



Article

# Clausal Coordination in Gã: The Case of nì †

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† This paper derives from my Master of Philosophy research in which I investigated the semantics and pragmatics of two Gã clausal connectives: *ni* and *shi*.

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**Abstract:** This paper analyses the communicative functions of the Gã (Niger–Congo, Kwa branch) clausal connective ni, roughly corresponding to English 'and', drawing on Wilson and Sperber's (1995; 2004) relevance theory. The study demonstrates that ni is a conjunction that achieves optimal relevance when the ni-utterance has cognitive effects that transcend those of the individual conjuncts of ni. Importantly, the use of ni leads the way in providing clues that aid the interlocutor to "work out" the nature of the inferential relation between the conjuncts. These inferential relations, including addition, temporality, causality, contrast and parallelism, ultimately enable the interlocutor to arrive at the desired and/or intended interpretation of the utterance as a whole. This paper is, thus, an attempt to account for the meaning of ni as well as the pragmatic processes that inform the specific inferential relations between the ni-conjuncts. It also illumines the ways in which pragmatic enrichment and context-dependent inference can strengthen the logical form of clausal coordination in Gã.

**Keywords:** coordinating connective; conjunct; enrichment; Gã; inference

# 1. Introduction

The focus of this paper is the  $G\tilde{a}^1$  (Niger–Congo, Kwa branch) clausal connective  $n\tilde{i}$ , roughly corresponding to English 'and'. My main goal in this study is to identify the acceptable communicative contexts within which  $n\tilde{i}$  can be used. Thus, the question I seek to understand is, under what conditions or constraints can the use of  $n\tilde{i}$  be considered felicitous in  $G\tilde{a}$ ? Based on this question, I propose a semantics for  $n\tilde{i}$  and distinguish this from its pragmatics. It must be mentioned at the outset that although this study is informed by typological guidance (cf. for e.g., Carston 2002; Amfo 2007; 2011; 2014), it is not intended to be a comparative study. Indirect or explicit references to existing work akin to  $n\tilde{i}$  are made only when necessary.

The semantics and pragmatics of conjunctions or sentence connectives have engendered scholarly interest for some time, leading to a number of accounts of the specific kinds of relations that exist between conjuncts.<sup>2</sup> From a semantic standpoint, Cohen (1971) proposes a semantic hypothesis view that considers *and* as a rich lexical entry (richer than the logical operator  $\mathcal{E}$ , for example) that is not semantically ambiguous. Similarly to Cohen (1971), Bar-Lev and Palacas (1980) do not equate the semantics of *and* with the logical operator  $\mathcal{E}$ , proposing that *and*, semantically speaking, is asymmetrical. The pragmatic accounts on *and*, on the other hand, do not subscribe to the view that any communicated relation between conjuncts stems from some meaningful linguistic information encoded in *and* itself. Hence for Grice (1989) and other neo-Griceans, including Gadzar (1979), Horn (1992) and

Although nasalization and tone have been marked on  $G\tilde{a}$  and  $n\tilde{i}$  ('and') in the title, they have not been marked on the  $G\tilde{a}$  examples in the paper for ease of presentation, and also because they are not needed to bring about distinction in meaning.

Carston (2002) (chapter three), for instance, presents an evaluation of various semantic and pragmatic accounts of conjunctions.

Levinson (2000), besides being semantically ambiguous, and is equivalent to the logical operator  $\mathcal{E}$  since any logical relation that exists between and-conjuncts is inferentially derived and/or pragmatically inferred. While the position of Grice and the neo-Griceans on the pragmatically inferred relations between conjuncts is shared by Carston (1993; 2002) and Blakemore and Carston (2005), this latter group of scholars does not consider such relations as implicated conclusions. Instead, they treat them as various enrichment procedures that contribute to the meaning of the overall proposition expressed by the utterance.

The analysis of ni in this study is informed by Carston (1993; 2002) and Blakemore and Carston's (2005) analysis of and, the coordinating conjunction in English; Amfo's (2007) analysis of the Akan sentence connective na ('and'); and Amfo's (2011) analysis of the Dangme clausal connective  $n\epsilon$  ('and'). Of particular relevance to the present study is Amfo (2007). I draw on Carston and Blakemore owing to the comprehensive approach they adopt in accounting for the range of functions of and, while Amfo's work is useful for the current study because Ga, Dangme and Akan are languages spoken in Ghana and they belong to the same language family (Niger–Congo, Kwa branch) in addition to the fact that Ga and Dangme stand in close proximity with each other both syntactically and phonologically.

This paper attempts to give a comprehensive account of the semantico-pragmatic functions of ni in Gã, employing mainly attested data culled from a Gã novel supported by the author's native speaker judgements/intuitions and formal instruction in Gã. The data also include self-constructed examples verified by five other native speakers and elicited examples from these native speakers. Generally, ni in Gã is expected to build on a previous utterance or refine its meaning in a certain way. Hence, in instances where it fails to logically expand the previous utterance, its usage is likely to be ungrammatical, as illustrated by examples (1) and (2) below.

