

From a motion verb to a temporal gram: The case of Nkami

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Abstract¹

This paper explores the grammatical pathway through which the future tense marker *bɛ̀* evolved in Nkami, a lesser-studied Kwa language of Ghana. The analysis is based on synchronic natural data drawn from an extensive corpus collected during a language documentation project focusing on both the language and its speakers. It reveals that Nkami's future tense marker evolved from the deictic motion verb *bɛ̀ɛ̀* 'come' along the following channel: *bɛ̀ɛ̀* (lexical verb) → *bɛ̀-* 'proximal directional prefix' → *bɛ̀-* 'future tense prefix'. This derivation strengthens a widely held observation that (deictic) motion verbs are a rich source concept for deriving grammatical markers of temporal orientation. Besides developing into grammatical items, the paper also shows that *bɛ̀ɛ̀* developed into another form, *bà*, which co-exists with it to express the lexical concept of 'come'. Apart from indicating the deictic motion 'come', *bà/bɛ̀ɛ̀* also complements *bo* 'have' to express property in completive situations, which contrasts with the general tendency to use the verb 'do' in such situations. Principles of grammaticalization, including polygrammaticalization, divergence, persistence, and decategorization, are all shown to be relevant in the evolution of the future tense marker in Nkami. Lastly, the investigation into the grammaticalization of the future tense marker in Nkami provides additional support for classifying Guang (Kwa, Niger-Congo) languages into Northern and Southern groups.

Key words: Grammaticalization; future tense prefix; directional prefix; deictic motion verbs; Kwa languages

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Abstract in Nkami

ᵛwɪlɪ ɲa ɔtʃɪtʃɪ grammaticalization bu Nkami (Kwa, Niger-Congo) lo. Nkami dɔi Guan anaafɔ kɔlɔlikuo kɔ ni baakãã bu Amankwakrom ni ɛbu Afram Plains ni ɛbu Ghana apueye afã lo. ɔsuna ɔkpa ni ɔkaakɔli mɔɔfim **bɛ̀-** ba bu Nkami kɔlɔli lo. Deta ni anɪfɔ bu asumi ɲa tʃu Nkami kɔlɔli amɔ asumi lo. ɔsuna bɛɛ Nkami mɔ kaakɔli mɔɔfim **bɛ̀-** tʃu anamɔntu atɔbɔ **bɛ̀ɛ̀** lo bu ɔkpa nya lo: **bɛ̀ɛ̀** (anamɔntu atɔbɔ) → **bɛ̀-** ‘prɔksima mɔɔfim’ → **bɛ̀-** ‘ɔkaakɔli mɔɔfim’. ɛɲa ɔɔfɔa mɔni abɪrɪsɛ kɔ baakãã bɛɛ baataa ɲa ɔkaakɔli mɔɔfim tʃu anamɔntu atɔbɔ lo. Atʃɛke, anɪɲa **ba** tʃu **bɛ̀ɛ̀** lo ni fɛɛfɛ woosuna ‘come’. Grammaticalization mɪra ni ɔsuna amɔ lo kɔ dɔi polygrammaticalization, divergence, persistence, na decategorization. Mɔ kɔrakɔra, ɔɔde sana anɪtʃɪe Guan kɔlɔlikuo lo ɲɔ: anaafoc ne atifi.

Introduction²

This paper aims to explore the grammatical pathway through which the future tense marker *bɛ̀-* developed in Nkami. Nkami denotes both an ethnic group and an endangered language spoken by approximately 400 individuals in Amankwa, which is located a few kilometers from the western shore of Lake Volta in the Afram Plains of Ghana.³ However, there are also twice as many or more Nkami speakers residing in cities and towns outside the language community. Presently, the majority of the indigenous people are trilingual in Nkami, Akan and Ewe. Based on linguistic and geographical factors, Asante (2016, 2017) places Nkami (ISO code [nkq]; Glottocode nkam1239) in the Southern group of the Guang languages family, which is part of the Kwa group within the Niger-Congo language family. Until quite recently the documentation of Nkami commenced, which has led to the development of a PhD dissertation on the language's grammar (Asante, 2016) and a few other publications (e.g., Akanlig-Pare & Asante, 2016; Asante, 2017, 2018, 2021), not many language researchers knew about the name ‘Nkami’. This piece adds to these resources with the hope that, collectively, they will help highlight the rich linguistic

² Nkami shares with regional languages most of their linguistics features. It is an ATR harmonic language that features both lexical and grammatical tonal functions. It follows an SVO word order, displays typical characteristics of serial verb constructions (SVCs), and employs affixation, compounding, and reduplication as key morphological processes. Additionally, its verbal features are indicated through prefixes and verbal particles (see Asante 2016, 2017).

³ I acknowledge that Mr. Wes Peacock and his wife, along with the members of the Language Committee on Nkonya, who were working on translating the bible into Nkonya, introduced me to Nkami while working on the phonology of Nkonya for my Mphil degree.

resources of this endangered and less-studied language to the broader linguistic community.

The paper is framed within the theory of grammaticalization, a framework that offers both descriptive and explanatory insights into why and how functional or grammatical categories evolve and develop (see Heine et al., 1991; Heine, 1992; Heine & Kuteva, 2002; Heine, 2003; Hopper & Traugott, 2003)⁴. According to Hopper and Traugott (2003, p. 23), grammaticalization is “the change whereby lexical terms and constructions come in certain linguistic contexts to serve grammatical functions, and, once grammaticalized, continue to develop new grammatical functions”. Thus, the phenomenon is typically understood as a unidirectional process in which linguistic forms with more concrete or less grammatical meanings evolve into new forms to convey more abstract or highly grammatical meanings. As a result, content words like verbs and nouns gradually transform over time into such grammatical elements as auxiliaries, determiners, conjunctions, case markers, and indicators of tense, aspect, mood, and direction.

Further, a key feature of the theory of grammaticalization is the notion that the transition from a lexical item to a grammatical one does not occur overnight; instead, it involves a series of gradual developments leading from the former to the latter. This phenomenon has been variously referred to as grammaticalization ‘chain’ (cf. Heine, 1992), ‘cline’ (cf. Hopper & Traugott, 2003) ‘path’ (Bybee et al., 1994), and ‘pathway’ (Bisang, 1996). Hopper and Traugott (2003, p. 7) schematise the following as a cross-linguistic progression of grammaticalization: content item > grammatical word > clitic > inflectional affix.

Heine (2003, p. 579) explains that grammaticalization of a linguistic expression involves four interconnected processes:

- i. **Desemantization** (also known as “bleaching” or semantic reduction): a reduction in meaning;
- ii. **Extension** (or “context generalization”): the use of the expression in new contexts;
- iii. **Decategorization**: the loss of morphosyntactic features typical of the original forms, including a shift from independent word status to cliticization or affixation;
- iv. **Erosion** (or “phonetic reduction”): the loss or reduction of phonetic substance.

⁴ The term grammaticalization (referred to as *grammatisation* in French) is attributed to Meillet (1912). For a detailed history of the theory grammaticalization, see works such as Heine (2003) and Hopper and Traugott (2003)

Heine and Reh (1984, p. 15) aptly summed up these interrelated processes in their definition of grammaticalization as “an evolution whereby linguistic units lose in semantic complexity, pragmatic significance, syntactic freedom, and phonetic substance”. Thus, the semantic bleaching or erosion of a linguistic expression may come along with extension in the range of usage, inflectional and distributional limitations, and attrition of the linguistic form. Moreover, Hopper (1991) identifies five principles for identifying and characterizing grammaticalization across languages: specialization, layering, divergence, persistence, and de-categorization. In our discussion of the developmental pathway of Nkami’s future tense maker, we will observe the relevance of all principles except for the first two: specialization and layering.

