

<http://dx.doi.org/10.4314/gjl.v7i1.1>

COORDINATION IN NKAMI

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Abstract

In this paper I comprehensively discuss the syntactic phenomenon of coordination in Nkami, an endangered, less known Guang (Kwa, Niger-Congo) language of Ghana, based on synchronic natural data. I discuss issues including Nkami's coordination strategies, its number and types of coordinators, morpho-phonological make-up and distributional abilities of the coordinators, allowable types of syntactic structures for coordination, and the semantic effect(s) of the coordinators on coordinate structures. In addition, some constraints governing Nkami's coordination, and the multi-functionality and source concepts of the coordinators are also discussed. Among other things, it is observed that Nkami employs both syndetic (overt) and asyndetic (covert) strategies for coordination though the latter is highly restricted, occurring chiefly in narratives and pithy sayings. Nkami employs a Serial Adjective Construction (or an asyndetic) strategy when modifiers (adjectives) in a sentence modify the same referent, while a Coordinate Adjective Construction (or a syndetic) strategy is used when the modifiers qualify different referents within the same sentence. Like regional languages, Nkami has clearly distinct *and*-coordinators for phrasal and clausal coordination. Lastly, almost all the coordinators in Nkami are multi-functional, and are diachronically derivable from more lexical or less grammatical concepts.

Keywords: Coordination, coordination strategies, linguistic properties of coordinators, multi-functionality and grammaticalization of coordinators, semantics of coordination

1. Introduction¹

The purpose of this paper is to offer an expository account of phrasal and clausal coordination in Nkami, an endangered Guang (Kwa, Niger-Congo) language of Ghana. Coordination is one of the commonest morphosyntactic means of joining identical words (phrases), clauses and sentences together (cf. Dik 1968, Welmers 1973, Sanders 1977, Payne 1985, Mithun 1988, Stassen 2000, Wälchli 2003, Haspelmath 2004, 2007). Haspelmath (2004, 2007: 1) characterizes coordination as “syntactic constructions in which two or more units of the same type are combined into a larger unit and still have the same semantic relations with other surrounding elements.” The set of possible units that may be coordinated (called coordinands)² include words, phrases, subordinate clauses, full clauses or sentences, as the following exemplify accordingly:

- (1) a. I *sing* and/or *dance* every day.
- b. *My father* and *my grandmother* are rich.
- c. I realized that *she was sick* but *she didn't open up*.
- d. *My father schooled at Tongji University* but *his wife went to University of Ghana*.

Usually, the individual clauses linked together in coordination are grammatically independent; hence, they do not exhibit overt signs of grammatical dependency. As a result, the coordinands of clausal coordination are normally considered as the least grammatically integrated compared to other types of multi-verb constructions and clause combinations such as serial verbs, relative clause, complement clause, and adverbial clause constructions. Two or more clauses (sentences) may be eligible for coordination if they share the same mood, (i.e. are imperatives, interrogatives or declaratives), and/or perform an identical function (cf. Dik 1968, Haspelmath 2004, 2007). Coordination is also often examined in terms of the number, types and position of connective devices (called coordinators) a language possesses. English, like most European languages, for instance, has only one *and*-coordinator, which occurs in medial position, for both phrasal and clausal conjunctive coordination, as (2a) and (2b)

¹ This paper is a thoroughly modified version of an aspect of a doctoral dissertation on the grammar of Nkami. The database for this study comprises spontaneous spoken and elicited texts gathered from about a hundred speakers of diverse backgrounds in a period of one year in Amankwa, the language community. The annotation and verification of data were carried out in collaboration with a team of two adult Nkami speakers, Kwadwo Akuamoah and Kwaku Ketewa, and several other language consultants. I wish to thank the Endangered Language Documentation Project (ELDP) for sponsoring the Nkami Documentation Project that has culminated into this paper. I also wish to thank the Editor and anonymous reviewers for their helpful comments and suggestions. As usual, for the people of Nkami, this work is yours.

² The terminologies used in this paper are mainly from Haspelmath (2004, 2007).

illustrate accordingly.

- (2) a. Mary **and** John visited their grandma.
 b. Mary visited her grandma **and** John visited his grandpa.

However, many languages of Africa (cf. Welmers 1973, Abdoulaye 2004, Lefebvre 2004) have distinct coordinators for phrasal and clausal coordinative conjunction, as the Ewe data in (3) illustrate (Dzameshi 1988/1989: 73-74).

- (3) a. Yao **kple** Abla wo dzo
 Yao and Abla they leave
 'Yao and Abla have left.'
 b. Eyram mlo anyi eye Selom no anyi de aba dzi
 Eyram lie ground and Selom sit ground on bed top
 'Eyram lay down and Selom sat on the bed.'

Thus, unlike English, Ewe employs two distinct coordinators, **kple** and **eye**, for phrasal and clausal conjunctive coordination respectively. For all the examples seen so far, there is only one coordinator that conjoins the coordinands together. These languages are referred to as monosyndetic languages (cf. Haspelmath 2004, 2007). However, there are cases in some other languages where a coordinator associates with each coordinand. For instance, in order for phrasal conjunction to be acceptable in Upper Kuskokwim Athabaskan, each of the coordinands (i.e. **maladija** 'tent', **jamena** 'stove', **denk'a** 'gun' and **leka mama** 'dog food') is required to be associated with the coordinator '**il**', as (4) shows (Kibrik 2004: 539).

- (4) Maladija 'il jamena 'il denk'a 'il leka mama 'il
 tent with stove with gun with dog food with
 'a tent, a stove, a gun, and dog food'

Languages like Upper Kuskokwim Athabaskan that employ this latter strategy are called polysyndetic languages (cf. Haspelmath 2004, 2007).

Moreover, apart from these examples of syndeton, there also exists cases of asyndetic (zero) coordination where the coordinands are merely juxtaposed without any overt coordinator(s), as (5) illustrates with data from Vietnamese (cf. Watson 1966: 170, Payne 1985: 26, Payne 1997: 338).

- (5)a. NP coordination
 Nháng tiráp [tilêt, callóh, acoq]
 we prepare basket spear knife
 'We prepare baskets, spears and knives.'

b. Clausal coordination

do [chô tôq cayâq, chô tôq apây]
 she return to husband return to grandmother
 ‘She returns to (her) husband and returns to (her) grandmother.’

Thus, Vietnamese extensively employs asyndetic coordination strategy for both phrasal and clausal coordination, as (5a) and (5b) exemplify.

Further, among other things, coordination may also be looked at in terms of the morpho-phonological and syntactic properties of the coordinators, allowable types of syntactic structures for coordination, multi-functionality and source concepts of coordinators, semantic effect(s) of coordinators on coordinate structures, and the rules governing ellipsis in coordination (cf. Ross 1967, Jacobs and Rosenbaum 1968, Sanders 1977, Schachter 1977, Payne 1985, Wälchli 2003, Haspelmath 2007). Consequently, in order to provide a good account of coordination in Nkami, we rubricise the rest of our discussion into six sections based on the following parameters: Section 2 – coordination strategies, Section 3 – linguistic properties of the coordinators, Section 4 – allowable syntactic structures for coordination (phrasal versus clausal coordination), Section 5 – semantics and diachronic lines of the coordinators, Section 6 – coordination and elliptical rules, Section 7 – summary and conclusion.

Among others, it will be shown that Nkami employs both syndetic (overt) and asyndetic (covert) strategies for coordination though the former is highly limited, surfacing mainly in pithy sayings and narratives. Secondly, just like the majority of the world’s languages (cf. Payne 1985, Mithun 1988, Stassen 2000, Haspelmath 2004, 2007), Nkami employs the monosyndetic NP-coordination strategy by way of a medial connective. Moreover, whereas Nkami employs a Serial Adjective Construction (or an asyndetic) strategy when modifiers (adjectives) in a sentence modify the same referent, a Coordinate Adjective Construction (or a syndetic) strategy is used when the modifiers qualify different referents within the same sentence. The paper also shows four distinguishing features between the two multi-verb construction types, (asyndetic) coordination and (linking) SVC, in Nkami with regards to the following parameters: intonation break, negation marking, subject marking, and the number of allowable adverbials belonging to the same sub-semantic type in a sentence. Further, like other languages of Africa (cf. Welmers 1973, Abdoulaye 2004, Lefebvre 2004), Nkami has distinct coordinators, **na** and **ni**, for phrasal and clausal conjunctive coordination respectively. Moreover, Nkami shows evidence of the three major semantic types of coordination (Haspelmath 2004, 2007): conjunction (conjunctive coordination or ‘and’ coordination), disjunction (disjunctive coordination or ‘or’ coordination), and adversative coordination (‘but’ coordination). Other sub-semantic domains such as animacy, conceptual closeness or naturalness, emphasis and inclusion (cf. Mithun 1988, Stassen 2000, Wälchli 2003, Haspelmath 2007) do not play any significant role(s) in coordination in Nkami. Lastly, almost all the coordinators in Nkami are multifunctional, and are traceable to more lexical or less grammatical concepts.