- 1. Adole ye kpitioo  $\hat{n}$  e-he ye feo Adole BE short CONJ 3SG-self BE beautiful 'Adole is short and she is beautiful.'
- \*E-sumo Adzo nì e-nyε-εε e-kεε lε
   3SG-love Adzo CONJ 3SG-able-NEG 3SG-tell PRO 'He loves Adzo and he cannot tell her.'

The analysis of  $n\hat{\imath}$  in this paper begins with a characterization of its semantic content subsequent to which how various enrichment mechanisms contribute to an understanding of  $n\hat{\imath}'s$  intended interpretations in specific speech situations is addressed. The remainder of the paper is structured as follows: the next section (Section 2) presents general information about the Gã language followed by the theoretical orientation underlying the study (i.e., relevance theory) in Section 3. In Section 4, the discussion on the linguistically encoded meaning of  $n\hat{\imath}$  and the pragmatically inferred relations signaled by  $n\hat{\imath}$ -conjuncts is presented. Section 5 concludes the study.

# 2. The Gã Language

Gã, like most languages in Ghana, is a Niger–Congo language of the Kwa language family. Together with its closest linguistic neighbor, Dangme, Gã has been classified under the Nyo subgroup of New Kwa (Williamson 1989). Gã is the indigenous language of the people of Gã State or Greater Accra, and its surrounding areas, and is mainly spoken in the coastal towns of Accra, Osu, La, Teshie, Nungua, Tema, and Kpone. In its present geographical location, the Gã speaking area is bordered on the north by the Akwapim–Togo Range Mountains and on the south by the Gulf of Guinea. It is estimated that Gã has about 680,000 native speakers (Kotey 2014). Geographical variations in Gã can hardly be recognized as a result of which there are no known dialects.

According to historians, the Gã people, at various times in the past, shared boundaries with Akans, Obutus, Akwamus, and Ewes. They also lived with various Europeans, including the Portuguese, Dutch, Danes, Germans, and English, as a result of which the Gã lexicon has been influenced by these languages (Adjei 1999). Kropp Dakubu (2002) submits that the first grammar of Gã was published

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in 1764. By 1866, the entire Bible had been translated into Gã (Adjei 1999). Consequently, compared to many West African languages, Gã has a longer history of academic study and linguistic inquiry. In Ghana currently, Gã is one of the major languages used by the media for both entertainment and news broadcasting. It also one of the eleven Ghanaian languages used for instruction in schools, and is also taught as a subject at all levels of education in the country.

In terms of basic phonology, Kotey (2014) indicates that forty-four sounds make up the Gã language. Of this, seven /i, e,  $\epsilon$ , o, o, u, a/ are oral vowels, five / $\tilde{\imath}$ ,  $\tilde{\epsilon}$ ,  $\tilde{\imath}$ ,  $\tilde{u}$ ,  $\tilde{a}$ / are nasalized vowels and the remaining thirty-two sounds /b, d,  $\dot{\mathfrak{g}}$ ,  $\dot{\mathfrak{g}}$ w, f, g, gb, gw, h, hw, k, kp, kw, l, m, n,  $\mathfrak{p}$ ,  $\mathfrak{p}$ ,  $\mathfrak{p}$ ,  $\mathfrak{p}$ , m,  $\mathfrak{p}$ ,  $\mathfrak{p}$ ,

Syntactically, word order and pronominal forms are used to signal grammatical relation in  $G\tilde{a}$ . A simple declarative sentence has an SVO word order (subject-verb-object); that is, the subject precedes the verb, and the object follows the verb. Hence,  $G\tilde{a}$  is an SVO head-initial language, but it also accepts both postpositions and/or adpositions. The grammatical categories associated with the verb in  $G\tilde{a}$  include tense, aspect, mood, and negation (Kropp Dakubu 2008), and these categories may be marked morphologically on the verb. Also, the form of the pronoun used indicates whether an entity is to be considered as a subject or an object in a given  $G\tilde{a}$  construction, and the pronouns are not gender-specific (Kotey 2014). The marker analyzed in this study,  $n\tilde{i}$ , falls within the syntactic category of coordinators and subordinators depending on whether it joins clauses of equal or unequal status.

## 3. Relevance Theory and Utterance Interpretation

The study draws on Wilson and Sperber's (cf. Sperber and Wilson 1995; Carston 2002; Wilson and Sperber 2004; Wilson and Matsui 2012; Clark 2013) relevance theory (RT), a theory that seeks to exploit further Grice's (1967) claim about the importance of inference to the interpretation process. Unlike Grice, however, Wilson and Sperber hold the view that pragmatic processes are vital in helping an interlocutor to construct what is explicitly communicated (explicatures<sup>3</sup>) and what is implied (implicatures).