There is extensive research on the development of future tense markers within the grammaticalization literature. Among those that provide comprehensive cross-linguistic observations on African languages, in particular, include Bybee et al. (1994), Heine et al. (1991) and Heine and Reh (1984). Deictic verbs of motion have been noted to be common source concepts for the future tense marker by these and many other researchers (cf. Bybee & Dahl, 1989; Bybee & Pagliuca, 1987; Ultan, 1978). Other verb types including the desiderative verb ‘want/desire’, action verb ‘do’, and others such as ‘have’, ‘owe’ and ‘be/become’ have also been mentioned in languages such as English, Mandarin Chinese, Swahili, the Eastern Kru languages, the Western Romance languages, Quechua and Korean. Aside from verbs, adverbs of varied types, particularly those with deictic reference, including ‘now’, ‘then’, ‘quickly’, ‘afterward’, and ‘tomorrow’ have been identified as source concepts (cf. Abunya & Amfo, 2013; Heine & Kuteva, 2002; Bybee et al., 1994; Heine et al., 1991; Marchese, 1986; Heine & Reh, 1984).

In Ghana, the theory of grammaticalization has been applied to explain various linguistic phenomena in some languages, as demonstrated in works such as Abunya and Amfo (2013), Osam (2010) and Amfo (2005, 2010). The first study is especially noteworthy because Abunya and Amfo (2013) also employ the theory to explain the development of the futurity marker in a related Guang language, Kaakyi. In contrast to Nkami, Abunya and Amfo (2013) cogently show that the futurity marker **ké** in Kaakyi originated from the adverb of time **ɔ̀kɛ́** ‘tomorrow’.

The study

This paper explores the grammaticalization process through which the future marker **bé-** evolved in Nkami. The data for this discussion is purely synchronic due to the lack of historical records for the language. It includes both elicited and spontaneous spoken texts

collected within a period one year from approximately a hundred speakers of various backgrounds in Amankwa, the language community, as part of the Nkami language documentation project. The annotation and verification of the data were conducted in partnership with two adult Nkami speakers, Ketewa and Akuamoah, as well as several additional language consultants. We will also draw on cross-linguistic and areal-typological facts to discuss and support Nkami's derivation.

We argue that the future tense marker grammaticalized from a directional/locative marker which also traces its root to the deictic motion verb **bɛ̀ɛ̀** 'come'. In other words, the verb 'come' and the future tense marker in Nkami form a grammatical cline ranging from the former to the latter, and that within this cline falls the directional marker **bɛ̀-**, which shares the same linguistic form with the future tense marker. Like many languages, the deictic motion verb **bɛ̀ɛ̀** 'come' has an allolexeme **bà**. Synchronically, **bà** happens to have more functions and is more frequently used in speech than **bɛ̀ɛ̀**. Examine the following sentences illustrating the different uses of the form, **bɛ̀**, and its related forms:⁵

- (1)a. **Ama b̀ inie** Lexical-verb
 Ama come.PST yesterday
 'Ama came yesterday.'
- b. **Ama b̀ɛ̀ inie** Lexical-verb
 Ama come.PST yesterday
 'Ama came yesterday.'
- (2) **Ama b̀-ɔ́** Directional prefix
 Ama PDP.HAB-sleep
 'Ama comes to sleep.'

⁵ These abbreviations are used: ANM = animate; COMP = complementizer, CONJ = conjunction, DEF = definite article, DDP = distal directional prefix, DEM = demonstrative, FUT = future, HAB = habitual, INANM = inanimate, INTJ = interjection, MOT = motional, NEG = negation, OBJ = object, PDP = proximal directional prefix, PL = plural, POSS = possessive, PERF = perfect, PRES = present, PROG = progressive, PST = past, REL = relativizer, SG = singular.

- (3) **Ama bɛ̃-dí**⁶
 Future prefix
 Ama FUT-sleep
 ‘Ama will sleep.’
- (4) **Ama ŋu bɛ̃ɛ̃/bɛ̃ anɪ-lɛ-dɪ** Complementizer
 Ama see that 1PL-PROG-sleep
 ‘Ama saw us sleep (lit. Ama saw that we were sleeping).’
- (5) **Ama bɛ-yɔ Dubai bɛ̃ɛ̃/bɛ̃ Guangzhou?** Conjunction
 Ama FUT-go Dubai or Guangzhou
 ‘Will Ama go to Dubai or Guangzhou?’
- (6) **Ama mo ʔu dʒi bɛ̃ɛ̃/bɛ̃ mo ʔsɪ kɛ** Prepositional
 Ama POSS head be like his father own
 ‘Ama’s head is like that of his father.’

As we observe in (1a-b), the verbal concept ‘come’ is expressed by two distinct forms, **bà** and **bɛ̃ɛ̃**, in Nkami. On the other hand, the prefix **bɛ̃-** performs multiple functions in (2-3). It is used to express direction in (2) and futurity in (3). In (4) **bɛ̃ɛ̃/bɛ̃** acts as a marker of complementation, introducing the complement clause **anɪlɛdɪ** ‘We are sleeping’. In contrast, in (5), it functions as a disjunctive coordinator meaning ‘or’. Moreover, in (6) **bɛ̃ɛ̃/bɛ̃** serves a prepositional function, indicating the physical resemblance between the comparee, ‘Ama’s head,’ and the standard of comparison ‘her (Ama’s) father’s head’. Though **bɛ̃ɛ̃/bɛ̃** in (4-6), expressing complementation, disjunctive coordination and simulative preposition, has phonetic resemblance with the other forms in (1-3), we posit that the former three do not fall within the grammatical cline/chain that developed the future tense marker **bɛ̃-** from the lexical verb **bɛ̃ɛ̃** ‘come’. Thus, it is just a case of sheer resemblance or, more plausibly, evidence of polygrammaticalization (cf. Craig, 1991), whereby the grammatical markers in (2-3) (i.e. marking direction and futurity), and those in (4-6) (i.e. complementizer, conjunction and preposition) developed from a common

⁶ Note that direction (2) and futurity (3) are expressed by the same prefix **bɛ̃-**. The two sentences are, hence, ambiguous, and so, other materials in the linguistic contexts may help to disambiguate them. More is said about them below.

lexical source verb **bɛ̀ɛ̀** ‘come’. Consequently, the grammatical channel for the evolution of the future marker in Nkami starts from (1) and ends at (3).

In Section 2 we will examine their nature in detail and argue that **bà** developed from **bɛ̀ɛ̀**. Furthermore, in Section 3 we will observe that alongside **bɛ̀-**, there is another prefix **yɛ̀-**, which also conveys direction. Section 4 provides an in-depth analysis of the prefix **bɛ̀-**, focusing on its role as a future tense marker, as well as its other related functions, such as expressing intention, willingness, and inclination, inter alia. Section 5 discusses the applicability of some grammaticalization principles to the evolution of Nkami’s future tense marker. It also provides cross-linguistic evidence to support Nkami’s derivation. Section 6 summarizes the paper.