2. Coordination Strategies in Nkami³

Nkami speakers employ the two main types of coordination strategies to connect structures in coordination: syndetic coordination, where an overt coordinator is employed to join the coordinands in coordination, and asyndetic coordination, where the coordinands are merely juxtaposed. Looking at syndetic coordination first, like all other languages, Nkami has a closed set of coordinators. They include the conjunctive coordinators, **na** and **ni** ‘and’, the adversative coordinators, **mɔɔsu** and **mɔ** ‘but’, and the disjunctive coordinator **bɛɛ** ‘or’. In example (6) are coordinate sentences showing the use of the coordinators in contexts.⁴

- (6)a. **Nei na Kɪrɪwɔ yɔ Meikpɔɪnie**
 Mum and Ketewa go Meikpɔ yesterday
 ‘Mum and Ketewa went to Meikpɔ yesterday.’
- b. **Akuamoah le-na edalo ni ɔ-fu so kããɛ**
 Akuamoah PRF-get money and 3SG-take buy car
 ‘Akuamoah has acquired money and (he) has bought a car.’
- c. **ɔ-yɔ asɔri mɔ/mɔɔsu mu ŋu-lo bu ɔkwa**
 3SG.HAB-go church but his head-inside have hardness
 ‘She goes to church (she is a Christian), but she is wicked/ungenerous.’
- d. **Ampomaa bɛ-nna afra bɛɛ ɔkpɔɔwɔ?**
 Ampomaa FUT-cook fufu or food.NAME
 ‘Will Ampomaa prepare fufu or cooked-yam?’

In the data above, **na** conjoins the NPs, **nei** ‘mum’ and **Kɪrɪwɔ**, in (6a), **ni** conjoins the two clauses (sentences), **Akuamoah le-na edalo** ‘Akuamoah has acquired money’ and **ɔ-fu so kããɛ** ‘he bought a car’, in (6b), **mɔ/mɔɔsu** ‘but’ joins the clauses, **ɔ-yɔ asɔri** ‘she goes to church’ and **mu ŋu-lo bu ɔkwa** ‘she is wicked/ungenerous’, in (6c), and **bɛɛ** ‘or’ connects the two clauses, **Ampomaa bɛ-nna afra** ‘Ampomaa will prepare fufu’ and **Ampomaa bɛ-nna ɔkpɔɔwɔ** ‘Ampomaa will prepare cooked-yam’, in (6d). Notice that

³ Nkami bears most of the linguistic features of regional languages. It is a tongue root (ATR) harmonic language, it exhibits both lexical and grammatical functions of tone, it is an SVO language, it portrays prototypical features of serial verb constructions (SVCs), its morphological processes are prominently expressed through affixation, compounding and reduplication, and its verbal properties are represented by prefixes and verbal particles (cf. Asante 2016a, b).

⁴ I use the following abbreviations: 1 = first person; 2 = second person; 3 = third person; CDP = correlative disjunctive particle; COMP = complementizer; COND = conditional marker; CONJ = conjunction; DEF = definite article; DEM = demonstrative; FUT = future; HAB = habitual; NEG = negation; OBJ = object; PL = plural; POSS = possessive; PRF = perfect; PROG = progressive; PST = past; PURP = purposive marker; REL = relative marker; SG = singular; SVC = serial verb construction.

Nkami is a monosyndetic language because in all the coordinate structures above, the coordinator occurs only once. It is also largely medial syndetic because the coordinators typically occur in between the coordinands (see Section 4 for more details). On the other hand, in addition to the above-mentioned coordinators, there also exists the correlative disjunctive particle (CDP), **oow... oow** ‘whether... or’, which may be considered as a bisyndetic coordinator, as (7) illustrates.

- (7)a. **Afra oow, adzogu oow, me-e-dzi**
 fufu CDP food.NAME CDP 1SG-FUT-eat
 ‘Whether fufu or adzoku, I will eat.’
- b. **ε-baale oow, ε-m-maale oow, ani-bu mu**
 3SG-good CDP 3SG-NEG-good CDP J 1PL-be.LOC there
 ‘Whether it is good or not, we are there (living).’
- c. **o-dzi ebrabu oow, oŋwei oow, akabiji oow, ma-a-kpa mu**
 3SG-be Akan CDP Ewe CDP Nkami CDP 1SG-NEG-like 3SG.OBJ
 ‘Whether he is an Akan, Ewe or Nkami, I don’t like/love him.’

Notice that whereas the coordinators are two in (7a-b) because the coordinands are two, they are three in (7c) because the coordinands are also three.

Conversely, asyndetic coordination is not as dominant as syndetic coordination in Nkami. It is generally employed for stylistic purposes; as a result, it usually occurs in pithy expressions and narratives, as exemplified in (8a-b) and (8c) respectively.

- (8)a. **oyebi oo-bie ŋwa, a-ma-bie atʃitʃiri**
 child 3SG.HAB-break snail 3SG-NEG.HAB-break tortoise
 ‘The child breaks (the shell of) a snail, (but) she does not break (that of) a tortoise.’
- b. **oo-kpa mmirise asũ, kpa ŋnebi asũ**
 3SG.HAB-like adults matter like children matter
 ‘He likes both adults and children.’
- c. **fesi ni kotoko bu mi, mialo be-mum-bu mi**
 first FOC porcupine be.LOC here now 3PL-NEG-be.LOC here
 ‘Before there were porcupines here, (but) now they are not here.’
 (nkami_huntingoverview_03:52/55)

Sentences (8a and b) are examples of pithy constructions that are covertly connected. For instance, (8a) has an underlying disjunctive coordinator, **mo** ‘but’, linking the two clauses **oyebi oobie ŋwa** ‘the child breaks a snail’ and **amabie atʃitʃirie** ‘she does not break a tortoise’. Note that **oyebi** ‘child’ serves as a metonym of the *human being*, as the interpretation of the whole sentence in (8a) is analogous to something like ‘do not bite off more than you can chew’.

Here, it must be observed that though the above constructions in (8) do not have overt coordinators linking their component parts, they are not serial verb constructions for the following four reasons, among others. First, unlike SVCs in Nkami (cf. Asante 2016a), the component parts of asyndetic coordination are signalled by intonation breaks, as indicated in writing by the commas in (8). Secondly, in SVCs negation is always marked once on the first verb although its scope covers the entire SVC, as (9) illustrates.

- (9)a. **Kofi mun-so kaase sa mu ɔsi**
 Kofi NEG-buy car give POSS father
 ‘Kofi didn’t buy a car for his dad.’
- b. ***Kofi so kaase mun-sa mu ɔsi**
 Kofi buy car NEG-give POSS father
 ‘Kofi didn’t buy a car for his dad.’

Whereas (9a) is admissible because the negative morpheme, **mun-**, is prefixed to the first verb, **so** ‘buy’, (9b) is infelicitous because **mun-** occurs on the second verb. However, observe that because the constructions in (8a, c) are examples of coordination via covert strategy, the negative morphemes can be attached to the verbs in the second part of the constructions. Thirdly, unlike SVCs where subject marking is typically represented only once on/before the first verb, in asyndetic coordination each of the component parts may have overt subject markings (whether shared or not), as shown in (8a, c). Lastly, observe that although it is possible for an asyndetic coordination to have two contrasting temporal adverbs, as shown in (8c), where both **feesi** ‘first/before’ and **mralo** ‘now’ occur in the same construction having scope over the first and second conjuncts respectively, it is never the case in SVCs. Thus, an entire SVC may have only one temporal adverb, which occurs at either sentence-initial or final positions, with semantic effect over the entire construction. This is illustrated as follows:

- (10)a. **inie Kofi so kããse sa mu ɔsi**
 yesterday Kofi buy car give 3SG.POSS father
 ‘Yesterday, Kofi bought a car for his father.’
- b. **Kofi so kããse sa mu ɔsi ene**
 Kofi buy car give POSS father today
 ‘Kofi bought a car for his father today.’
- c. ***inie Kofi so kããse sa mu ɔsi ene**
 yesterday Kofi buy car give 3SG.POSS father today
 ‘Yesterday Kofi bought a car and presented it to his father today.’

Thus, whereas the SVCs in (10a-b) are acceptable because they have only one temporal adverb, (10c) is unacceptable because both parts have distinct temporal adverbs, **inie** ‘yesterday’ and **ene** ‘today’.