Basically, RT is a theory about human cognition and communication. Although largely used in the analysis of verbal communication in its early development, RT is now being applied to other forms of communication, including visual and multimodal communication (cf. Forceville 2005; 2006; 2014). It is a theory about ostensive-inferential communication, i.e., the phenomenon in which the speaker not only has an informative intention, but also a communicative intension. Ostensive-inferential communication involves cognitive processes that are guided by the communicative principle of relevance, which states that, "Every ostensive stimulus conveys a presumption of its own relevance" (Wilson and Sperber 2004, p. 612). What is meant by optimal relevance is that (a) the ostensive stimulus is relevant enough to be worth the audience's processing effort and (b) the ostensive stimulus is the most relevant one compatible with the communicator's abilities and preferences. The "relevance" of an input to an individual is determined by a combination of the (positive) cognitive effects achieved and processing effort of the input. Hence (all other things being equal), the greater the positive cognitive effects achieved by processing an input, the greater the relevance of the input to the individual at that time and vice-versa (Wilson and Sperber 2004, p. 609). Processing effort is the mental

In relevance theory, an explicature is an ostensively communicated assumption which is inferentially developed from the logical form of an utterance. Its input ingredients include the logical form and contextual information. An implicature, conversely, is derived exclusively via processes of pragmatic inference. Carston (2002) discusses the explicature–implicature distinction in detail.

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effort expended to arrive at a satisfactory interpretation of incoming information, while a cognitive effect is an adjustment of an individual's representation of the world (Wilson and Sperber 2004). Positive cognitive effects contribute positively to the fulfillment of cognitive functions or goals (Wilson and Sperber 2004, p. 608), and so are worth having.

Hence, if, for example, in a conversation between A and B, A utters *I am a human being*, RT predicts that following a relatively simple heuristic, B will typically not interpret A's utterance as a statement about the biological species of A, although that is what is directly or explicitly communicated. Most likely, B will interpret A's utterance to mean that A exhibits certain attributes—kindness, has feelings, is emotional, etc.—owing to A's human nature. This latter interpretation is only indirectly communicated (an implicature); it yields a positive cognitive effect, and in context will require less processing effort compared to the biological species interpretation. Similarly, when one hears the utterance *I have a big cat* in a conversation between two childhood friends at home, one will most likely in an everyday situation interpret *big cat* as referring to a domestic cat/pet and not a lion, for instance. This is because the explicitly communicated message in the given context satisfies the hearer's expectations of relevance. Hence, the hearer abandons the indirectly communicated meaning (a lion, for instance) which is likely to be a false assumption, and therefore not worth having.

According to RT, "relevance" (positive contextual effects) can be achieved in three ways. First, a newly derived information can combine with some previous information or assumption held by the interlocutor to yield contextual implications. Second, an utterance is relevant when it strengthens the interlocutor's already existing assumption. Third, a new piece of information is relevant to the extent that it conflates with an existing assumption of the interlocutor, thereby necessitating an abandonment of one of the pieces of information. Crucially, utterances are interpreted within a specific context, which is psychologically defined by Sperber and Wilson (1995, p. 15) as "a subset of the hearer's assumptions about the world", including all the pieces of information that the interlocutor "invests" into the interpretation process. To Sperber and Wilson (1995), thus, variables that affect context—social, cultural, historical, ethnographic, economic or participants' (status)—simply shape the interlocutor's assumptions (of the world) used in accessing an utterance's desired interpretation.

For the interlocutor to choose a specific context that will aid the interpretation process, certain linguistic items may prove useful. Some of these linguistic indicators, which may not contribute to truth-conditional or conceptual meaning, are referred to as encoders of procedural meaning in relevance-theoretic terms.<sup>4</sup> That is, these linguistic forms signal an interpretive path for an utterance by providing constraints on the inferential process. The notion of linguistic items being able to encode procedural information in RT as well as the procedural-conceptual meaning dichotomy in the semantic/pragmatic literature is traceable to Blakemore's (1987) study in which she re-analyzed some of Grice's conventional implicatures as being (semantic) constraints on implicatures. Following Blakemore (1987), other researchers such as Blass (1990), Wilson and Sperber (1993), Fretheim (2001a; 2001b), Andersen and Fretheim (2000), Amfo (2014; 2011) and Otoo (2016) have investigated various linguistic expressions in terms of how they guide the interlocutor in arriving at the intended interpretation by constraining the comprehension process both at the explicit and implicit levels.

The Gã sentence connective that is the focus of this paper,  $ni^5$ , encodes procedural information that suggests that ni's presence provides a cue to the interlocutor to follow a certain path of interpretation. That is, ni narrows the process of comprehension, providing crucial guidance on the nature of the relationship between the clauses coordinated by ni. In this vein, ni can be said to be akin (albeit not exactly the same) to the Akan clausal connective na as analyzed in Amfo (2007). For an overall interpretation of ni, thus, the interlocutor needs to pragmatically enrich the accessed information with

<sup>&</sup>lt;sup>4</sup> Wilson and Sperber (1993) discuss the various kinds of procedural information that can be encoded by a linguistic item.

The sentence connective herein discussed has a low tone, contrasting with the high tone inferential marker of reason *ni* ('so that', 'in order that').