The Deictic-Motion Verbs **yɔ̀** ‘go’ and **bà** ‘come’

Nkami has two basic deictic verbs of motion, **bà** and **yɔ̀**, which are semantically akin to ‘come’ and ‘go’ respectively. Like ‘come’ and ‘go’ in English, apart from their physical motional meaning, they also inherently indicate direction or location. That is, the use of **bà** indicates movement towards the deictic centre, while **yɔ̀** indicates opposite movement, as (7) illustrates.

- | | | | | | | | |
|-------|-----------------------|-----------|--------------|----|-----------------------|------------|--------------|
| (7)a. | Kofi | bà | Accra | b. | Kofi | yɔ̀ | Accra |
| | Kofi | come.PST | Accra | | Kofi | go.PST | Accra |
| | ‘Kofi came to Accra.’ | | | | ‘Kofi went to Accra.’ | | |

Both **yɔ̀** ‘go’ and **bà** ‘come’ can be used in all moods: declaratives, imperatives and interrogatives. In declarative sentences, **yɔ̀** ‘go’ can be employed in all tense-aspect contexts except for the continuative, as (8) shows.

- | | | | | | |
|-------|-------------------|-------------|---|----------------------|--------|
| (8)a. | mì-yɔ̀ | ewei | | PAST | |
| | 1SG-go.PST | home | | | |
| | ‘I went home.’ | | | | |
| b. | mì-bɛ̀-yɔ̀ | ewei | → | [mɛ̀yɔ̀ ewei] | FUTURE |
| | 1SG-FUT-go | home | | | |
| | ‘I will go home.’ | | | | |

- c. **mì-lè-yò** **ewei** → [**mìèyò ewei**] PERFECT
 1SG-PRF-go home
 ‘I have gone home.’
- d. **mí-yó** **ewei** HABITUAL
 1SG-go.HAB home
 ‘I go home.’
- e. **mì-lé-yò** **ewei** → [**míyó ewei**] PROGRESSIVE
 1SG-PROG-go home
 ‘I am going home.’

In (8) **yò** ‘go’ is utilized in all five situations: past, future, perfect, habitual and progressive. It is, however, irregular when used in the progressive in the sense that it does not overtly inflect for the progressive prefix **lé-**. As shown in (8e), the progressive is expressed by a high-tone prefix **lé-** distinct from the perfect **lè-**, which is expressed by a low-tone prefix in (8c). However, when **yò** is used in the progressive, the segmental component of the progressive prefix, i.e. **lé-**, is omitted, leaving its associating high tone behind.⁷ Like many other Guang languages, Nkami exhibits rightward high-tone spreading. As a result, prior to the omission of **lé-**, its associating high tone extends onto **yò**, resulting in its surface form [**yó**]. Moreover, the lingering high tone of the progressive prefix re-associates with the preceding syllable; i.e. the 1SG.SUBJ pronoun **mì** ‘I’ becomes [**mí**]. Note also that the habitual (8d) has no segmental manifestation; it is realized as tone on the phonological word, which encompasses both the verb stem and the subject pronoun. In other words, all the syllables within the phonological word associate with a high tone. As a result of these phenomena, the progressive and the habitual situations are neutralized in the language when the verb **yò** ‘go’ is used. Thus, **míyó** could either index ‘I (habitually) go’ or ‘I am going’. Extra linguistic resources and/or context are, therefore, required to infer the intended meaning.

Unlike **yò**, **bà** inflects for all the grammatical tense/aspect markers in the language, as (9) illustrates.

⁷ A probable reason for the failure of the motion verb, **yò** ‘go’, to inflect for the progressive, **lé-**, is that the latter evolved from the former.

- (9)a. **mì-bà** **ewei** PAST
 1SG-come.PST home
 ‘I came home.’
- b. **mì-bè-bà** **ewei** → [**mèbà ewei**] FUTURE
 1SG-FUT-come home
 ‘I will come home.’
- c. **mì-lé-bà** **ewei** → [**mìbà ewei**] PERFECT
 1SG-PRF-come home
 ‘I have come home.’
- d. **mí-bá** **ewei** HABITUAL
 1SG-come.HAB home
 ‘I come home.’
- e. **mì-lé-bà** **ewei** → [**mìébà ewei**] PROGRESSIVE
 1SG-PROG-come home
 ‘I am coming home.’

Observe in (9e) that although the initial lateral consonant gets deleted, the progressive prefix, **lé-**, can be deduced from the context, just like the other grammatical prefixes.

The defective verb **bèè** ‘come’

As noted earlier, apart from **bà**, there is another form **bèè**, which expresses the same deictic motion concept ‘come’. The major difference between the two is that, unlike **bà** which can be utilized in all tense-aspects and sentence types, **bèè** cannot be used in the progressive and future situations, and in imperative sentences. Consider examples (10-12):

(10) IMPERATIVE

- | | |
|--------------|----------------|
| a. bà | b. *bèè |
| ‘Come!’ | ‘Come!’ |

(11) FUTURE

- | | | | | | |
|----|--------------------------|-------------|----|--------------------------|-------------|
| a. | ani-bè-bà | ɔtʃɛ | b. | *ani-bè-bèè | ɔtʃɛ |
| | 1PL-FUT-come | tomorrow | | 1PL-FUT-come | tomorrow |
| | ‘We will come tomorrow.’ | | | ‘We will come tomorrow.’ | |

(12) PROGRESSIVE

- | | | | | | | |
|----|-----------------------|--------------|------|-----------------------|--------------|------|
| a. | Yaa lé-bá | (ɛ)mɪ | b. | *Yaa lé-bèè | (ɛ)mɪ | |
| | Yaa | PROG-come | here | Yaa | PROG-come | here |
| | ‘Yaa is coming here.’ | | | ‘Yaa is coming here.’ | | |

Whereas all the sentences to the left (10a-12a) are admissible because **bà** is the main-verb, those to the right (10b-12b), having **bèè** as the main-verb, are not admissible. Nonetheless, **bèè** can be used in the past, habitual and perfect, as (13) shows.

- | | | | |
|--------|----------------------|--------------|----------|
| (13)a. | Yaa bèè | (ɛ)mɪ | PAST |
| | Yaa | come.PST | here |
| | ‘Yaa came here.’ | | |
| b. | Yaa òó-béé | (ɛ)mɪ | HABITUAL |
| | Yaa | 3SG.HAB-come | here |
| | ‘Yaa comes here.’ | | |
| c. | Yaa lé-bèè | (ɛ)mɪ | PERFECT |
| | Yaa | PRF-come | here |
| | ‘Yaa has come here.’ | | |

Put differently, save the imperative, future and progressive, the concept of ‘come’ in Nkami is expressed by two distinct but interchangeable linguistic forms: **bà** and **bèè**. It should, however, be emphasized that though the use of **bèè** is perfectly right in the situations described in (13), it is less frequently used in everyday speech than **bà**. Given its low frequency of usage, along with its limited inflectional and distributional abilities, it may be appropriate to describe **bèè** as a ‘defective’ verb in Nkami (at least, as compared to **bà**). There is an attempt in Section 4 to establish the diachronic lines of **bà** and **bèè** but before that let us explore another function of **bà/bèè**.

bà/bèè in complementary function

Apart from its core function as a deictic motion verb, **bà** also complements the possessive verb **bɔ** ‘have’ when used with property encoding nominals to assign property in Nkami. Thus, one strategy speakers of Nkami employ to express predicative property is through possessive constructions. These constructions are made up of an entity in the subject position, followed by the possessive verb **bɔ** ‘have’ and then one of approximately 20 defective property-encoding nominals, such as **ɛtā** ‘ugliness’, **ɛsī** ‘tallness’, **ɔdɛ** ‘sweetness/taste’, **oyire** ‘coldness’, **ɔsī** ‘pain’, **odu** ‘heaviness’ and **ɔya** ‘lightness (weight)’ (cf. Asante, 2016, 2021, p. 76). Typically, if one wants to express something like ‘the girl is tall’ and ‘the water is cold’, this is the way Nkami speakers go about it.