3. Linguistic Properties of the Coordinators

This section examines some linguistic properties of the coordinators with emphasis on morpho-phonological properties.⁵ As we may have noticed above, Nkami has preference for monosyllabic coordinators. Apart from **mɔɔsu** and, to some extent, **oow... oow** ‘whether ... or’, all the other coordinators, **na** ‘and’, **ni** ‘and’, **bɛɛ/be** ‘or’, and **mɔ** ‘but’, may be considered as monosyllabics. The second thing worthy of note is that the majority of the coordinators have an initial nasal consonant. This appears to be common among Tano-Kwa languages. For instance, Akan also has **nanso/nso** ‘but’, **anaa** ‘or’, **na** ‘and’ and **ni** (**ne** in orthography) ‘and’ (cf. Frimpong 2007). Note the similarity between Akan’s conjunctive coordinators, **na** and **ni**, and their counterparts, **na** and **ni**, in Nkami. However, while Akan employs **ni** to conjoin phrases and **na** for clauses, Nkami does the reverse, as we observe in (11-12).

(11) Nkami

- a. **Kofi na Ama ba ni**
 Kofi and Ama come here
 ‘Kofi and Ama came here.’
- b. **Kofi ba ni ni ani-yɔ**
 Kofi come here and 1PL-go
 ‘Kofi came here and we went.’

(12) Akan

- a. **Kofi ni Ama ba-a ha**
 Kofi and Ama come-PST here
 ‘Kofi and Ama came here.’
- b. **Kofi ba-a ha na ye-ko-e**
 Kofi come.PST here and 1PL-go-PST
 ‘Kofi came here and we went.’

The adversative coordinator, **mɔ** ‘but’, appears to be a shortened form of **mɔɔsu** ‘but’. Synchronically, both exist to perform the same function, as (13) exemplifies.

- (13) **Kofi kpa ni mɔ/mɔɔsu ma-a-kpa mu**
 Kofi like 1SG.OBJ but 1SG-NEG-like 3SG.OBJ
 ‘Kofi likes me but I don’t like him.’

This notwithstanding, there seems to be a slight semantic difference between the two forms. It appears that **mɔɔsu** is more emphatic than **mɔ**. So, all things being equal, it is more likely for a speaker to select **mɔɔsu**, rather than **mɔ**, in (13) if her dislike for Kofi

⁵ See Section 4 for some more syntactic properties of the coordinators.

is relatively high, and vice versa, if her dislike for him is relatively low. As we shall see in Section 6, almost all the coordinators have some other functions, and are traceable to lexical or less grammatical forms in the language.

Haspelmath (2004: 27) observes that generally ‘and’ words are shorter (and rarely longer) than ‘or’ words, as the following data show.⁶

(14)		‘and’	‘or’
	German	und	oder
	Russian	i	ili
	Hausa	da	koo
	Iraqw	nee	laqaa
	Persian	=ò	ya... ya...
	Lavukaleve	o	ve
	Dargi	...-ra ...-ra	ya(-ra)... ya(-ra)...

True to Haspelmath’s (2004) observation, Nkami seems to conform to this tendency as the ‘and’ coordinators, **ni** and **na**, are shorter than the ‘or’ word, **bɛɛ**. Again, Nkami conforms to Ohori’s (2004) observation that whereas conjunctive coordination often differentiates between NP coordinands and clausal coordinands, disjunction less often does so. Thus, whereas Nkami employs two distinct coordinators, **na** ‘and’ **ni**, for phrasal and clausal conjunction respectively, no such distinction is observed in disjunction, as the language has only one disjunctive coordinator, **bɛɛ**.

Like other functional words in the language, the coordinators are rarely the target for English-Nkami code-mixing. However, based on native speakers’ hunch, the adversative coordinator, **mɔɔsu/mɔ**, stands the greatest chance of being replaced/switched with the English counterpart ‘but’. For instance, they contend that while (15d) may be acceptable by Nkami-English bilingual speakers, all the others cannot be admissible.

- (15) a. ***Nei and** **Kitrwa** **yɔ** **Meikpɔinie**
Mum and Ketewa go Meikpɔ yesterday
‘Mum and Ketewa went to Meikpɔ yesterday.’
- b. ***Akuamoah le-ja** **edalo and** **ɔ-fu** **sɔ** **kããɛ**
Akuamoah PRF-get money and 3SG-take buy car
‘Akuamoah has acquired money and he has bought a car.’
- c. ***Ampomaa bɛ-nma** **afra or** **ɔkpɔdwu?**
Ampomaa FUT-cook fufu or food.NAME
‘Will Ampomaa prepare fufu or cooked-yam?’

⁶ It has been observed that a possible reason for this trend is that the conjunctive coordinators are more prominent in discourse than their counterparts for adversative and disjunctive coordination (cf. Haspelmath 2004, Ohori 2004).

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- d. *ʔɔɔ-yɔ* *asɔrɪ* *but* *mʊ* *ŋu-lo* *bʊ* *ɔkwa*
 3SG.HAB-go church but her head-inside have hardness
 ‘She goes to church (she is a Christian), but she is wicked/ungenerous.’

This phenomenon is also consistent with Matras’ (1998) observation that adversative coordinators are most likely to be borrowed followed by the disjunctive coordinators and then conjunctive coordinators, as schematised in the borrowing hierarchy below (cf. Haspelmath 2004: 27).

- (16) Borrowing hierarchy of coordinators
 ‘but’ > ‘or’ > ‘and’

4. Which Syntactic Structures can be Coordinated?

This section looks at the types of syntactic structures that can be coordinated in Nkami. In different words, does Nkami allow coordination of independent clauses, or phrases, or simple words, or all of the aforementioned? Nkami allows all of the aforementioned categories to be coordinated, but with some restrictions. As we saw before, like other African languages (Welmers 1973), Nkami employs distinct conjunctive coordinators for phrasal and clausal coordination. Consequently, a distinction between phrasal and clausal coordination in Nkami is in order.

4.1 Phrasal Coordination

Some linguists (cf. Radford 1988) distinguish between word-level and phrase-level coordination. However, as rightly observed by Dzameshi (1998) for Ewe, since simple words could qualify as full phrases, I do not make such a distinction. *Na* ‘and’ is the only coordinator that is solely employed for phrasal coordination in Nkami, and it can only be used to conjoin identical phrases. For instance, whereas it can conjoin the pair of noun phrases in (17a-c), it cannot be used to conjoin a noun phrase and an adjectival phrasal in (17d).

- (17)a. *Nkamifʊ* *na* *Nkonyafʊ* *tʃu* *abusua* *ɔkʊlɪ*
 Nkamis and Nkonyas come.from family one
 ‘Nkamis and Nkonyas come from one family.’
- b. *oyebi* *amu* *na* *mʊ* *ɔsɪ* *ba-a-yɔ* *ndʊlɔ*
 child DET and POSS father 3PL-PROG-go farm
 ‘The child and his father are going to farm.’
- c. *m-fu* *sa* *wʊ* *na* *mʊ*
 1SG-take give 2SG.OBJ and 3SG.OBJ
 ‘I gave it to you and him.’

- d. **oyebi amu na tuntu ba-a-yo ndulo*
 child DET and black 3PL-PROG-go farm
 ‘The boy and black (colour) are going to farming.’

Taking (17b) as an example, since *oyebi amu* ‘the boy’ and *mu oɔɪ* ‘his father’ are both noun phrases, the coordinator, *na* ‘and’, can be used to link them to form an acceptable phrasal conjunctive coordination in the language. However, because the two phrases in (17d) belong to different categories, i.e. *the boy* ‘noun phrase’ and *black* ‘adjectival phrase’, they cannot be connected with *na*. Apart from noun phrases, verbal and adverbial phrases may also be conjoined by *na*, as in:

- (18)a. *yɔ na wu-ye-tɕma abia amu su*
 go and 2SG-DDP-sit chair DET on
 ‘Go and sit on the chair.’
 b. *ɔ-bo asumi basa.basa na gidigidi*
 3SG-do work RED.recklessly and quickly
 ‘He did the work very quickly and recklessly (without caution).’

Thus, the conjunctive coordinator connects the verbal phrases, *yɔ* ‘go’ and *wu-ye-tɕma* ‘you (go) sit’, in (18a), and the adverbial phrases, *basabasa* ‘recklessly’ and *gidigidi* ‘quickly’. Note, however, that though the majority of informants see (18b) to be acceptable, there are many others too who are either sceptical or see it to be unacceptable. In isolation, adjectival phrases may be conjoined, as shown in (19a). However, when they are used attributively to modify nominals, they fail to be conjoined by the phrasal conjunctive coordinator, *na* ‘and’, as (19b) shows.

