examples (32) and (33).

(32) **We know** that Mdluli has written to Zuma declaring his loyalty and complaining of plots against him by other senior police officials (MG).

(33) **We believe** time has come to deliver a better, much more meaningful life to our people (LT).

There are also objective pronouncements, which are said to be more authoritative. According to Love (2011: 412), these kinds of expressions "strengthen the writer's claims for their factual knowledge". These types of expressions are common in all four newspaper editorials, as can be seen in examples (34) to (35).

(34) **Clearly**, the justices of the court were in awkward position. They had a direct interest in the outcome of the case (M&G).

(35) With an election just two months away **it is important** that the regional bloc acts as an effective mid-wife in helping deliver a credible election that does not produce a contested result (LT).

Although the writers present the propositions as facts and highly warrantable, they nonetheless acknowledge that there may be alternative positions while challenging or fending-off those alternatives. Pronouncements could show that the writer is engaging in a dialogue with previous speakers/writers and the writer refutes whatever has been said. It could show that the writer anticipates objections, and therefore attempts to limit the space for such objections.

Pronouncements were also made in the form of a rhetorical question. In this regard, the rhetorical question does not necessarily need an answer but somehow passes a point of view on to the addressee or the reader, as seen in example (36).

(36) How, then, can they influence any allocation within already impossibly overstretched, ludicrously inadequate university budgets? (M&G)

The question simply states that those people should have not been involved in the first place as the resources are limited. Since Pronouncements leave a very limited space for an alternative view, the readers are assumed as aligned with the writers and those objecting to these “facts” will be increasing their interpersonal cost.

Resources of *Proclaim: Concur* were the second most frequently occurring options (25 percent). Within this sub-category, *Lesotho Times* employs most resources (47 percent) in this category, presupposing a shared knowledge between the paper and the readers, in particular the whole nation. *Public Eye* comes second with 36 percent and lastly, *Mail and Guardian* employs *Proclaim: concur* resources at the rate of 24 percent. However, *Sunday Times* does not employ *Proclaim concur* resources at all. It nonetheless, presupposes a shared knowledge among its readers by employing monoglossic utterances. According to Martin and White (2005: 107) monoglossic utterances may imply a shared knowledge as the writer assumes that the proposition being advanced will not be problematic or is not up for discussion.

This sub-category is divided into two groups: affirm and concede. In affirm, the speaker presents the current proposition as something that is given, as being in accord with what is generally known or expected. He presents himself as simply echoing or affirming the generally shared knowledge, as illustrated in examples (37) and (38).

(37) Such continuous operation, would **of course**, require more resources to ensure its effectiveness (PE).

(38) **We all know** how these deranged despots have been willing to murder their own people in a bid to instil the “fear of God” in their own subjects (ST).

The use of *of course* in example (37) and *we all know* in example (38) highlights the dialogic nature of the editorials and reinforces a sense of shared goals and common interaction between the newspaper and readers. Hyland (2005: 184) believes that these resources seek to “position readers within apparently naturalised boundaries of disciplinary understandings”. The writers rely on pre-agreed knowledge, and thereby reducing any processing difficulties or misunderstanding on the part of the readers as the readers’ line of thinking is assumed to be in line with the writers’ arguments.

With the combination of a declarative and a question, the dialogic space is contracted, as no one would want to put up an opposing view to a view supposedly held by everyone. In this case the reader is rhetorically aligned with the writer’s views and potential alternatives are indirectly silenced, as seen in example (39).

(39) This would **obviously** include the sparing of government and the presidential blushes-what other motive can the government have? (M&G)

Hyland (2005: 186) views these types of questions as strategies to invite and bring the readers into a space where they can be led into the writers’ viewpoint. The writers manipulate the readers into accepting the writer’s viewpoint or following a particular line of argument. Unlike the questions that seek to expand dialogic space in the sub-category of Entertain, these questions lead the reader to an obvious answer, the writer and the reader are presented as concurring.

In *Concur: Concede*, there is a combination of concession and countering expressions (Concede and Counter) whereby the writer shows a strong agreement with a proposition and then counters the same proposition as shown in examples (40) and (41).