(14)a. **ɔtʃibi amɔ bɔ (ɛ)sī**
girl DET have tallness
‘The girl is tall.’

b. **adzuro amɔ bɔ (ɔ)dɛ**
food DET have sweetness
‘The food is delicious.’

c. **ntʃu mɪ bɔ (o)yire**
water DEM have coldness
‘This water is cold.’

Using a possessive clause to express predicative property, as shown in (14), is the most preferred choice in Nkami. Apart from the present tense, a possessive clause may also be employed to code property in the future, as (15) illustrates.

(15)a. **adzuro amɔ bè-bɔ (ɔ)dɛ**
food DET FUT-have sweetness
‘The food will be delicious.’

b. **waasɛ amɔ bè-bɔ (ɛ)fɛ**
cloth DET FUT-have beauty

‘The dress will be beautiful.’

Besides these two situations, the present and future, the possessive verb, **bɔ** ‘have’, cannot be used to code property in other situations. In such other situations, **bà/béé** ‘come’ is required, as (16-17) show.

(16) PAST

- a. **adʒuro amɔ bà/bèè (mɪ) ɔdɛ**
food DET come.PST 1SG.OBJ sweetness

‘The food brought (me) sweetness (The food was delicious).’

- b. ***adʒuro amɔ bɔ (mɪ) ɔdɛ**
food DET have.PST 1SG.OBJ sweetness

‘The food brought me sweetness (The food was delicious).’

- c. ***adʒuro amɔ bɔ (mɪ) ɔdɛ**
food DET do.PST 1SG.OBJ sweetness

‘The food brought (me) sweetness (The food was delicious).’

(17) PERFECT

- a. **waasɛ amɔ lè-bà/bèè ɛfɛ**
dress DET PRF-come beauty

‘The dress has brought beauty (the dress has been beautiful).’

- b. ***waasɛ amɔ lè-bɔ ɛfɛ**
dress DET PRF-have beauty

‘The dress has brought beauty (the dress has been beautiful).’

- c. ***waasɛ amɔ lè-bɔ ɛfɛ**
dress DET PRF-do beauty

‘The dress has brought beauty (the dress has been beautiful).’

The English glosses are quite close but not entirely equivalent. Both sentences in (16-17) express satisfaction with a service. Example (16) may be used after enjoying a good meal,

while (17) could be used when receiving a dress from a dressmaker, especially if there had been initial doubts about the dressmaker's skill. Thus, they are typically used with the benefit of hindsight. When **bà/bèè** is used in this complementary function, it seems to convey the meaning of 'bring', which can also be interpreted as expressing 'proximal' motion in an abstract sense (i.e., bringing satisfaction).⁸ Thus, apart from indexing the deictic motion 'come', **bà/bèè** can also complement **bo** 'have' to express property in completive situations.

The use of **bà/bèè** 'come' to complement **bo** 'have' in these situations is quite significant because it appears to differ from the usual tendency, where verbs of related meaning 'have' in other languages (e.g. Chumburung and French) are complemented by verbs that are semantically related to 'do'. For instance, Hansford (p.c.) reports that in Chumburung, a related Guang language, the cognate of Nkami's **bo** 'have' is paired with a complementary verb **waa** 'do', which is used for marking all tense and aspect forms. Notwithstanding, we maintain that in Nkami **bà/bèè** 'come' complements **bo** 'have' as the available data do not show that the verb **bo** 'do' in Nkami is used for this complementary function. For instance, replacing **bà/bèè** 'come' in (16a, 17a) with **bo** 'do' in (16c, 17c, respectively) results in ungrammaticality. Having discussed the functions of **bà/bèè** as a verb that expresses lexical meaning of motion and direction, we turn now to situations where **bà/bèè** has been grammaticalized to express more abstract and less concrete meanings.

Expressing direction/location

The two deictic motion verbs **yò** 'go' and **bà/bèè** 'come/bring' have respectively developed into grammatical prefixes **yè-** and **bè-** that are used to convey direction or location of events. They are akin to their source lexical verbs in terms of their deictic semantics. As prefixes, **bè-** and **yè-** are bound morphemes that cannot function as independent words on their own: they have to be attached to other verbs to be functional (see Section 5 for more). Like the verb **yò** 'go', the prefix **yè-** denotes the direction of events or states that is relatively distant from the deictic centre. Conversely, **bè-**, like **ba** 'come', denotes a direction that is relatively close to the deictic centre. I call **bè-** a 'proximal directional prefix (PDP)' and **yè-** a 'distal directional prefix (DDP)'. Notice that the difference between the two sentences in (18) is based on the fact that the predicate **dí** 'sleep' inflects for the PDP **bè-** in (18a) and the DDP **yè-** in (18b).

⁸ This usage of **bà/bèè** results in a valency shift from intransitive (1) to (extended) transitive verb (16-17). The processes leading to the shift are, however, unclear.

(18)a. **Kofi bɛ̀-dí**

Kofi PDP-sleep.HAB

‘Kofi comes to sleep.’

b. **Kofi yɛ̀-dí**

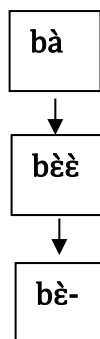
Kofi DDP-sleep.HAB

‘Kofi goes to sleep.’

Sentence (18a) indicates that the ‘sleeping’ event takes place at a space that is proximal to the speaker, while (18b) indicates that it does at a place that is distal to the speaker’s space.⁹

Having established that the directional morphemes developed from the deictic verbs of motion, we will at this juncture determine which of the two ‘come’ verbs, **bà** and **bɛ̀ɛ̀**, developed into the directional prefix, **bɛ̀-**. In other words, did **bɛ̀-** develop from **bà** or from **bɛ̀ɛ̀**? Additionally, we need to determine the chronological relationship between the two ‘come’ verbs. Did **bà** precede or evolve from **bɛ̀ɛ̀**, or vice versa? There are two likely possibilities in our view, but what seems obvious is the derivational cline in (22), where **bà** develops into **bɛ̀ɛ̀**, which in turn gives rise to **bɛ̀-**.

(22)



While this reasoning sounds highly plausible on the surface¹⁰, we propose (23) to explain the derivational process.

⁹ Apart from collocating with the habitual in (18) and the progressive in (34) to express prospective meaning, the directional prefixes, **bɛ̀-** and **yɛ̀-**, may also collocate with the perfect and the past, as (1) and (2) illustrate below.

(1)a. **Kofi lɛ̀-bɛ̀-dí**
Kofi PRF-PDP-sleep
‘Kofi has come to sleep.’