- (19)a. *tuntu na timi*
 black and short
 ‘dark and short’
 b. ?*wo-o-ŋu ɔŋɪmi timi na kugɔ amu?*
 2SG-PRF-see man short and red DET
 ‘*Have you seen the *short and fair-skinned man*?’
 ‘?Have you seen the *short man and the fair-skinned man*?’

As we notice from the italicized part of the English translation in (19b), if the speaker intends to ascribe the attributes, ‘short’ and ‘red/fair’, to the same person, as in ‘short and fair-skinned man’, then, (19b) is infelicitous. However, if the two adjectives refer to two different individuals, as in ‘short man’ and ‘fair-skinned man’, then, it may be acceptable. To make the second interpretation more acceptable, the definite article, *amu* ‘the’, is placed after the first adjective, *timi* ‘short’, as in:

- (22) **wo-o-ŋu** **ɔŋɪ** **timi** **∅** **kugɔ** **amu?**
 2SG-PRF-see man short CONJ red DET
 ‘Have you seen the *short and fair-skinned man*?’
 ‘*Have you seen the *short man* and *fair-skinned man*?’

Put differently, Nkami employs an SAC (or an asyndetic) strategy when the modifiers (adjectives) in a sentence modify the same referent, while a coordinate adjective construction (or a syndetic) strategy is used when the modifiers qualify different referents within the same sentence, as in (20).

Moreover, in some languages such as Akan and English verbs in a series may be conjoined to express separate but conceptually related events, as (23) exemplifies.

- (23) Akan
kɔ **na** **bra** ‘Go and come.’
 go and come

However, such combinations are not acceptable in Nkami since the second verb in the series must always be prefixed with a subject pronoun, as (24) indicates.

- (24) **yɔ** **na** **wɔ-ba** ***(yɔ na ba)**
 go and 2SG-come
 ‘Go and come.’

If one decides not to prefix the subject pronoun to the second verb, then, the phrasal conjunctive coordinator, **na** ‘and’, must also be elided; in which case, a serial verb construction is derived, as in:

- (25) **yɔ** **ba** ‘Go and come.’
 go come

Though the two imperatives in (24) and (25) are both glossed ‘go and come’ in English, based on the hunch of native speakers, (25) conveys a more integrated relationship between the actions ‘going’ and ‘coming’ than (24). A relatively shorter time is perceived in the realization of the two actions in (25) than in (24). Moreover, (25) may generally be seen as one composite event expressed by two separate verbs, indicating the sub-parts of the entire composite event; while (24) expresses two entirely separate events in a sequence. An evidence to show that (24) expresses two separate events is based on the fact that the second person singular pronoun, **wu** ‘you’, could be replaced by other personal pronouns, as (26) illustrates.

English and Yoruba exemplifying the two strategies respectively.⁷

(29)a. [*Addo visited grandma*] **and** [*she gave him a gift*].

b. Yoruba (Payne1997: 338)

[**mo mú ìwé**] [**mo sɪ wá ilé**]
 I take book I and come house
 ‘I took a book and I came home.’

Whereas the English coordinator, *and*, comes between the two coordinands in (29a), in Yoruba the coordinator, *sɪ* ‘and’, is placed after the subject, **mo** ‘I’, of the second coordinand. As indicated earlier, Nkami agrees with the general tendency since the archetypical position of its coordinators is the position between the two coordinands. In what follows is an examination of the distribution of the clausal coordinators in turn. Consider example (30).

(30) **Kofi dũ bantɪrɪ nr Ama dũ abulo**
 Kofi plant cassava and Ama plant corn
 ‘Kofi planted cassava and Ama planted corn.’

As indicated before, like most African but unlike most European languages such as English, Nkami has a clausal conjunctive coordinator, **nr**, which is distinct from the phrasal conjunctive coordinator, **na**. **Nr** only occurs between two clauses in coordination, as shown in (31). It neither appears at sentence-initial nor sentence-final positions. In sentence-initial position a different form, **nà** (with a low tone), is used, as (31) illustrates.⁸

(31) **nà mu nei bu bile nr o-lo-sũ ɔlu amu?**
 and POSS mum be.LOC where FOC 3S-PROG-cry DEM DET
 ‘And where is his mother and he is crying like that? (Where is his mother for him to be crying that much?)’

Generally, when **nà** is used at the beginning of an utterance, it implies that the interlocutors have a common knowledge of a scene, circumstance or situation which calls for the utterance. A speaker will typically utter (31) when they have sensual access to the child; that is, they may be seeing and/or hearing the child cry. **Nà** is usually used in interrogative sentences, as in (31). In some instances too, it may also be used by a

⁷ See Haspelmath (2004, 2007) also for a cross-linguistic typological discussion on possible syntactic positions of coordinators.

⁸ Akan has an identical form with an identical function(s). It, thus, could be a possible loan from Akan to Nkami.

speaker based on an implicature derived from a preceding proposition(s), especially in narratives. In (32a) is one of such uses employed by **ɔbirise Kimpo**, a hunting consultant, in the middle of a narration about the role dogs play during hunting; while (32b) sought to know from him if there were elephants in Nkami at a particular point in time.

- (32)a. **nà m-kplɪ fã lɔ amɔ kɛ e-dzi esa**
 and PL-dog part inside DET as.for 3SG.INANM-be grass
su titiriw...
 on mainly
 ‘And as for dogs (-hunting), it is mainly on the desert... (that they are used).’
 (Nkami_hunting overview 03:00-03:03)
- b. **nà ɔlɔ bɪ amɔ nɪ atrubɔɔbu mɪ?**
 and DEM time DET FOC elephant be.LOC here
 ‘And at that time, were there elephants here?’

These syntactic observations made about **nɪ/nà** can largely be made about **mɔ/mɔɔsu** ‘but’ and **bɛɛ** ‘or’ as well. In addition to serving as medial connectives, as in (33), they may also be used at sentence-initial position when the participants have a common knowledge about a situation, or when an implicature is derived from preceding proposition(s), as (34a) and (34b) show.

- (33) Prototypical position of **mɔ/mɔɔsu** ‘but’ and **bɛɛ** ‘or’
- a. **mɪ ɔsɪ bu edalo bebiree mɔ/mɔɔsu**
 1SG.POSS dad have money many but
ɔ-mun-fu anɪ-yɔ sukuu
 3SG-NEG-take 1PL-go school
 ‘My dad has a lot of money but he did not take us to school.’
- b. **wu-bɛ-ba mɪ bɛɛ wu-bɛ-yɔ mu?**
 2SG-FUT-come here or 2SG-FUT-go there
 ‘Will you come here or (you will) go there?’

- (34) **mɔ/mɔɔsu** ‘but’ and **bɛɛ** ‘or’ in sentence-initial position⁹
- a. **mɔ/mɔɔsu ɛ-mun-dzi hwi, ɛ-bɛ-bɔ yeyire**
 but 3SG.INANM-NEG-be nothing 3SG.INANM-FUT-do well
 ‘But it is nothing (all the same, don’t worry), it shall be well.’

⁹ Normally, the front high vowel, /i/, is inserted at word-initial position before the bilabial nasal consonant of **mɔ** and **mɔɔsu**, becoming [mi] and [miɔɔsu] respectively, when they are used in sentence-initial position.

- b. *bɛɛ wɔ-ɔ-lɔ?*
 or 2SG-PROG-be.sick
 ‘Or are you sick?’

Furthermore, only *bɛɛ* ‘or’ can occur at sentence-final position, as shown in (35). The semantic implication of this usage is discussed in the next section.

- (35) *wu-bɛ-dzi ɲa yɔ owi su bɛɛ?*
 2SG-FUT-be first go sun on or
 ‘Will you first go to toilet or... (go and bath)?’

Regarding the correlative disjunctive particle, *oow... oow* ‘whether... or’, it can be used to connect both phrases and clauses, unlike the other coordinators, as (36a) and (36b) illustrate accordingly.

- (36)a. *nantwie oow, ɔkplako oow, mɛ-ɛ-wi*
 cow CDP pig CDP 1SG-FUT-chew
 ‘Whether beef or pork, I will eat.’
- b. *wɔ-ɔ-lɔ oow, wu-nɛ-lɔ oow, wu-bɛ-yɔ*
 2SG-PROG-be.ill CDP 2SG-PROG.NEG-be.ill CDP 2SG-FUT-go
ntɕu-lɔ
 water-inside
 ‘Whether you are ill or not (you are not sick), you will go (and fetch) water.’

Moreover, unlike the other coordinators, however, the position of the correlative disjunctive coordinator in both phrasal and clausal coordination is fixed: it always follows each of the coordinands in coordination, which it forms a phonological word with.

5. Semantics and Diachronic Lines of the Coordinators

Apart from the syntactic function of conjoining clauses and/or phrases, the coordinators play an important semantic role of characterizing the relationships between the coordinands in coordination. Coordination in Nkami, like in many languages, may be rubricised into three main categories: Conjunctive, Disjunctive and Adversative coordination, based on the semantic effect of coordinators upon their coordinands. Let us look at them in turn.