(40) Many will welcome any plan that seems to demonstrate clear political will to unlog the sclerotic arteries of the economy. We **certainly** do - **but** there are big questions (M&G).

(41) **It is therefore clear** that they **certainly** need better salaries. **But** the problem is that their employers have already said they cannot afford to pay M1 500 (LT).

In examples (40) and (41) both propositions are presented as valid but the second proposition that is preceded by the conjunction is presented as more valid. The use of these rhetorical pairs signals that the writer is negotiating with the reader. The writers first signal that they are in agreement with the addressee and immediately close down dialogic space to pass their own point of view that they consider to be more dominant than the conceded proposition. The use of these kinds of rhetorical pairs invokes both the presence of the writer and the reader or the addressee in the unfolding communicative event.

The least employed sub-category was that of *Endorse*. In endorsements, the authorial voice aligns with prior speakers and “takes over the responsibility for the proposition or at least shares some responsibility for it with the cited source” (White 2005: 122). In this case the authorial voice is heavily involved in construing the proposition as incontestable because it is proven or shown.

In the *Endorse* sub-category, *Mail and Guardian* and *Public Eye* employ the resources in equal frequency (37.5 percent). For *Mail and Guardian*, the presence of endorsements can be attributed to the fact that the editorials in this paper usually refer to the information gathered during investigations of news stories. In this regard, the paper finds it appropriate to align with the attributed materials (and positioning the readers similarly) from these investigations as they are considered reliable. It is assumed that newspapers do not publish a story until all information is gathered and has been proven to be true. This can be seen in example (42) to (44).

(42) The extraordinarily blunt, but also careful, report **eloquently demonstrates** that many universities are forced into taking measures they know to be dreadful to their students (M&G).

(43) It has been **proven time and again** that in many such strikes, only a small number of unruly individuals will be advocating mayhem for their own ulterior motives (PE).

(44) But the release and subsequent clash between the judges only serves to **vividly illustrate** what is wrong with our justice system in Lesotho (LT).

The use of pre- and post-modifiers in examples (42), (43) and (44) shows the writer as strongly aligned with the attributed material. The authorial voice indicates its endorsement of the current viewpoint. It further shows that it stands with the attributed source in advancing the current proposition.

## Conclusion

The findings from the study show that editorial writers tend to limit dialogic space rather than opening it up. This is probably because the writers mostly pass their opinions to their readers and at the same time they position their readers as sharing the same opinion. The writers also want the readers to accept the position given by the editorial. The small difference in the use of contracting and expanding resources may imply that the editorial writers are trying to maintain a balance between their authorial persona and the readers (Thompson 2005: 312).

*Lesotho Times* has the highest frequency of Engagement resources. Its editorials seem to carry a more conversational tone, unlike other editorials. *Lesotho Times* editorials also used more person pronouns and directives than other editorials.

Among all the four newspapers, *Lesotho Times* comes across as the paper that relies more on affective assessment of events than other newspapers do. The use of person pronouns and directives is far more pronounced than in other newspaper editorials. The tone of the paper is more conversational than in the other newspapers. This, in turn, resulted in the high number of Engagement resources used in the editorials

*Sunday Times* shows a low frequency in the use of the resources. This is probably because, in most editorials, the paper starts with a background section written in monogloss and starts an argument in the middle of the text or towards the end. The paper is also similar to *Public Eye* in that the editorials strive for a neutral comment and do not try hard to influence the readers or the addressee.

*Public Eye* and *Sunday Times* editorials employ more expanding resources than contracting resources. This may be because the editorials more or less follow an objective rather than a subjective tone (as the standard editorials do). The editorials employ a more informative structure than giving their own opinion. The papers rely on external sources as in a news story. In particular, person pronouns are less frequently used and in some editorials, they are not present at all. This is more typical of a news story than an editorial comment. It does not try hard to persuade the readers into reaching certain conclusions.

Although *Lesotho Times* and *Public Eye*, the Lesotho newspapers, differ in terms of the style that they use in the commentaries to get their message across, *Sunday Times* and *Mail and Guardian* use almost the same style. They use fewer pronouns and they strive to be objective in passing their comments.