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general knowledge or world assumptions about the events or actions represented by the propositions of the conjuncts. Phrased slightly differently, ni's presence is indicative of some kind of existing inferential relations between the conjuncts, and so this information is combined with the encoded meaning of ni, the encoded meaning of the linguistic feature of the conjuncts (for example, syntactic structure and ordering) and any other relevant contextual information in order to establish the precise nature of the relation that exists between the conjuncts. It is noteworthy also that ni is relevant to the extent that it places an expectation on the interlocutor to 'work out' an inferential relation between the conjuncts coordinated by ni. It also provides procedural information in that the ni-utterance is optimally relevant as a single unit, even though the individual conjuncts that ni coordinates may be relevant on their own.

The data on which this study is based include a Gã novel and sentences either constructed by the author using native speaker competence (and/or verified by other native speakers) or sentences elicited from native speakers and verified by other native speakers. Five native speakers (three of them are Gã teachers at the university) who had tertiary education, and who had also received formal instruction in Gã, were used to verify the data. The novel from which the examples were taken is titled *Namɔ Matsu*? (Amartey 1966)—such examples have been marked (NM) followed by the page number. The examples elicited from other native speakers have been marked (EL), and the ones constructed by the author based on native speaker competence have been marked (SC).

#### 4. Communicative Functions of nì

A given token of ni when instantiated may be used to achieve different communicative functions. It could serve the purpose of addition so that it further develops a prior utterance. It may express a temporal relationship in which case it gives an indication of a sequential ordering of events and can also be used to communicate a causal relationship between conjuncts by signifying that one action is necessarily the cause of another action. Furthermore, the conjuncts coordinated by ni may serve a contrastive function or may be considered as individual premises that contribute to a single conclusion. These inferential relations were identified and determined with recourse to the context of instantiation and/or pragmatic inference. In the ensuing sub-sections, these functions of ni—addition, temporality, causality, contrast and parallelism—are discussed with illustrative examples.

## 4.1. Addition

Like its close Kwa relatives (cf. Amfo 2007; 2011), when ni is used to express addition, it means that it expands the information given in the prior conjunct by giving additional and relevant information that helps to construe the overall import of the ni-utterance. The additive function of ni is illustrated in (3) and (4).

- 3. E-yɛ yitswɛi kusuu nì e-woɔ jinsi. 3SG-own hair plenty CONJ 3sg-wear-HAB jeans 'S/he has long hair, and s/he wears jeans.' (EL)
- 4. Odoi bu-ə mə **nì** etsu-ə shia nitsumə Odoi respect-HAB PRO CONJ 3SG-work-HAB house work 'Odoi is respectful and he performs household chores.' (EL)

An interlocutor uttered the example in (3) when he was asked to describe a particular female student. Through the response given, we get to know that, among other things, the female student being described usually wears her hair long and also dons denim trousers. Thus, the second clause (which is introduced by ni) adds to the first information and expands the intended description of the speaker to the hearer. Similarly, (4) was enunciated when a speaker attempts to put forward some attributes of Odoi. By introducing ni and somewhat 'refining' his first utterance, the hearer arrives at a cognitively plausible conclusion with little processing effort that in (4), not only does Odoi exhibit reverential tendencies, but that he is also industrious with household work.

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The point to be made here is that without  $n\hat{\imath}$  in (3) and (4), the addressee will require more cognitive effort before arriving at the intended interpretation, as the utterances may be open to some other interpretation. For example, one may construe the second utterance in (4) as an attempt by the speaker to give a reason why Odoi is extremely respectful, but this will be a wrong interpretation. In (3), it is the presence of  $n\hat{\imath}$  that helps the reader to access the information that Adzo's wearing of jeans is a pure addition (and nothing more) to her having long hair. Thus,  $n\hat{\imath}$  leads the way in narrowing down the possible inferences drawn from the  $n\hat{\imath}$ -conjuncts and helps the interlocutor to access the correct interpretation with little processing effort. The examples in (3) and (4), thus, show that by expanding or supplementing a prior discourse,  $n\hat{\imath}$  signals an additive relationship between the  $n\hat{\imath}$ -conjuncts in view of which the individual conjuncts cannot be viewed as maximally relevant on their own.

In Gã (and Dangme, a closely related language to Gã), hu ('also', 'as well') can be used to signal a sense of addition (Amfo 2011). Hence, hu can be added to the clauses in (3) and (4) without affecting their grammaticality and semanticity. However, such an inclusion will be redundant since the notion of addition that hu invests into the utterance interpretation is already integrated in and captured by ni. That said, some speakers may still insert hu to sound emphatic, resulting in an example like  $Ey\varepsilon$   $yitsw\varepsilon i$  kusuu ni ewoo jinsi hu ('S/he has long hair and wears jeans also').