5.1 Conjunctive Coordination

Conjunctive coordination (also conjunction or ‘and’ coordination) in Nkami generally conveys the notion of inclusiveness or supplementation. Often, the expression

in the second coordinand is seen as an addition to the one in the first coordinand. Two coordinators, **na** and **ni**, are respectively used for phrasal and clausal conjunctive coordination in Nkami. Let us see **na** before **ni**.

- (37)a. **Amankwa-bu** **na** **Adeɛmera-bu** **be-dʒi Nkami-fuɔ**
 NAME-IDENT and NAME-IDENT 3PL-be Nkami-IDENT
 ‘The people of Amankwa and Adeɛmera are Nkamis.’
- b. **Kofi na Ama be-yɔ ndulo**
 Kofi and Ama 3PL-go farm
 ‘Kofi and Ama will go to farm.’

As we observe in (37a), the use of **na** connotes the idea of inclusion, where people of two different towns, **Amankwa** and **Adeɛmera**, are put into one identical ethnic group, **Nkamifuɔ** ‘Nkamis’. Similarly, the two personal names, **Kofi** and **Ama**, are linked together with **na** in (37b), as either performing the event ‘going to farm’ collectively (and/or at the same time) or separately (and/or at different times). In different words, the sentence in (37b) necessarily does not have a *collective* or *together*-interpretation (cf. Stassen 2000); a *together*-interpretation is only one of its potential interpretations. Secondly, neither of the two participants, **Kofi** and **Ama**, in the construction is backgrounded and that both participants have equal ‘structural rank’ (cf. Stassen 2000). Furthermore, the two NPs in coordination in Nkami are typically subject to the Coordinate Structure Constraint, which forbids NP-extraction from such constructions (cf. Ross 1967, Stassen 2000). For instance, a coordinand of the coordinate NP in (37b) cannot be extracted for ex-situ focus, as (38) illustrates.

- (38) ***Kofi ni na Ama be-yɔ ndulo (amu)**
 Kofi FOC and Ama 3PL-go farm FOC
 ‘KOFI (not John, for instance) and Ama went to farm.’

Thus, the extraction of Kofi, a coordinand of the coordinate NP, for focus in (38) results in an ungrammatical sentence.¹⁰ Besides being used as a phrasal conjunctive coordinator, **na** may be extended to give ‘comitative’ interpretation. Thus, speakers will give you the same sentence in (37b) when asked to provide the equivalent of ‘Kofi will go to school with Ama’, although given (37b) in isolation without any context, no speaker will provide the comitative ‘Kofi with Ama’ rather than a conjunctive ‘Kofi and Ama’ interpretation. Thus, it appears that, synchronically, Nkami speakers have no formal means for coding comitative meaning (i.e., accompaniment); they substitute the

¹⁰ This is, however, admissible in some languages such as Akan, as (1) illustrates.

- (1) **Kofi na ne Ama kɔ-ɔ afuo=m no**
 Kofi FOC and Ama go-PST farm=inside FOC
 ‘KOFI (not John, for instance) and Ama went to farm.’

ordinary coordinate phrase when requested to translate a comitative phrase such as ‘Kofi with Ama’. This position is at variance with the popular position that comitative markers typically perform the additional function of a conjunctive coordinator, and that the former usually develops into the latter, especially in African languages (cf. Stassen 2000, Haspelmath 2004, 2007).

In the case of the clausal conjunctive coordinator, **ni**, it links two clauses whose events are performed by the same or different entities. For instance, in (39a) two distinct persons, **Kofi** and **mi** [m-] ‘I’, respectively perform the events of ‘giving money’ and ‘buying a book’. On the other hand, there is subject sharing in (39b), as the same person, **mi** ‘I’, carries out both events of ‘selling alcohol’ and ‘selling charcoal’.

- (39)a. **Kofi sa mi edalo ni m-fu so owli**
 Kofi give 1SG.OBJ money and 1SG-take buy skin/book
 ‘Kofi gave me money and I used it to buy a book.’
- b. **m-sɔ nta ni m-sɔ dʒanunum**
 1SG-sell alcohol and 1SG-sell charcoal
 ‘I sell alcohol and (I sell) charcoal.’
- c. **Kofi ɔɔ-dɔ mi ni mi mo mi-dɔ mu**
 Kofi 3SG.HAB-love 1SG.OBJ and 1SG.OBJ also 1SG-love him
 ‘Kofi loves me and I also love him.’

Note that the events carried out, or the state of affairs involved in the two propositions, can be performed simultaneously or at different times. For instance, in (39a) there is a general understanding that the event in the first clause ‘giving money’ occurs prior to the event in the second clause ‘buying a book’. However, in (39c) where the emotive verb, **ɔɔ** ‘love’, is used in both propositions, it is generally understood that the situation in both clauses happens concurrently. Just like in many other languages, the use of the conjunctive coordinator in Nkami may generate an interpropositional (logical) relation of ‘conjunction’ (cf. Payne 1997, Haspelmath 2007), between the two conjoined propositions. A coordinate construction in Nkami is true iff (if and only if) both propositions in coordination are true. So, for instance, (39c) can only be true if it is true that ‘Kofi loves me’, and ‘I also love him’. Thus, (39c) is false if either of the propositions is false.

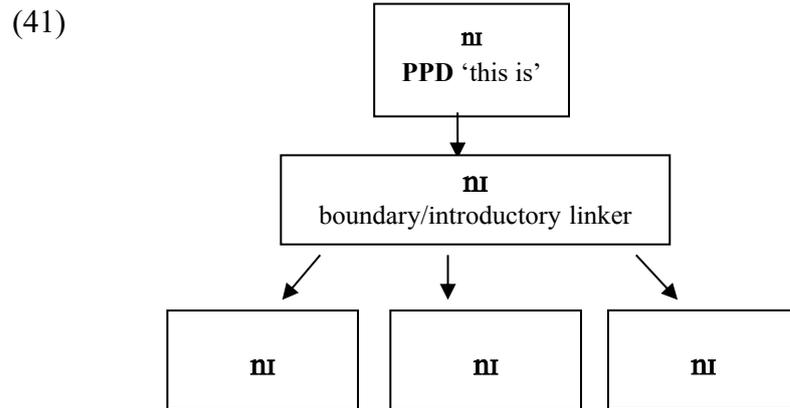
Apart from functioning as a clausal conjunctive coordinator, **ni** also functions as a relative marker, a focus marker and a proximal predicative demonstrative (PPD) in verbless clauses. Consider the following sentences showing the various indexes of **ni**.

- (40) a. **Ni** as a clausal conjunctive coordinator
ɔɔmi amu bu Ghana ni ɔɔfi amu bu China
 man DET be.in Ghana CONJ woman DET be.in China
 ‘The man is in Ghana and the woman is in China.’

-
- b. **Nɪ** as a relative marker
- | | | | | | | |
|--------------|-----------|----------------|-------------|------------|-----------|--------------|
| ɔ̃pɪɪ | nɪ | [wɔ-ŋu | mɔ] | amɔ | bɔ | China |
| man | REL | 2SG.SUBJ-see | 3SG.OBJ | REL | be.in | China |
- ‘The/that man you saw is in China.’
- c. **Nɪ** as a focus marker
- | | | | | |
|--------------|-----------|--------------|-----------|------------|
| ɔ̃pɪɪ | nɪ | wɔ-ŋu | mɔ | amɔ |
| man | FOC | 2SG-see | 3SG.OBJ | FOC |
- ‘It is a man you saw (not a woman).’
- d. **Nɪ** as a PPD
- | | | |
|--------------|------------|-----------|
| ɔ̃pɪɪ | amɔ | nɪ |
| man | DET | PPD |
- ‘This is the man.’
- e. **Nɔ** as a DPD
- | | | |
|--------------|------------|-----------|
| ɔ̃pɪɪ | amɔ | nɔ |
| man | DET | DPD |
- ‘That is the man.’
- (Asante and Ma 2016: 53-54)

Thus, **nɪ** functions as a clausal conjunctive coordinator in (40a), a relative marker in (40b), a focus marker in (40c) and a proximal predicative demonstrative (PPD) in (40d). And here, the explanation offered by Asante and Ma (2016: 53-55) for establishing the diachronic source of the relative marker in Nkami goes for the conjunctive coordinator as well; thus, it may be prudent to suggest that the clausal conjunctive coordinator, as well as the relative and focus markers, diachronically derived from the proximal predicative demonstrative. That is, judging from the four distinct functions of **nɪ** in (40a-d), one may not be far from right to contend that the reference of **nɪ** is more abstract and less grammatical when employed as a clausal conjunctive coordinator, a relative marker and a focus marker in (40a-c), than its reference in (40d) as a proximal predicative demonstrative. Thus, the first three functions of **nɪ** are similar in the sense that, at the underlying level, it appears to be used as a ‘boundary/introductory linker’. However, as a proximal predicative demonstrative, **nɪ** is used in opposition to **nɔ** in verbless clauses (40e) to express the deictic reference of entities. Thus, one can use **nɪ** to designate the location of entities in the real world when it functions as a proximal predicative demonstrative, as (40d) exemplifies. However, when **nɪ** functions as a boundary linker, it is not deictic, and hence, cannot be used to designate the location of entities in the real world as it does in (40d). Moreover, whereas **nɪ** contrasts **nɔ** when used as a demonstrative, it is not contrastive as a ‘boundary/introductory linker’. In other words, it will not be admissible to substitute **nɪ** with **nɔ** in (40a-c) to express deictic contrast. In sum, looking at the four distinct functions of **nɪ**, clausal conjunctive coordinator, relative marker, focus marker and proximal predicative demonstrative, it may be right to suggest that the first three functions derived from the proximal predicative demonstrative as a boundary/introductory linker before specializing into their

respective functions, as (41) schematises.