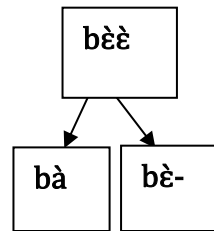
b. **Kofi lɛ̀-yɛ̀-dí**
Kofi PRF-DDP-sleep
‘Kofi has gone to sleep.’

(2)a. **Kofi bɛ̀-dí mɪ**
Kofi PDP-sleep.PST here
‘Kofi came to sleep here.’

b. **Kofi yɛ̀-dí mɔ**
Kofi DDP-sleep.PST there
‘Kofi went to sleep there.’

¹⁰ This position is supported by evidence from other Guang languages, where the form for ‘come’ is similar to **bà**, with only tonal differences (see the last section of this paper).

(23)



The proposal in (23) suggests that **bà** rather developed from **bèè**, and not vice versa. It also suggests that the directional prefix **bè-** derived from **bèè**, rather than from **bà**. That is to say that **bèè** serves as the diachronic source for both **bà** and **bè-**. I adduce two reasons for this proposition. First, as noted earlier (Section 2.1), though both **bèè** and **bà** mean ‘come’, **bèè** has a more limited distribution than **bà**. Specifically, while **bà** can be used across all sentence types and tense-aspects, **bèè** cannot be used in the imperative, nor in the progressive and future situations.

Moreover, synchronically, **bèè** is used less frequently in discourse compared to **bà**. Indeed, it would not be surprising if **bèè** were to become extinct in the near future. Therefore, if both **bèè** and **bè-** had rather evolved from **bà**, as schematised in (22), one would expect **bà** (the source/older form) to be less prominent in discourse than **bèè** (the derived/newer form). Since the reverse is true, it may be more appropriate to adopt (23) rather than (22) for explaining the derivation of the directional prefix **bè-**.

In addition to the frequency argument, there is also another based on idiosyncratic lowering processes in the language (cf. Akanlig-Pare & Asante, 2016, p. 41). Nkami has a number of cases where the mid-vowels /e, ε, o, ɔ/ have lowered/shortened to become the low vowel [a]. Consider the third person plural pronominal form in connection with the other persons in the progressive tense in (24). Here, **dɔ́í** is ‘eat’, **lé-** denotes the progressive prefix, while the opening forms represent the pronominal forms (Akanlig-Pare & Asante, 2016, p. 41).

- (24)a. **mɪ-lé-dɔ́í** → [miédɔ́í] ‘I am eating.’
b. **wɔ-lé-dɔ́í** → [woódɔ́í] ‘You are eating.’
c. **ɔ-lé-dɔ́í** → [olódɔ́í]¹¹ ‘S/he is eating.’
d. **anɪ-lé-dɔ́í** ‘We are eating.’

¹¹ There is progressive rounding harmony, where the [+round] vowels of the third and second person singular pronominal forms influence the vowel of the progressive prefix, **lé-**. Refer to Akanlig-Pare and Asante (2016) and Asante (2016) for a detailed discussion of the vowel harmony in Nkami.

- e. **mini-lé-døí** ‘You (PL) are eating.’
 f. **bè-lé-døí** → [**bàádøí**] ‘They are eating.’

As (24) demonstrates, the progressive aspect is expressed by **lé-**, which can appear as [**lé**, **ló**, **ló**]. This depends on the rounding and ATR characteristics of surrounding vowels (cf. Akanlig-Pare & Asante, 2016). Nevertheless, as (24f) illustrates, the front mid-vowels of the third person plural pronominal prefix **bè-** ‘they’ as well as the subsequent prefix for progression **lé-** both appear as a low vowel [**a**] synchronically, even though there is no low vowel in the surrounding environment to trigger this change. A similar lowering change also occurs in the habitual, as (25) shows (cf. Akanlig-Pare & Asante, 2016, p. 41).

- (25)a. **midøí** ‘I eat.’
 b. **wodøí** ‘You eat.’
 c. **ɔdøí** → [**oodøí**] ‘S/he eats.’
 d. **anidøí** ‘We eat.’
 e. **minidøí** ‘You (pl) eat.’
 f. **bɛ-døí** → [**baàdøí**] ‘They eat.’

Dissimilar to the progressive aspect, the habitual does not manifest segmentally. Conversely, similar to the progressive, the habitual features synchronic lowering and lengthening of the mid-vowel in the 3PL.SUBJ pronoun (**/bɛ-døí/** → [**baàdøí**]). The point thus far is that given that there are instances in the language where mid-vowels have historically changed to [**a**] without specific phonetic conditioning environment, it is more probable that the deictic motion verb **bèè** evolved into **bà** rather than the reverse.

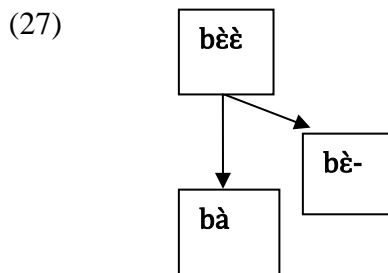
This is particularly prudent because, in addition to these idiosyncratic historical cases of vowel lowering, there is also a general process of lowering in the language, whereas vowel raising is not attested. Consider the singular subject pronominal forms of the habitual and future negatives in (26), for instance, where **kira** means ‘read’ and **ma-** is the negative morpheme (cf. Akanlig-Pare & Asante, 2016, p. 42).

- (26)a. **mi-ma-kira** → [**maakira**] ‘I will not read/ I don’t read.’
 b. **wo-ma-kira** → [**waakira**] ‘You will not read/you don’t read.’
 c. **ɔ-ma-kira** → [**amakira**] ‘S/he will not read/s/he doesn’t read.’

As (26) shows, in both future and habitual negative contexts, the [-low] vowels in the singular subject pronouns, **mi-**, **wu-**, **ɔ-**, are synchronically lowered to [a] due to the [+low] phonetic property of the vowel in the subsequent negative morpheme **ma-**. Consequently, we take these language-internal facts to be evidence that **bà** derived from **bèè**, rather than the reverse.

If we accept that both **bà** and **bè-** developed from **bèè**, then we can further argue that not only did **bà** and **bè-** follow different developmental paths, as shown in (23), but also that the development of **bè-** preceded **bà**. This thesis takes support from the observation that forms that are used more frequently in speech are more likely to undergo grammaticalization than those used less frequently (cf. Hopper, 1987; Haiman, 1994; Bybee & Scheibman, 1999). Recall that, synchronically, **bà** is used more frequently than **bèè**. It is anticipated that, since forms used more frequently are more prone to change than those used less frequently, **bè-** would have developed from **bà** rather than **bèè**, if **bà** existed alongside **bèè** before the derivation of **bè-**.¹²

To reflect this analysis, **bè-** is positioned higher than **bà** in the derivation hierarchy shown in (27), i.e. the line leading to **bè-** is shorter than that of **bà**. Moreover, to illustrate that **bà** and **bèè** both convey the meaning ‘come’ and serve similar functions, the line leading to **bà** is depicted as straight, while the line to **bè-** is shown as slanted. This represents the fact that **bè-** ‘inherits’ only part of the semantics (i.e. directional meaning) of **bèè**.