Another important point to be made about the meaning of  $n\hat{i}$  is the fact that  $n\hat{i}$  cannot initiate an utterance without a preceding clause or proposition. That is, since  $n\hat{i}$  always supplements a previous utterance, there must necessarily be a previous clause for  $n\hat{i}$  to join, and subsequently build on. Once the  $n\hat{i}$ -clause is detached from an earlier unit of discourse, it loses both its acceptability and meaningfulness as the examples in (3) show. I must add that using the English translations in (5), the Gã utterances are more unacceptable than the English ones, as they will be practically impossible for a Gã speaker to utter (5).

```
*Nì
5. a.
                                      akε
                                                abifao
                                                           lε
                                                                   he
                                                                                     lε?
                   o-na-aa
                                                                          tse-ee
         CONJ
                                                                          tear-NEG PRO
                   2SG-see-NEG
                                      COMPL
                                                           DET
                                                baby
                                                                   self
         'And can't you see that the baby is unwell?' (EL)
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b. \*Ni e-to mi.

CONJ 3SG-be.tired 1SG

'And I am tired'. (EL)

Generally,  $n\hat{\imath}$  encodes the information that the proposition of the clause that  $n\hat{\imath}$  initiates ought to be seen as an addition of some other highly accessible proposition, usually, the proposition expressed in the previous clause. Hence, when interpreting a clause containing  $n\hat{\imath}$ , one would look for that other proposition that the  $n\hat{\imath}$ -clause proposition ought to be an elaboration of. If there is no such highly accessible proposition (as when  $n\hat{\imath}$  occurs in discourse initially as seen in (5)), the context for interpreting  $n\hat{\imath}$  is not in place. In other words, the processing effort of finding the antecedent clause is too great and does not lead to any new (or different) positive cognitive effects. This makes the use irrelevant, primarily, due to too much processing effort for no extra cognitive effect. Relevance theory postulates that in utterance interpretation, one would look for interpretations that require the least processing effort for the most cognitive effect, in view of which it is the most accessible propositions that will be tested for relevance first and then assumed to be true if they lead to positive cognitive effects. In (5), however, there is no "other proposition" that is easily accessible, thereby making the utterances unacceptable.

## 4.2. Temporality

Similar to the Akan sentence connective  $n\hat{a}$  (Amfo 2007) and the Dangme clausal connective  $n\varepsilon$  (Amfo 2011),  $n\hat{i}$  is used especially in narrative discourse to indicate a sequential ordering of two events, activities or actions, as exemplified in (6).

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Limann prezident nì Rawlings ba-kpo lε. ve etsε-εε long-NEG CONI Rawlings come\_remove PRO be president 'Limann was president and was soon overthrown by Rawlings.' (SC)

The first clause in (6) refers to the presidency of Dr. Hilla Limann, president of the third republic of Ghana, while the second clause refers to his overthrow by Flt. Lt. Jerry John Rawlings. Drawing on knowledge of Ghana's political history with respect to former heads of state, we can thus infer that Limann's presidency preceded his being overthrown by a military junta led by Rawlings. We notice then that the intervening clause <code>etseee</code> (literally speaking 'it did not last long') will gain relevance if we pragmatically interpreted the two events described in (6) as sequentially or temporally related. The notion of duration captured by the intervening clause <code>etseee</code>, thus, makes the temporal relation that ni establishes in (6) even more explicit. In (7), the specific world knowledge that one can eat a meal only after it has been prepared provides the input for us to suppose that the two activities, i.e., <code>cooking and eating</code> are in linear order, so that the cooking event described in the first discourse is the first event and the eating event is the second. Thus, the search for positive cognitive effects (in terms of true descriptions of the world) is what guides the hearer/reader towards the interpretation that Kwei prepared the meal first, and then he ate it. Again, the temporal adverb <code>nogg</code> ('immediately/suddenly') gains relevance through a pragmatic interpretation that implies that the events mentioned are in chronological order

7. Kwei hoo niyenii lε nì e-ye nonn. Kwei DET CONJ cook food 3SG-eat immediately 'Kwei cooked the food and he immediately ate (it).' (NM12)

Therefore, in (6) and (7), the presence of  $n\hat{\imath}$ , which requires some extra processing effort, suggests that the utterance as a whole will be more relevant when interpreted as one unit. Consequently, the interlocutor is required or perhaps forced to look out for a specific relevant relation between the utterances joined by  $n\hat{\imath}$ . Based on context-dependent inference and general knowledge of the world, the interlocutor is able to arrive at the desired (and) intended temporal relation. Without the presence of  $n\hat{\imath}$ , it can be argued that it will be harder and, in fact, take a lot more time for the reader/hearer to arrive at the intended interpretation that the two events are in chronological order, as it will be possible to infer other interpretations. For instance, in the absence of  $n\hat{\imath}$ , the second event in (5) could be interpreted as a reason why Kwei immediately cooked the food, although this sense of reason or explanation is not what is intended by the speaker. Thus,  $n\hat{\imath}$ 's presence enables the hearer/reader to easily access the intended temporal or sequential interpretation.