Finally, it may be necessary to note that Nkami is not the only known language whose conjunctive coordinator performs such functions. For instance, Stassen (2000) illustrates cases in some languages where the NP-coordinator seems to be a specialization of the function of a general focus-marking particle, as (41-42) exemplify with Manam and Kabyl (Stassen 2000: 17-18):

- (41) Manam (Austronesian, Melanesian)
- a. **moane-be** **aine** **di-pura**
man-and woman 3PL-arrive
'The men and the women arrived.'
 - b. **wabubu-lo-be** **i-pura**
night-at-FOC 3SG-come
'It was at night that he came.'

- (42) Kabyl (Afroasiatic, Berber)
- a. **agerfiou** **d'** **oubarer'**
raven and fox
'the raven and the fox'
 - b. **netsa** **d'** **agellid'** **en** **temourth** **agi**
3SG FOC king of country this
'It is him who is the king of this country.'

5.2 Disjunctive Coordination

Regarding disjunctive coordination (disjunction or 'or' coordination), speakers may use the disjunctive coordinator, **bɛɛ/be** 'or', to state alternative propositions in Nkami. The use of **bɛɛ** in coordination provides options or alternatives to interlocutors. There are two main types of disjunctive coordination in Nkami. The first one provides

limited options to interlocutors in discourse, as (43) exemplifies.

(43) Limited options

- a. **wu-be-yo** *Shanghai* **bee** *New York?*
 2SG-FUT-go Shanghai or New York
 ‘Will you go to Shanghai or New York?’
- b. **n-tʃi** **a** **klalɪ** **amu** **li** *mi* **bee** *mu*
 1SG-watch COND grasscutter DET pass here or there
 ‘When I watch (watching), the grasscutter passed here or there.’

In (43a), for instance, there are two available options to the addressee, ‘going to Shanghai’ or ‘going to New York’. The addressee is therefore expected to choose between the two options. When **bee** is used in this sense, it may generate the logical relation of ‘disjunction’. Thus, the truth of either one or both propositions in (43b), for instance, makes the entire coordinate construction true. The construction in (43b) is, however, false if neither of the propositions is true, i.e., if the grasscutter did not pass any of the two locations stated.

Furthermore, **bee** may be used to provide unlimited alternatives to interlocutors when it occurs at sentence-final position, as (44) illustrates.

(44) Unlimited Options

- wu-be-yo** *Shanghai* **bee...?**
 2SG-FUT-go Shanghai or
 ‘Will you go to Shanghai or ...?’

As we observe in (44), the speaker provides unlimited alternatives to the addressee including the one stated, ‘Shanghai’, and ‘any other city in the world’, since the proposition in the second coordinand is unspecified. Note, however, that if there is a pause after the first coordinand before the disjunctive coordinator, represented by a comma in writing as (45) illustrates below, then, the unlimited interpretation will not hold.

(45) Limited Options

- wu-be-yo** *Shanghai,* **bee...?**
 2SG-FUT-go Shanghai or
 ‘Will you go to Shanghai or ... (you will not go)?’

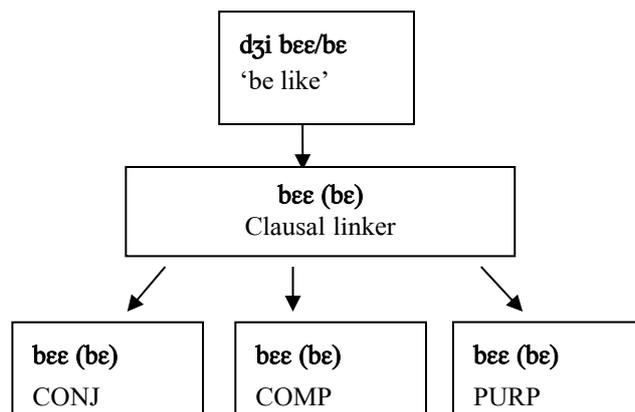
Thus, as the English translation shows, although the second coordinand of the sentence in (45) is not provided, the addressee has only two available options; that is, ‘going to Shanghai’ or ‘not going to Shanghai’, and not ‘going to Shanghai’ or ‘going to any other city’, as (44) connotes.

Like the phrasal conjunctive coordinator, **ni**, **bɛɛ** is also multi-functional. In addition to being a disjunctive coordinator, it also functions as a preposition, a complementizer, a purposive clause linker, among others. These functions are exemplified in (46) below (Asante 2016b: 244).

- (46)a. **Kofi bɛ-yɔ Shanghai bɛɛ London?** Coordinator
 Kofi FUT-go Shanghai CONJ London
 ‘Will Kofi go to Shanghai or London?’
- b. **Kofi yɔ bɛɛ ɔ-lɔ-yɛ-dɪ** Purposive
 Kofi go PURP 3SG-PROG-PDP-sleep
 ‘Kofi went (in order to go and) to sleep.’
- c. **Kofi ŋu [bɛɛ ɔ-lɔ-dɪ]** Complementizer
 Kofi see COMP 3SG-PROG-sleep
 ‘Kofi saw him sleeping (John saw that he was sleeping).’
- d. **Kofi mu ɔpɛsɪlɔ dʒi bɛɛ/bɛ akpāā** Preposition
 Kofi POSS face be like bat
 ‘Kofi’s face is like a bat.’

In (46a) **bɛɛ** functions as a disjunctive coordinator, connecting the two conjuncts ‘Shanghai’ and ‘London’. It functions as a complementizer in (46b) by introducing the complement clause, **ɔlɔdɪ** ‘he is sleeping’; and it functions as a purposive clause linker, introducing the purpose clause, **ɔlɔyɛdɪ** ‘he is going to sleep’. Lastly in (46d) it co-occurs with the copula verb, **dʒi** ‘be’, to perform a function that may be couched as ‘prepositional’, since it designates the physical similarity between the comparee of comparison ‘Kofi’s face’ and the standard of comparison ‘dog’. Following closely from the arguments put forward by Asante (2016b: 244) for establishing the diachronic source concept for the complementizer, **bɛɛ**, in Nkama, in all three cases in (46a-c), **bɛɛ** appears to serve as a ‘clausal introducer/linker’. Thus, similarly to the argument adduced for the diachronic source of the clausal conjunctive coordinator above, the use of **bɛɛ** as a clausal introducer/linker appears to be more abstract and more grammatical than its use as a preposition (or an inherent complement) of the phrasal verb, **dʒi bɛɛ/bɛ** ‘be like’, in (46d). As a result, it may be appropriate to suggest that the disjunctive coordinator, complementizer and purposive clause linker (PURP) diachronically derived from the phrasal verb, **dʒi bɛɛ/bɛ** ‘be like’, first as a clausal linker before specializing into their respective functions, as (47) schematises.

(47)



5.3 Adversative Coordination

In adversative coordination (or ‘but’ coordination) there is a seemingly contrast or conflict between the propositions expressed in the first and second coordinands. Nkami employs *mɔsɔ/mɔ* in adversative coordination, as shown in (48).

- (48)a. **n-tie** **Accra** *mɔ/mɔsɔ* **n-tʃu** **Nkami**
 1SG-live Accra but 1SG-come.from Nkami
 ‘I live in Accra but I come from Nkami.’
- b. **anɪ-fu** **akisitɔ** **bebiree** **le-kãã** **Afram** *mɔ*
 1PL-take taboo many PRF-touch Afram but
ɔ-da **anɪ** **yɔ** **bã**
 3SG-hit 3SG.POSS body fence
 ‘We have desecrated Afram but he continues to protect us.’