Expressing future tense and related concepts

This section seeks to show how the deictic motion verb **bèè** ‘come’ has undergone a conceptual shift from a (lexical) verb coding motion and direction to a functional or grammatical element coding space (direction) in one construction and time in another. As previously hinted, since the future tense prefix and the directional prefix share the same

¹² Unless one may want to argue that the two verbs co-existed before **bè-**, and that at the time **bè-** surfaced, **bèè** was more frequently used than **bà**.

form **bè-**, any clause with a predicate marked for **bè-** may be ambiguous. For example, the clause in (28b) **Ama bèdží odzo** could either mean ‘Kofi will eat yam’, expressing futurity, or ‘Kofi comes to eat yam’, indicating the direction/location of the event. However, in (29), only the future reading is possible due to the additional linguistic material **ɔtʃɛ kɛ** ‘as for tomorrow’.

As in many languages, the future tense marker in Nkami has the primary function of locating the situation or event coded by the verb in future time; that is, a period after the time of speech (see Bybee et al., 1994; Bybee & Dahl, 1989; Comrie, 1976). This is the sense that the sentences in (28) indicate.

- | | | | | | | | |
|--------|------------------------|--------------|-------------|----|---------------------|---------------|-------------|
| (28)a. | Ama | bè-yó | ndɔɔ | b. | Ama | bè-dží | odzo |
| | Ama | FUT-go | farm | | Ama | FUT-eat | yam |
| | ‘Ama will go to farm.’ | | | | ‘Ama will eat yam.’ | | |

Both sentences in (28) indicate that at the time of speech Ama had not yet performed the events: ‘going to farm’ and ‘eating yam’. They are events that are due to happen after the speech time. In fact, the actuality of these events is not assured, as they indicate mere estimation or prediction by the speaker. Consequently, linked with the future coding function of the future morpheme **bè-** is a predictive function (cf. Bybee & Dahl, 1989). A typical example is seen in (29), which was uttered by one of my field consultants after a long wait for that particular year’s rains.

- | | | | | | |
|------|-------------------------------------------------|-----------|------------|------------|--------------|
| (29) | ɔtʃɛ | kɛ | ɲaw | amɔ | bè-bá |
| | tomorrow | as.for | rain | DEF | FUT-come |
| | ‘As for tomorrow, it will rain (by all means).’ | | | | |

Clearly, regardless of how certain or serious the consultant was, unless the event described in (29) actually occurred, their statement can only be seen as an estimate based on past observations and/or inferences. Thus, as in many languages, the future tense marker in Nkami can be used to express several other related concepts, such as intention, willingness, expectation, ability, customary behaviour and inclination, command, and request. We exemplify the intention function below (see Asante, 2016) for a discussion on other related functions of the future tense marker):

- | | | | |
|------|------------------|--------------|----------------|
| (30) | anɪ-bè-yó | Accra | ɔkaakɔɪ |
| | 1PL-FUT-go | Accra | someday |

‘We will go to Accra someday.’

Not only is example (30) stating that the event ‘going to Accra’ will occur in a future time, but it also conveys an inherent sense of intention to achieve a goal. In essence, the speaker is literally stating that ‘our intention/aim is to go to Accra someday’.

Discussion: Application of grammaticalization principles

We have thus far established the stepwise manner through which the future tense morpheme **bɛ̀-** evolved from the deictic motion verb **bɛ̀ɛ̀** ‘come’. We have observed that the lexical verb **bɛ̀ɛ̀** ‘come’ first developed into a directional prefix which is used to code direction of events; and then went on to develop into a future prefix which marks future time and related concepts.

The grammaticalization of the future tense prefix in Nkami clearly shows evidence of what Hopper (1991) and Heine and Reh (1984, p. 57) respectively call ‘divergence’ and ‘functional split’, whereby new grammaticalized prefixes (i.e. the directional and future prefixes) co-exist with their source lexical verb **bɛ̀ɛ̀** to continually perform independent functions. Thus, in Hopper’s (1991, p. 24) words, the divergence principle “refers to the fact that when a lexical form undergoes grammaticalization to a clitic or affix, the original form may remain as an autonomous lexical element and undergo the same changes as ordinary lexical item”. As note in Section 2.1, **bɛ̀ɛ̀** continues to co-exist with its grammaticalized directional and future tense prefixes, undergoing many—though not all—of the changes typical of a regular lexical verb. Thus, aside from the imperative mood and the progressive and future situations, **bɛ̀ɛ̀** can be used in all other sentence-types and can inflect for all other grammatical tense-aspects, just like other lexical verbs. The reduction in function and frequency of **bɛ̀ɛ̀** is reasonably attributable to the evolution of **bà**, as both express the concept ‘come’. So, it may not be entirely accurate to attribute the decrease in **bɛ̀ɛ̀**’s inflectional abilities as a lexical verb solely to its grammaticalization into a prefix. Instead, it seems more likely due to the competition it faces from the more preferable alternative, **bà**, among speakers.

Now, the derivational process also shows a case of ‘decategorization’ in the sense that it involves a loss of morphosyntactic features in the newly grammaticalized forms. Hopper (1991, p. 22) explains that “forms undergoing grammaticalization tend to lose or neutralize the morphological markers and syntactic privileges characteristic of the full categories of Noun and Verb, and to assume attributes characteristic of secondary categories such as Adjectives, Participle, Preposition, etc.” Thus, the development of the lexical verb **bɛ̀ɛ̀**

‘come’ into grammatical prefixes, marking direction and futurity, has brought about loss of its morphosyntactic independence as a lexical verb. As a grammatical prefix, **bɛ̀-** cannot inflect for grammatical properties open to its lexical source. Instead, it behaves like other bound grammatical morphemes that must be prefixed to a lexical verb to convey meaning. Therefore, **bɛ̀-** cannot independently express direction or futurity without being paired with a lexical verb. In different words, **bɛ̀-** is now parasitic to other lexical verbs for survival and meaning (function). Additionally, it has undergone phonetic depletion, now realized as a light syllable with a short vowel, unlike its lexical source verb, **bɛ̀ɛ̀**, which is realized as a heavy syllable with a long vowel.

Moreover, the mechanism of ‘persistence’ is evident in the process. While the directional prefix **bɛ̀-** does not retain the motional meaning of its lexical source verb, **bɛ̀ɛ̀** ‘come’, it still preserves its deictic semantics. That is to say, both the lexical verb **bɛ̀ɛ̀** and the directional prefix **bɛ̀-** index spatial direction that is proximal to the speaker’s space. On the contrary, **bɛ̀-**, when functioning as a marker of futurity, no longer encodes spatial direction but instead indicates future time. In other words, there is evidence of semantic bleaching from the use of **bɛ̀-**, as a grammatical prefix marking spatial direction, to its use as a future tense prefix marking time. Nevertheless, the principle of persistence continues to manifest when **bɛ̀-** is used as a future tense marker; thus, one can talk about future direction as opposed to past direction in the temporal sense.

The grammaticalization of the future tense prefix in Nkami further attests to the thesis that typically while physical objects or events, such as movement, which have a primary experiential basis, often provide the source domain for the conceptualization of spatial notions like direction. In turn, spatial morphemes also provide the source domain for temporal notions, such as futurity, and so on (cf. Heine et al., 1991; Bybee, 2003).