By providing a crucial guide for the interpretation of the  $n\hat{i}$ -utterance as a whole, thus, the presence of  $n\hat{i}$  encourages the interlocutor to look out for a relationship of linearity with respect to the period when certain events took place. Such an interpretation, as exemplified in (6) and (7), achieves optimal relevance, involves little processing effort, and results in positive cognitive effects. The point must also be made that in these examples, both the first and the second events are part of a natural "super event" that contains them both. That is, there is a unity of the two events and the presence of  $n\hat{i}$  helps the reader/hearer to know that both events are sequentially related. Given that the order of events as suggested by  $n\hat{i}$  is fixed, any attempt to reverse the positions of the conjoined utterances will result in unacceptable and ill-formed constructions like (8) and (9).

- 8. \*Rawlings ba-kpo lε nì Limann ye pre zide nt etse-εε.
  Rawlings come\_remove PRO CONJ Limann eat president long-NEG
  'Rawlings soon overthrew Limann and Limann was president'. (SC)
- 9. \*E-ye nɔŋŋ **nì** Kwei hoo niyenii lε. 3SG-eat immediately CONJ Kwei cook food DET 'Kwei immediately ate the food and he cooked it'. (SC)

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Based on general knowledge of the world, one can submit that the sentences in (8) and (9) lack internal logical consistency, and so are false assumptions not worth having. Indeed, the vagueness and unnaturalness of the sentences is one that every native speaker of Gã can attest to.

## 4.3. Causality

Another specific inferential relation that  $n\hat{\imath}$  may signal between two conjuncts is a causal one; akin to its close Kwa relatives  $n\hat{\imath}$  and  $n\epsilon$  as analyzed in Amfo (2007; 2011). This means that the action expressed in the second proposition of the  $n\hat{\imath}$ -utterance is contingent on or follows from the first proposition, as shown in (10).

In (10), the death of the queen is supposed to have been occasioned by the death of the king. Thus, in addition to the sequential temporal relation suggested, the speaker, more importantly, intends for the hearer to see the causal relation between the ni-conjuncts. Therefore, a more specific causal relation that is optimally relevant strengthens the encoded sequential temporal relation. An interpretation which says that not only did both the king and the queen die, but that the queen died (of sorrow) because the king died yields many more cognitive effects than a pure temporal interpretation: the king died, and then the queen died of sorrow (for whatever reason). The extra cognitive effects of the causative interpretation may include the following: if the queen died of sorrow because of the king's demise, then she must have loved him dearly or the king must have been a good man, etc. Since the causal interpretation is also a description of the world that we may imagine as true, it is an interpretation which yields positive cognitive effects for the extra cost that the presence of ni leads to, making such an interpretation optimally relevant. The presence of ni in signaling a cause–consequence relation between the two conjuncts is so crucial that when absent, the utterance can merely be understood as two separate events that may have taken place in the course of history within a particular society. Example (11) explains this view.

The example in (11) can be interpreted as an account of two events (not necessarily connected to each other) that may have taken place in a given community insofar as there is no contextual information to the contrary. For instance, it can answer the question, which two unpleasant events have taken place in Swedru in the last decade? In (11), thus, unlike in (10), the syntactic position of the two sentences is inconsequential for meaning. When ni is present, however (as seen in (10)), the interlocutor is compelled to look at the two conjuncts as jointly relevant, which, in this case, leads to an assumption that they are connected through an inferential relation. Aided by the appropriate contextual assumption and in an attempt to find 'relevance', the interlocutor is able to causally relate the two parts of the utterance with each other, and to arrive at the interpretation that the death of the queen was as a result of the demise of the king. It must be mentioned that in principle, (11) can be given the same interpretation as (10); however, the interpretation in (11) will be less explicit and harder to arrive at.

The example in (12) also illustrates how a ni-utterance can pragmatically evoke a causal or cause–consequence relation.

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12. E-tu kεjε oketeke mli nì e-na-ji ku-mɔ 3SG-jump PRT train inside CONJ 3SG-leg.PL break-PL 'He jumped from the train and he broke his legs.' (NM18)
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Like (10), there is a semantic dependence of the second conjunct on the first conjunct in (12) in view of which the hearer is able to arrive at the logical interpretation that the action described in the second conjunct follows necessarily from the first conjunct. That is, an individual had his legs broken because he jumped from the train. As part of the comprehension and interpretation process, the interlocutor draws on communicative context and one's assumptions about the world that if one jumps from a moving train, one could get oneself severely injured or possibly die. Aided by this contextual assumption, the interlocutor is able to causally link the two actions together to arrive at an optimally relevant conclusion that the individual's fracturing of his legs stemmed from his jumping from the train, while it was moving.<sup>6</sup>