Sentence (48a) conveys the meaning that ‘in spite of the fact that I live in Accra (and it appears to you that I am from Accra, I am not), I actually come from Nkami’. A similar interpretation goes for (48b) where one would assume or expect that because of the desecration of Afram (god), he would forsake them, but he does not as he continues to protect them. In both sentences there is a general acceptance of the truths of the first propositions (by the interlocutors), and the second propositions only seek to counteract the derived assumptions (not the truths) from the first propositions by the addressee/hearer.

Unlike the previous coordinators, the adversative coordinator, *mɔ* ‘but’, has fewer functions. It is isomorphic with a morpheme that is similar in function with the English adverbs ‘also’ and ‘too’. As noted above, when *mɔ* is used as an adversative coordinator, it indicates contrast, as (49a) further illustrates. On the other hand, there is a sense of inclusiveness when used as an adverb, as (49b) illustrates.

(49)a. **Mɔ** as an adversative coordinator

Kofi ɔɔ-kpa nta mɔ Yaw ma-kpa
 Kofi 3SG.HAB-like alcohol but Yaw NEG-like
 ‘Kofi likes (drinking) alcohol but Yaw does not like it.’

b. **Mɔ** as an adverbial

Kofi ɔɔ-kpa nta, ni Yaw mɔ ɔɔ-kpa
 Kofi 3SG.HAB-like alcohol and Yaw also 3SG.HAB-like
 ‘Kofi likes alcohol, and Yaw likes it too.’

Moreover, when used as a coordinator, as in (49a), **mɔ** immediately precedes the subject of the second clause (here, Yaw); however, as an adverbial, it follows the subject of the second clause and before its predicate. The isomorphism between the inclusive adverb ‘also/too’ and the adversative coordinator ‘but’ is not restricted to Nkami. It also shows up in Akan, as (50) exemplifies.

(50) Akan

a. **Nso** as an adversative coordinator

Kofi pɛ nsa nso Yaw m-pe
 Kofi HAB.like alcohol but Yaw NEG-like
 ‘Kofi likes alcohol but Yaw does not like it.’

b. **Kofi pɛ nsa nsoso Yaw m-pe**

Kofi HAB.like alcohol but Yaw NEG-like
 ‘Kofi likes alcohol but Yaw does not like it.’

c. **Nso** as an adverbial

Kofi pɛ nsa, ɛna Yaw nso pɛ
 Kofi HAB-like alcohol and Yaw also HAB.like
 ‘Kofi likes alcohol, and Yaw likes it too.’

In fact, as we observe in (50b), unlike Nkami, the adversative coordinator, **nso** ‘but’, in Akan may engage in a morphological process, namely, reduplication (becoming **nsoso**), which is common with adverbs in the language. Similarly to the arguments put forward for the two other coordinators above, since **mɔ**, as an adverbial, is more lexical and less grammatical than its function as a coordinator, we may assume that the latter derived from the former.

Here, it may be worthy to note that the development of the adverbial ‘too, also, as well’ into a coordinator is quite pronounced in many of the world’s languages. For instance, in her cross-linguistic typological study on the origin of coordinators, Mithun (1988) shows that NP-coordinators grammaticalize from “varied sources including ..., or sentence adverbials with the original meaning ‘also, too, as well’, or ‘furthermore, then, moreover’” (cf. Stassen 2000). The difference, however, is that whereas the adverb ‘too, also’ has developed into an adversative coordinator in Nkami (and Akan), it developed into conjunctive coordinators in these languages.

6. Coordination and Elliptical Rules

As we have seen in many of the data above, the independent coordinands in coordination may be realized in their full or reduced forms. Observe further below that whereas (51a) has the object NP, *afra* ‘fufu’, explicitly stated in both clauses, it is only stated once in the first clause in (51b).

- (51)a. ?*Kofi* *ɔɔ-kpa* *afra* *ni* *Ama* (*mɔ*) *ɔɔ-kpa* *afra*
 Kofi 3SG.HAB-like fufu and Ama (also) 3SG.HAB-like fufu
 ‘Kofi likes fufu and Ama (also) likes fufu.’
- b. *Kofi* *ɔɔ-kpa* *afra* *mɔ* *Ama* *ma-kpa*∅
 Kofi 3SG.HAB-like fufu but Ama NEG-like
 ‘Kofi likes fufu but Ama does not like (it).’

This section, therefore, seeks to explain the mechanisms speakers use to code this and other reduced forms through what has come to be known as ‘compression’ or ‘coordination reduction’ rules (cf. Sanders 1977, Schachter 1977, Baker 1978, Payne 1985, Dzameshi 1998, Haspelmath 2007). We will restrict ourselves to the following coordination reduction rules, conjunction reduction, reciprocation and anaphoric substitution, in that order in the following paragraphs.

The rule schema for conjunction reduction requires that for a compound sentence to be reduced to a simple sentence, the various coordinands in the compound sentence should share a ‘similar structure’. By ‘similar structure’, Jacob and Rosenbaum (1968) refer to constituents that are of the same type with identical syntactic function. Thus, the conjunction reduction rule prohibits identical materials in parallel structures (coordinands); so, whenever there is repetition of shared constituents in parallel structures, the repeated materials in the second coordinand are omitted. For instance, both coordinands in (52a) have the phrase *yɔ ndulo* ‘go to farm’. However, since the language does not prefer identical elements in coordination, the second occurrence of the phrase, *yɔ ndulo* ‘go to farm’, is omitted, as (52b) shows.

- (52)a. *Kofi* *yɔ* *ndulo* *ni* *Ama* (*mɔ*) *yɔ* *ndulo*
 Kofi go farm and Ama also go farm
 ‘Kofi went to farm and Ama went to farm too.’
- b. *Kofi* *na* *Ama* (*bɛ*)-*yɔ* *ndulo*
 Kofi and Ama 3PL-go farm
 ‘Kofi and Ama (they) went to farm.’

When the conjunction reduction rule applies in (52b), the subject of the second coordinand is preposed to the position before the main (and only) verb, *yɔ* ‘go’. The subject that undergoes the movement, *Ama*, forms an NP compound subject with the

subject of the first coordinand, **Kofi**. Evidence to show that the subjects of the two coordinands in (52a), **Kofi** and **Ama**, now form a compound subject in (52b) is based on the fact that the main verb may inflect for the third person plural subject pronoun, **bɛ-** ‘they’, to co-reference the NP compound subject, **Kofi** and **Ama**, in person and number. Also, observe that since the language formally distinguishes between phrasal and clausal conjunctive coordination, the clausal coordinator, **ni**, in (52a) is replaced with the phrasal coordinator, **na**, in (52b).¹¹

Note also that the application of the conjunction reduction rule may bring about ambiguity. In cases where participants (subject arguments) of identical events, as in (53a) where both **Kofi** and **Ama** participate in the event of ‘going to Kumasi’, form a compound subject through the application of the conjunction reduction rule, the resultant sentence may be potentially ambiguous, as (53b) shows.

- (53)a. **Kofi beyɔ Kumasi ni Ama (mɔ) bɛ-yɔ Kumasi**
 Kofi FUT-go Kumasi and Ama (also) FUT-go Kumasi
 ‘Kofi will go to Kumasi and Ama will (also) go to Kumasi.’
- b. **Kofi na Ama bɛ-yɔ Kumasi**
 Kofi and Ama FUT-go Kumasi
 ‘Kofi and Ama will go to Kumasi together OR
 Kofi and Ama will go to Kumasi separately.’

Thus, the derived sentence in (53b) has two interpretations: ‘Kofi and Ama will go to Kumasi together’ or ‘Kofi will go to Kumasi separately and Ama will go to Kumasi separately’. Contextual knowledge is required to disambiguate them.

Another means by which Nkama achieves syntactic reduction in coordination is through the ‘reciprocal formation rule’. The reciprocal formation rule also prohibits repetition of shared constituents in parallel clauses. So, when there is repetition of identical elements in a coordinate construction, the reciprocal pronoun, **amu yu** ‘themselves (each other)’, may be introduced to replace the repeated element(s). This is exemplified in (54).

- (54)a. **Kofi dɔ Ama ni Ama dɔ Kofi**
 Kofi love Ama and Ama love Kofi
 ‘Kofi loves Ama and Ama loves Kofi.’
- b. **Kofi na Ama (bɛ)-dɔ amu yu**
 Kofi and Ama (3PL)-love them self
 ‘Kofi and Ama love themselves (each other).’

In (55b) the identical constituent, **Ama dɔ Kofi** ‘Ama loves Kofi’, is omitted and its position is filled by the reciprocal pronoun **amu yu** ‘themselves (each other)’.

¹¹ See Haspelmath (2007), for instance, for arguments against the conjunction reduction rule.