Furthermore, as observed by several researchers (cf. Sweetser, 1988; Traugott, 1988; Heine & Kuteva, 2002; Heine, 2003), Nkami’s derivation demonstrates that grammaticalization is not only characterized by semantic bleaching, phonetic depletion, and loss of morphosyntactic properties, but can also involve semantic, phonetic and morphosyntactic gains. Thus, as Heine (2003, p. 579) succinctly puts it “in the same way that linguistic items undergoing grammaticalization lose in semantic, morphosyntactic, and phonetic substance, they also gain in properties characteristic of their uses in new contexts”. In other words, in the same way that **bɛ̀-** has lost lexical or semantic robustness as a lexical verb, it has, in its new role(s), also gained abstract and/or grammatical robustness as a functional morpheme marking direction and futurity. As a grammatical prefix, **bɛ̀-** enjoys the properties of other functional prefixes. It can combine with other grammatical prefixes (such as tense and aspect prefixes), in the language to express the directional location of events in time or

temporal situation. For instance, as shown in example (31a) shows, **bè-** as directional prefix can combine with the progressive prefix **lé-** to express prospective meaning in the language. It can also pair with the perfect prefix **lè-** in (31b) to convey the direction of past events in relation to present situations.

- | | |
|----------------------------------------------------------------------------|----------------------------------------------------------------------|
| (31)a. Ama lé-bé-dzí
Ama PROG-PDP-eat
'Ama is coming to eat.' | b. Ama lè-bè-dzí
Ama PRF-PDP-eat
'Ama has come to eat.' |
|----------------------------------------------------------------------------|----------------------------------------------------------------------|

Although **bè-**, as a future tense marker, cannot combine with other tense and aspect markers as the directional marker does in (31), since it also marks tense, it has also gained some syntactic freedom. For instance, it can be morphologically marked on its lexical source verb, **bà/bèè** 'come', whereas **bè-** as a directional marker cannot, as illustrated in examples (32a) and (32b) accordingly.

- | | |
|-------------------------------------------------------------------|---------------------------------------------------------------------|
| (32)a. Ama bè-bá (béé)
Ama FUT-come
'Ama will come.' | b. * Ama bè-bá (béé)
Ama PDP-come
'Ama comes to come.' |
|-------------------------------------------------------------------|---------------------------------------------------------------------|

Thus, since the verb **bà/bèè** 'come' inherently encodes spatial direction, it is infelicitous to pair it with the directional prefix, which also indexes spatial direction. The inability of the directional prefix **bè-** to collocate with the lexical verb **bà/bèè** 'come' is a further attestation that the former directly derived from the latter. On the other hand, as a marker of temporal direction (not spatial direction), **bè-** can combine with its lexical source verb **bà/bèè** 'come' to mark futurity (32a). It is important to mention that while **bè-**, as a directional prefix, can pair with tense-aspect markers, as shown in (31) above, it cannot co-occur with the future tense prefix, as (33) illustrates.

- (33) ***Ama bè-bè-dí**
Ama FUT-PDP-sleep
'Ama will come to sleep.'¹³

¹³Something close to this could only be expressed in an SVC, as in (3):

(3) **Ama bè-ba bè-dí**
Ama FUT-come PDP-sleep
'Ama will come and sleep.'

The inability of the directional prefix to co-occur with the future tense prefix is also an attestation that the future tense prefix directly derived from the directional prefix.

Moreover, **bè-** gains some phonetic substance by partaking in some phonological processes in the language characteristic to bound grammatical markers (affixes). Specifically, it undergoes [+ATR] vowel harmony when preceding a [+ATR] vowel stem and high-tone assimilation when following a high-tone triggering syllable. Observe in (32) that it is realized as [**bè-**] (i.e. [-ATR]) because it precedes a [-ATR] vowel stem **bà/bèè**, but as [**bé-**], (i.e. [+ATR]), in (31) because it appears before a [+ATR] vowel stem **dʒi** ‘eat’. Put differently, **bè-** has a [+ATR] variant [**bè-**], and the selection of either depends on the ATR status of the vowel(s) in the verbal base that follows. Additionally, observe that **bè-** is realized as a high-tone syllable [**bé-**] in (31a), as opposed to [**bè-**] in (31b), because it follows a high-tone triggering syllable **lé-**.

Evidence from other languages

As noted earlier, it is not unusual for future markers to evolve from motion verbs. For instance, of the 46 out of 119 languages observed by Bybee et al. (1994) that have developed future tense markers from lexical sources, 20 have grammaticalized from verbs of motion, making this the largest set in their database. Although 20 out of 119 languages, and more crucially, 119 out of the sum of languages worldwide, is obviously insignificant, it is, at least, a good step to build on. In (36-37) we show some data from two languages that behave similarly to Nkami in their development of the future tense marker. They are taken from two other Niger-Congo languages, Bambara and Akan. Akan’s case is quite intriguing because apart from also being a Tano-Kwa language of Ghana, it also functions as a lingua franca and the first language spoken by most Nkami children presently. Not surprisingly, Akan exhibits a similar derivation to Nkami, as illustrated in (34).

(34) Akan (Kwa, Niger-Congo, Ghana)

- | | | | | |
|----|-----------------------|---------------|--------------|-----------|
| a. | Yaa | bá-á | nnora | Main verb |
| | Yaa | come-PST | yesterday | |
| | ‘Yaa came yesterday.’ | | | |
| b. | Yaa | bè-da | | Direction |
| | Yaa | PDP-sleep.HAB | | |
| | ‘Yaa comes to sleep.’ | | | |

c. **Yaa bɛ̀-ɔ́-da** Future

Yaa FUT-sleep

‘Yaa will sleep.’

Thus, Akan also demonstrates a case where both directional and future prefixes originate from the deictic motion verb **bá** ‘come’ (cf. Osam, 1994). A major difference, however, is that while Akan distinguishes between the low-tone directional prefix **bɛ̀-** in (34b) and the high-tone future prefix **bɛ́-** in (34c), Nkami uses identical forms for both. Here, note, however, that Osam (1994, 2003) refers to what I call ‘directional’ prefixes as ‘motional’ prefixes in Akan. To justify why these should be recognized as motional prefixes, rather than aspect markers, as suggested in the Akan literature (cf. Dolphyne, 1988), Osam (1994, p. 114) notes: “The crucial point here is the physical movement. Whenever the [motional] prefixes are used the implication is that there is physical motion involved. This is one reason why these prefixes are better treated as markers of motion rather than aspect”. Although Akan is not the object of this study, it seems that in both Akan and Nkami, the primary function of **bɛ̀-** is to indicate direction or location rather than movement. For instance, in a situation where a mother wants Kofi to excuse her son (Kwaku) so he can rest after a long day, the Akan sentence in (35) is felicitous.

(35) **Kofi, ɛ-yɛ, Kwaku re-bɛ̀-ɔ́-da**
Kofi 3SG.INANM-be Kwaku PROG-PDP-sleep
‘Kofi, it is okay, Kwaku is about (coming) to sleep.’

In (35) Kwaku might even be lying on the mat at the time of her mother’s utterance. Therefore, there isn’t necessarily any movement from a distant place to the mother’s location before he begins to sleep. What (35) primarily indicates is that Kwaku is about to sleep at a location close to where the mother is.

Bambara also exhibits a similar case where the lexical verb **na** ‘come’ has developed into a future morpheme **na**, as shown in (36) below (Payne, 1997, p. 238).

(36) Bambara, Niger-Congo (Payne, 1997, p. 238)

a. **a be na**
3SG.SUBJ PRES come

‘He/she is coming.’

b. **a** **na** **taa**

3SG.SUBJ come go

‘He/she will go.’

c. **a** **na** **na**

3SG.SUBJ come come

‘He/she will come.’