#### 4.4. Contrast

Similar to English and (Carston 2005) and as found by Amfo (2014), when  $n\hat{\imath}$  expresses a contrastive function or relation, it means that it provides an opposite view to the information given in the previous conjunct. The contrast expressed is usually explicit and although the propositions may not necessarily be the case of a positive cancelling out a negative (and vice-versa) or a denial of an expectation as is typical with contrastive uses of and, the differing viewpoint communicated by the two conjuncts is still evident. The contrastive function of  $n\hat{\imath}$  is illustrated in (13) and (14).

- Nii kooyi gbε nì Naa woovi gbε Nii go north road **CONJ** Naa go south road 'Nii headed towards the north and Naa headed towards the south.' (NM36)
- $fa\text{-}gb\epsilon$ 14. Anum kεtee ŋshɔ sεε nì eba. Anan mansee Anum travel go sea back CONJ Anan come\_from abroad return 'Anum travelled outside the country and Anan returned home from abroad.' (NM22)

The examples in (13) and (14) communicate two contrasting messages—Nii and Naa's different geographical locations and Anum and Anan's respective trip abroad and return from abroad. This contrastive relation is, however, realized by  $n\hat{i}$  and not shi ('but') which is the prototypical contrastive marker in Gã. While in (13), shi can replace  $n\hat{i}$  and the same idea will be communicated, it will be pragmatically unacceptable for shi to be used in (14) even though a contrastive relation is still expressed. In the context of situation, thus, and following the principle of relevance, it seems sufficient for the speaker to use  $n\hat{i}$ , the more general connective, instead of the specific contrastive marker shi in (13) and (14) since the contrast expressed is already explicit. This explicitness of the contrast may be attributed to syntactic cues or to the semantics of or meanings expressed by the individual conjuncts. It can also be realized that like the other communicative function of  $n\hat{i}$  already discussed, the contrastive interpretation obtained in (13) and (14) does not form part of the encoded meaning of  $n\hat{i}$ . On the contrary, it is inferentially derived and pragmatically deduced via the syntactic structure and semantic content of the conjuncts.

## 4.5. Parallelism

A parallel relation is yet another inferential relation that can be suggested by  $n\hat{\imath}$ , which is yet another function that Akan  $n\hat{\imath}$  (Amfo 2007) and Dangme  $n\epsilon$  (Amfo 2011) express. This is illustrated in (15) with a syntactically complex structure, which is not atypical for naturally occurring data.

<sup>&</sup>lt;sup>6</sup> There is a widespread phenomenon in African languages sometimes referred to as "associated plural". From the data analyzed and drawing on my native speaker knowledge and formal instruction in Gã, it does not seem that the notion of "associated plural" exists in Gã. So, to introduce Kofi in a sentence like *I went to the market with Kofi*, the marker kε (also translating as English 'and'), which is used in conjoining phraseological units in Gã will be used, and the sentence will be expressed as, Mi kε Kofi tee jara lε n₂ ('Kofi and I went to the market').

15. Amε-tsu nitsumo-i sroto-i nì ame-shwe shwemo-i stroto-i 3PL-work different-PL **CONJ** different-PL task-PL 3PL-play game-PL hii koni ame-na gbomotso-ŋ-hewale CONJ 3PL-get human.body-inside-health' 'They were engaged in different tasks/activities, and (they) played different games too in order to remain healthy.' (EL)

The utterance in (15) was made in response to an inquiry by a customer who wanted to know why staff of a company embarked on annual corporate retreats. As part of the modus operandi of the company in question, the company organizes an annual corporate retreat for its staff members. On such a retreat, the staff members are taken out of the formal corporate setting of their offices to a more serene environment (say a health spa) for general relaxation and brainstorming. The company does this in the hope that it will improve the productivity, output, and effectiveness of the workers. It was while company workers were on one such retreat that a customer wanted to find out the rationale behind these retreats. The two conjuncts in the utterance—they were engaged in different tasks/activities and they played different games—therefore function as distinct but parallel premises in the comprehension process that lead to the conclusion subsequently expressed, which is to promote the health and general well-being of the workers. By giving the two distinct reasons, the speaker attempts to justify and/or rationalize the relevance of the company retreat(s).

Importantly, the interlocutor processes the two reasons, though distinct from each other, at the same time (that is, in parallel) during the inferential process, and this aids the interlocutor in arriving at a derived conclusion. Collectively, the two reasons present a cogent argument for the conclusion that the corporate retreat is justified. If ni is not present, it is improbable that the two propositions will be seen as contributing to the same conclusion derived in (15). Most likely, only the second proposition will be considered to yield the conclusion derived, and hu will not also be present, as hu is only made relevant by the presence of ni.

That the two distinct reasons/premises given in (15) are interpreted in parallel is reinforced by the use of hu. According to Amfo (2010), nso ('also') (a cognate of hu) in Akan directs the interlocutor to interpret the utterance within which nso occurs against a previously established background. Hence in (13), the interpretation of ameshwe shwemoi strotoi hu ('they played different games also') is done within a context in which ametsu nitsumoi strotoi ('they were engaged in different tasks/activities') is being processed. Together, the two conjuncts represent a good and a sound argument for the conclusion derived. From (13), it can be deduced that there is no sequential temporal relation between the conjoined units of discourse, nor is there any form of causal relation between them. Instead, the ni-utterance is optimally relevant in that the conjuncts in the utterance present us with two parallel premises from which we can derive a conclusion. Although the parallel premises are distinct from each other, they function collectively in guiding the interlocutor in the derivation of a conclusion.