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### **A Note from the Editor**

The present issue of the *Ghana Journal of Linguistics*, the eighth, is the last that I shall oversee as Editor-in-Chief. There have been ups and downs, and times when it was doubtful whether the journal could survive, but overall it has been a rewarding and interesting experience. It did survive, and I would like to take the opportunity to thank the people who made it possible: first of all the Linguistics Association of Ghana, who created it, the authors, without whose work there could be no journal, the editorial committee, the editorial board, and especially the many reviewers who gave so freely of their time and expertise to make the journal one of which we can be proud.

Upcoming volumes will include at least two special issues, guest edited by Prof. Paul Kerswill and Prof. Maria Koptjevskaja Tamm. Other issues will be in the capable hands of the incoming Editor-in-Chief and his Editorial Committee. With the cooperation of the wonderful team at African Journals On-line, our hosts, I am sure there are many more years of successful publication ahead for the *Ghana Journal of Linguistics*.

### Preferred Formats for References

References made in the notes or in the text should include author's last name, the date of publication and the relevant page number(s), e.g. (Chomsky 1972: 63-4).

There should be a separate list of references at the end of the paper, but before any appendices, in which all and only items referred to in the text and the notes are listed in alphabetical order according to the surname of the first author. When the item is a book by a single author or a collection of articles with a single editor, give full bibliographical details in this order: name of author or editor, date of publication, title of the work, place of publication and publisher. Be absolutely sure that all names and titles are correctly spelled. Examples:

Bauman, Richard, 1986. *Story, Performance and Event*. Cambridge & New York: Cambridge University Press.

Fiona Mc Laughlin, ed., 2009. *The Languages of Urban Africa*. London & New York: Continuum International Publishing Group.

If the book has more than one author or editor, they should all be given, the first appearing as above, the others with their first name or initial placed before the surname:

Heine, Bernd and Derek Nurse, eds., 2000. *African Languages, an Introduction*. Cambridge: Cambridge University Press.

An article appearing in an edited book should be referenced under the author's name, with the editor(s) and full details of the book and page numbers of the particular article. For example:

Bender, Lionel M., 2000. Nilo-Saharan. In Bernd Heine and Derek Nurse, eds., *African Languages, an Introduction*. Cambridge: Cambridge University Press. Pp. 43-73.

However, if you cite several articles from the same book you can give the full details just once, in a reference under the editor's name, as the one for the book edited by Heine and Nurse above, and abbreviate the reference details for the specific article, as below:

Bender, Lionel M., 2000. Nilo-Saharan. In Heine and Nurse, eds., *African Languages* pp. 43-73.

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Bender, Lionel M., 2000. Nilo-Saharan. In Heine and Nurse eds., 2000: 43-73.

A journal article should be cited similarly to an article in an edited book. Note that the words ‘volume’, ‘number’ and ‘pages’ can be omitted, provided the correct punctuation is observed, as in the following:

Zaborski, Andrzej, 1976. The Semitic external plural in Afroasiatic perspective.  
*Afroasiatic Languages* 3.6: 1-9.

If the page numbering is continuous through all issues of the volume the ‘number’ itself can also be omitted:

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Items in newspapers can be cited in the same way as journal articles. Unpublished papers will not have a place of publication or a publisher: simply add ‘ms’ (for ‘manuscript’), or the name and place of the meeting at which it was presented.

The editors will be grateful if you do NOT format your paragraphs including hanging and indented paragraphs by using the Return or Enter key and indents and spaces – please use the paragraph formatting menu!

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PLEASE follow these guidelines closely when preparing your paper for submission. The editors reserve the right to reject inadequately prepared papers. All areas of linguistics are invited – the journal is not limited to articles on languages of or in Ghana or Africa.

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All examples **must** be in a Unicode font and Bold. Times New Roman that comes with Word 10 (but not earlier versions) is Unicode and may be used for occasional words cited in the text, if diacritics are few. More extensive examples with glossing and translation should be in DoulosSIL, although Unicode Times New Roman may again be used if diacritics are not needed, and Charis SIL is acceptable. DoulosSIL and CharisSIL can be downloaded from [www.sil.org](http://www.sil.org). All such examples should be indented and numbered.

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