Remember also that when the subject of the second constituent, **Ama**, moves leftward to join **Kofi** to form the compound subject, '**Kofi and Ama**', in (55b), the phrasal coordinator, **na** 'and', substitutes for the clausal coordinator, **ni**.

Next, like the conjunction reduction and reciprocal formation rules, the anaphoric substitution rule prohibits shared constituents in parallel coordinands. However, instead of omitting one of the shared constituents or introducing the reciprocal pronoun to replace repeated element(s), the anaphoric substitution rule replaces an identical constituent with a special form, which is usually a pronoun or a particle. The anaphoric substitution rule in Nkami is similar to that of English, as both languages replace repeated noun phrases with pronouns. Consider (55) below.

- (55)a. **Kofi ma-tilifu jamileku ni Kofi ma-kã**
 Kofi NEG-fear God and Kofi NEG-listen
jamileku asũ
 God word
 'Kofi does not fear God, and Kofi does not listen to God's word.'
- b. **Kofi ma-tilifu jamileku ni a-ma-kã mu asũ**
 Kofi NEG-fear God and 3SG-NEG-listen 3SG.POSS word
 'Kofi does not fear God, and he does not listen to his word.'

Thus, the repeated NPs, **Kofi** and **jamileku** 'God', in (55a) are respectively replaced with the anaphoric 3SG subject pronoun, **a-**, and the 3SG possessive pronoun **mu** 'his'.

7. Conclusion

This paper has discussed the syntactic phenomenon of coordination in Nkami, an endangered lesser-known Guang (Niger-Congo, Kwa) language of Ghana, based on synchronic natural data. It has discussed a wide range of issues including coordination strategies in Nkami, number and types of coordinators in Nkami, linguistic properties of the coordinators, allowable types of syntactic structures for coordination, semantic effect(s) of the coordinators on their coordinate structures and the multi-functionality and possible diachronic source concepts of the coordinators. Additionally, some constraints governing Nkami's coordination and the source concepts of the connectives were also discussed. Among other things, it has been observed that Nkami employs both syndetic (overt) and asyndetic (covert) strategies for coordination, though the former is highly restricted occurring chiefly in narratives and pithy sayings. Secondly, just like in the majority of the world's languages (cf. Stassen 2000, Haspelmath 2004, 2007), Nkami employs the monosyndetic NP-coordination strategy by way of a medial connective. Moreover, whereas Nkami employs a Serial Adjective Construction (or an asyndetic) strategy when modifiers (adjectives) in a sentence modify the same referent, a Coordinate Adjective Construction (or a syndetic) strategy is used when the modifiers qualify different referents within the same sentence. The paper also showed four distinguishing features between the two multi-verb construction types, (asyndetic)

coordination and (linking) SVC, in Nkami with regards to the following parameters: intonation break, negation marking, subject marking, and the number of allowable adverbials belonging to the same sub-semantic type in a sentence. Moreover, we also saw that Nkami has clearly distinct connectives, **na** and **ni**, for both phrasal and clausal conjunctive coordination respectively, just like in other African languages (cf. Welmers 1973, Abdoulaye 2004, Lefebvre 2004). Also, almost all the coordinators in Nkami are multifunctional and derivable from more lexical or less grammatical concepts. Further, Nkami shows evidence of the three major semantic types of coordination (Haspelmath 2004, 2007): conjunction (conjunctive conjunction or ‘and’ coordination), disjunction (disjunctive coordination or ‘or’ coordination), and adversative coordination (‘but’ coordination). Other sub-semantic domains such as animacy, conceptual closeness or naturalness, emphasis, inclusion, etc. do not play any significant role(s) in coordination in Nkami (cf. Mithun 1988, Stassen 2000, Wälchli 2003, Haspelmath 2007). Lastly, we also saw that three mechanisms that Nkami speakers employ to achieve syntactic reduction in coordination are conjunction reduction, reciprocation and anaphoric substitution.

References

- Abdoulaye, Mahamane L. 2004. Comitative, Coordinating, and Inclusory Constructions in Hausa. In M. Haspelmath, ed., *Coordinating Constructions*. Amsterdam: Benjamins. Pp 165-193.
- Aikhenvald, Alexandra Y. & Robert M. W. Dixon, eds., 2006. *Serial Verb Constructions: a Cross-linguistic Typology*. Oxford: Oxford University Press.
- Asante, Rogers K. 2016a. *Nkami Language: Description and Analysis*. PhD Dissertation, Tongji University.
- Asante, Rogers K. 2016b. Complement Clause Constructions in Nkami. *Acta Linguistica Hafniensia* 48.2: 219-248, DOI:10.1080/03740463.2016.1242829.
- Asante, Rogers K., and Qiuwu Ma. 2016. Relative Clause Constructions in Nkami. *Studies in African Linguistics* 45.1&2: 27-59.
- Baker, Carl L. 1978. *Introduction to Generative-transformational Syntax*. New Jersey: Prentice-Hall.
- Bamgbose, Ayo. 1973. The Modifying Serial Construction: a Reply. *Studies in African Linguistics* 4.2: 207-217.
- Bamgbose, Ayo. 1982. Issues in the Analysis of Serial Verb Constructions. *Journal of West African Languages* 12.2: 3-21.
- Dik, Simon C. 1968. *Coordination: Its Implications for the Theory of General Linguistics*. Amsterdam: North Holland.
- Dzameshi, A. K. 1998/1989. Structures of Coordination in Ewe. *Journal of West African Languages* 27.1: 71-31.
- Frimpong, Nana K. S. 2007. *Conjunctions in Akan*. Mphil Thesis, University of Ghana.
- Jacobs, Roderick A. & Peter S. Rosenbaum. 1968. *English Transformational Grammar*. London: Ginn and Co.
- Haspelmath, Martin. 2004. Coordinating Constructions: an Overview. In Martin Haspelmath, ed., *Coordinating Constructions*. Amsterdam: Benjamins. Pp 3-39.
- Haspelmath, Martin. 2007. Coordination. In T. Shopen, ed., *Language Typology and Syntactic Description*. Cambridge: Cambridge University Press. Pp 1-51.
- Kibrik, Andrej A. 2004. Coordination in Upper Kuskokwim Athabaskan. In Martin Haspelmath, ed., *Coordinating Constructions*. Amsterdam: Benjamins. Pp 537-553.
- Lefebvre Claire. 2004. Coordinating Constructions in Fongbe with Reference to Haitian Creole. In Martin Haspelmath, ed., *Coordinating Constructions*. Amsterdam: Benjamins. Pp 123-164.
- Matras, Yaron. 1998. Utterance Modifiers and Universals of Grammatical Borrowing. *Linguistics* 36: 281-331.
- Mithun, Marianne. 1988. The Grammaticalization of Coordination. In J. Kaiman and S. A. Thompson, eds., *Clause Combining in Grammar and Discourse*. Amsterdam: Benjamins. Pp 331-359.

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- Ohuri, Toshio. 2004. Coordination in Mentalese. In Martin Haspelmath, ed., *Coordinating Constructions*. Amsterdam: Benjamins. Pp 41-66.
- Osam, Kweku E. 2003. *The Trondheim Lectures: an Introduction to the Structure of Akan, its Verbal and Multiverbal Systems*. Legon: Department of Linguistics.
- Payne, John R. 1985. Complex Phrases and Complex Sentences. In T. Shopen, ed., *Complex Constructions*. Cambridge: Cambridge University Press. Pp 3-41.
- Payne, T. 1997. *Describing Morphosyntax: a Guide for Field Linguists*. Cambridge: Cambridge University Press.
- Radford, Andrew. 1998. *Transformational Grammar: a First Course*. Cambridge: Cambridge University Press.
- Ross, John R. 1967. *Constraints on Variables in Syntax*. Bloomington: Indiana University Linguistics Club.
- Sanders, Gerald A. 1977. A functional Typology of Elliptical Coordination. In F. R. Eckman, ed., *Current Themes in Linguistics: Bilingualism, Experimental Linguistics, and Language Typologies*. Washington, DC: Hemisphere. Pp 241–70.
- Schachter, Paul. 1977. Constraints on Coordination. *Language* 53: 86-103.
- Sebba, Mark. 1987. *The Syntax of Serial Verbs*. Amsterdam: Benjamins.
- Stassen, Leon. 2000. AND-languages and WITH-languages. *Linguistic Typology* 4.1: 1-55.
- Wälchli, Bernhard. 2003. *Co-compounds and Natural coordination*. PhD Dissertation, University of Stockholm.
- Watson, Richard. 1966. Clause to Sentence Gradations in Pacoh. *Lingua* 16: 166-168.
- Welmers, W. 1973. *African Language Structures*. Berkeley: University of California Press.