Unlike Nkami and Akan, the same form **na** is utilized as both a (lexical) verb ‘come’ and a marker of futurity in Bambara. Thus, **na** functions as a (lexical) verb in (36a), as a marker of futurity in (36b), and performs both functions within the same clause in (36c).

With regard to sister Guang languages, though no study explicitly shows that any of them derives their future morpheme from the deictic motion verb **ba** ‘come’, it appears that the South-Guang languages behave similarly to Nkami, while the North-Guang languages do not, as (37-38) exemplify.¹⁴

(37) South-Guang

a. Nkonya

m-bé-bá

1SG.SUBJ-FUT-come

‘I will come.’

b. Leteh

Kofi **bè-búé** **dɔkita**

Kofi FUT-do doctor

‘Kofi will become doctor.’

c. Nkami

ɔ̀-bè-bá

3SG.SUBJ-FUT-come

‘He will come.’

(38) North-Guang

¹⁴ I am thankful to Dr. Hansford for supplying these examples on Guang languages and for his feedback on an earlier draft of this piece.

- | | |
|-------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| <p>a. Chumburung</p> <p>mú-í-bá</p> <p>1SG.SUBJ-FUT-come</p> <p>‘I will come.’</p> | <p>b. Nawuri</p> <p>ń-tèm-bá</p> <p>1SG.SUBJ-FUT-come</p> <p>‘I will come.’</p> |
| <p>c. Kaakyi</p> <p>ḡ-ké-bà</p> <p>3SG.SUBJ-FUT-come</p> <p>‘He will come.’</p> | |

Thus, while the future markers in the Southern Guang languages shown in (37) bear phonetic resemblance to **ba** and are likely derived from it, as argued for Nkami, the future markers of the Northern Guang languages presented in (38) do not appear to have originated from **ba**, due to the lack of phonetic similarity.¹⁵ If this observation is correct, it would further support Asante’s (2009, 2016, 2017) position that Nkonya and Nkami should be classified as Southern Guang languages.¹⁶ This runs contrary to the dominant view (cf. Stewart, 1970; Snider, 1990) that Nkonya belongs to the Northern Guang group.

Conclusion

The fore-going has been an attempt to trace the diachronic development of the future tense marker **bè-** in Nkami, an endangered Guang language of the Kwa branch of the Niger-Congo language family. Diagram (39) below summarizes the stepwise path along which the future tense marker **bè-** evolved from the deictic motion verb **bèè** ‘come’. Among other

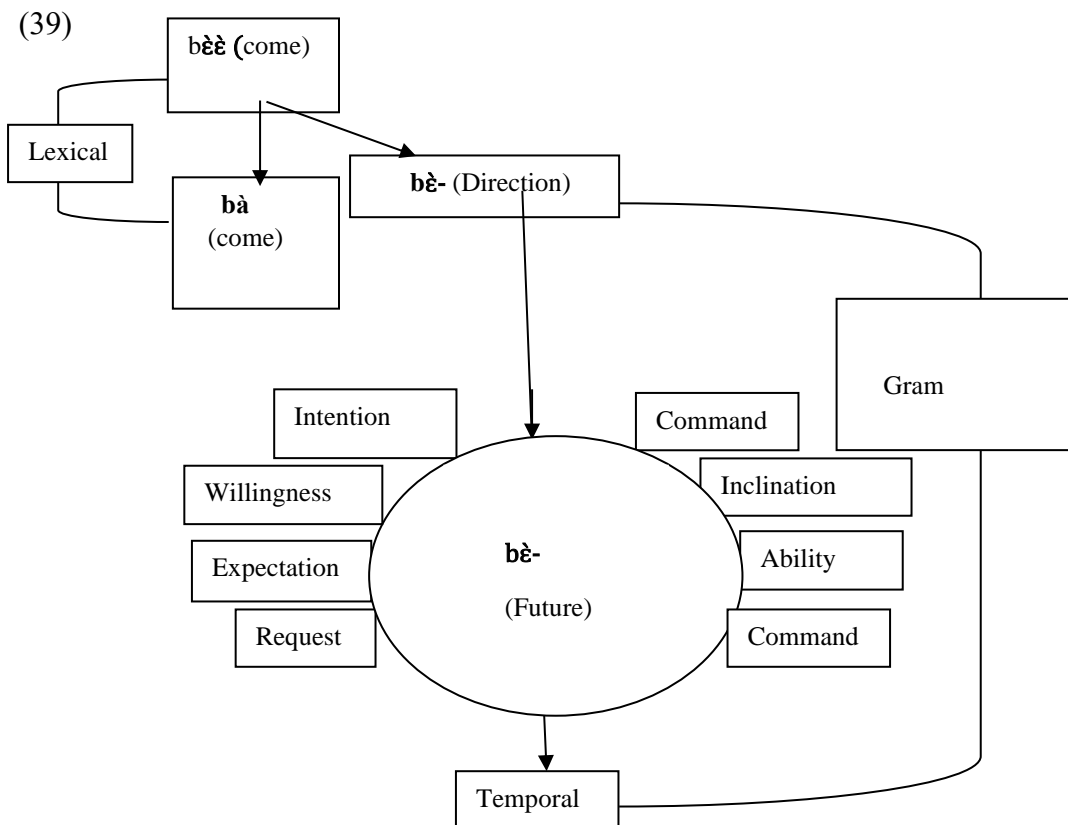
¹⁵ At this point, one may wonder how Nkami (and these related languages) developed its future tense marker from the verb ‘come’ instead of ‘go’, – a more common source. To answer this question, let us consider one common expression in the language:

(4) **ofi ma-tjie ba/*yó**
 year NEG-keep long come/go
 ‘A year does not keep long to come.’

Thus, the use of **ba** ‘come’ instead of **yó** ‘go’ in (4), is an indication that, underlyingly, Nkami speakers plausibly conceptualize the future (here, (next) year) as moving towards the subject/speaker, who stays put, rather than the subject/speaker moving towards the future.

¹⁶ Given the geographical proximity of Akan to the Southern Guang languages (compared to the Northern Guang languages), the similarity in their grammaticalization pathways may be explained by contact-induced grammaticalization.

things, it reveals that the lexical verb **bèè** ‘come’ first developed into a directional marker before developing into a future tense marker, expressing futurity and other related concepts such as intention, willingness, expectation, inclination, inter alia. It also shows that **bèè** developed into another form, **bà**, which it co-exists to express the same lexical concept in the language.



Also, apart from expressing the deictic motion ‘come’, **bà/bèè** also complements **bɔ** ‘have’ to express property in completive situations, in contrast with the usual tendency where the verb ‘do’ is employed in such situations.

The cline of grammaticalization of the marker of futurity in Nkami further reinforces the idea that typically while physical objects or events (e.g. movement), rooted in primary experience, often serve as source domain concepts for the conceptualization of spatial concepts (e.g. direction), spatial morphemes similarly provide the basis for the conceptualization of temporal concepts (e.g. futurity) and so forth (cf. Bybee, 2003; Bybee

et al., 1994; Heine et al., 1991). It has also demonstrated that various grammaticalization principles, such as polygrammaticalization (cf. Craig, 1991), persistence, divergence, and decategorization (cf. Hopper, 1991), all play a crucial role in the evolution of the future marker in Nkami. Lastly, this study has provided additional evidence for dividing the Guang language group into Northern and Southern sub-groups.

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