According to Amfo (2014, p. 76), it is possible for an explanatory relation to exist between  $n\hat{i}$  constructions. The data used for this study, however, did not reveal such explanatory relations of  $n\hat{i}$ -utterances. Moreover, the native speakers consulted for this study were unable to provide any such examples. The current study holds that the examples provided in Amfo (2014) to depict the explanatory function of  $n\hat{i}$  can be analyzed as 'marked' examples (as opposed to being typical). Consequently, it will be rare to find such usage in normal dyadic encounters or everyday situations. I have reproduced Amfo's examples in (16) and (17).

- 16. Səle-mə jogbanın **nì** Nyəmə baa-fee Pray-IMP well CONJ God FUT-do 'Pray hard and God will do it.' (SK)
- 17. Nyɛ-ba-a shia nì m-a-na nɔ-ko m-a-ha nyɛ. 2PL-come-IMP home CONJ 1SG-FUT-get something 1SG-FUT-give 2PL '(You) come here and I will get something for you.' (SK)

The examples in (16) and (17), the present author holds, do not reflect everyday usage in  $G\tilde{a}$ , and can therefore be considered unconventional. Thus, in (16), for instance, the conjunction *ejaake* ('because') is likely to be used by most speakers, as it makes the reason clause expressed in the second conjunct more explicit. Similarly, in (17), the use of *koní* ('so that') instead of  $n\hat{i}$  is likely to be more preferred. Hence, from the present author's native speaker standpoint, the explanatory usage of  $n\hat{i}$  above are atypical cases not likely to occur in mundane conversations.

#### 5. Conclusions

In this paper, I have analyzed the communicative purposes served by the Gã coordinating connective nì and argued that nì semantically encodes information which suggests that the nì-utterance as a single unit achieves optimal relevance and more positive cognitive effects over and above the individual units of discourse joined by ni. Importantly, the semantically encoded information in niis used as an input for more precise and exact pragmatic interpretations. On the basis of "relevance" and context-dependent inference, various inferential relations are revealed between the conjuncts in the *nì*-utterance, namely addition, temporality, causality, contrast and parallelism. The conclusion adduced here is that the semantics of nì is univocal—it is simply a clausal connective. Inferential relations that are specifically communicated between conjuncts derive from a combination of the univocal lexical semantics of *nì* with general world knowledge or assumptions and other contextually determined information. This finding is in sync with Amfo's (2007; 2011; 2014) studies on the univocal semantics of sentence connectives, especially in Kwa languages. From the analysis, it can be asserted that compared to English and, which has a wider range of usage, nì in Gã has a more restricted or limited number of functions in communicative contexts. For instance, and, unlike nì can be used to introduce a comment clause, a conditional implication, an element of surprise as well as express similarity (cf. Quirk and Greenbaum 1973, p. 257). That said, further studies on nì will have to be conducted in order to ascertain the extent to which this claim holds. The findings of the study also show that *nì* has a similar range of functions as clausal coordinators in other Kwa languages like Akan, Dangme and Ewe. Again, unlike English and, nì is strictly a clausal coordinator which functions at the sentential level. Hence, it cannot be used in phrasal coordination. In conjoining phraseological units in Gã, another marker  $k\varepsilon$ , is required. It can, thus, be said yet again that English *and* seems to have a broader scope of usage than *nì* syntactically and semantically.

Finally, this study contributes to Gã linguistics, in general, and to the semantics and pragmatics of Gã discourse markers and/or particles, in particular. By shedding light on the communicative functions of a commonly used pragmatic marker in Gã, this study sheds light on an aspect of the grammar of Gã and brings to the fore the range of functions with which this marker can be used in different communicative contexts, thereby highlighting the uniqueness (or non-uniqueness) of this marker. To the best of the determination of the author, no other study has investigated the Gã coordinating connective aside from Amfo (2014). Meanwhile, unlike Amfo (2014)—which compares sentential coordination in two Kwa languages, Gã and Ewe—the present study focuses solely on nì in Gã, thereby enabling an intensive and a more detailed analysis of this marker. To the extent that the present study uses a different set or source of data from Amfo (2014), it provides a body of evidence that can be used to corroborate or refute the findings in Amfo (2014). In this regard, the investigation of the same phenomenon by different researchers with different sets of data provides a good basis on which the functions or communicative role of ni in Gã can be ascertained, interpreted, established and generalized. That said, the use of a much larger corpus than the present study in future research is recommended, as this may reveal subtle inter-speaker differences and other nuances in the meanings of n, and enrich our understanding of its usage. Moreover, to the extent that some of the data used in the present research were based on the author's native speaker intuitions in consultation with other native speakers, it will be desirable for future studies to investigate ni using other types of data such as elicited intuitional data, elicited oral production and/or naturalistic speech.

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