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A cognitive-grammaticalization model of the *BE NAA… LA* construction in Basse Mandinka

K e y w o r d s : Cognitive linguistics; grammaticalization; verbal semantics; Mandinka

S ł o w a k l u c z e : lingwistyka kognitywna; gramatykalizacja; semantyka czasownika; język Mandinka

1. Introduction

The topic of the present study is an analytic verbal expression (exemplified in 1, below) that is commonly employed in Basse Mandinka, a regional variety of the Gambian Mandinka language. This construction is formed by the non-verbal locative predicator *be* 'be' (in the negative *te*), the verb *naa* 'come', the base of a "meaning" verb[1] and the infinitive marker *la* 'to'. This locution – in accordance with its formal properties and, especially, the shape of the three invariant components – will be referred to as the '*BE NAA…LA*'[2]:

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[1] The meaning verb is a verb which indicates a determined type of activity – it is a variable element in the periphrasis.

[2] It should be noted that in the description of the semantic potential and, subsequently in its analysis, the *BE NAA…LA* periphrasis will be treated as one construction although it is formed by four entities (three constant ones and one variable), i.e. *be*, *naa*, *la* and

(1)   M   **be**   **naa**   a   **ke**   **la**[3]
      I   NONVPR   come   it   do   INF
      I am almost done with doing it

Basse Mandinka – as its name indicates – is spoken in Basse, the capital city of the Upper River Division, situated in the easternmost part of Gambia. It is also extensively employed in neighboring villages in this upper river portion of the country, such as Manneh Kunda, Mansajang, Bassending or Kaba Kama. Basse Mandinka is an eastern variant of Gambian Mandinka. Mandinka itself (whether it is spoken in Gambia, Senegal or Guinea Bissau) constitutes a regional variety of Manding – a cluster of relatively mutually intelligible tongues spoken in the Western Africa such as (besides Mandinka) Bambara, Malinké or Jaahanka (Wilson 2000: 109). Manding, in turn, is classified as belonging to the Western branch of the Mande family, a sub-group of the Niger-Congo realm (for a more detailed discussion of the classification

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a given meaning verb. By doing so, the author follows the method commonly employed in cognitive linguistics and construction grammar where the "core" grammar and lexicon are understood as forming an uninterrupted continuum and where grammatical constructions may be synthetic or analytic. In the latter case, grammatical constructions can further offer different grades of grammaticalization: from non-grammaticalized loose periphrastic chains (these typically correspond to diachronic inputs) to fully grammaticalized formations (these correspond to more advanced stages of grammaticalization). This view has its roots in the fact that grammatical core formations (for instance verbal aspects, tenses or modal expressions) are typically derived from transparent periphrases built on originally independent lexical or grammatical items with a specific meaning and/or function. A sequence of such lexical components forms an original periphrasis to the meaning of which each element equally contributes. Gradually, the components lose independency and the entire periphrasis acquires a more stable usage: it evolves into a solid category by following the trajectory determined by one of the universal paths (this path usually depends on the meaning of the input periphrasis). Eventually, the components may merge into a single form, delivering an agglutinative or synthetic shape.

As will be evident from examples provided in section 3 below, the *BE NAA…LA* formation offers various senses that surpass a straightforward summation of the meaning of its components. In other words, it delivers values that cannot be understood as mere aggregates of four independent elements. In such cases, the *BE NAA…LA* behaves as a single conceptual unit: it expresses senses that correspond to consecutive meaning extensions which are typical for its grammaticalization path.

[3] Following Creissels (1983) and Wilson (2000), I will gloss the non-verbal predicator *be* as NONVPR. The *BE NAA…LA* form (i.e. the predicator *be*, the verb *naa*, the base of a meaning verb and the infinitive marker *la*) as well as other relevant verbal constructions will be given in bold type. The infinitive marker *la* will be glossed as INF.

of Mandinka and Manding, see Kastenholz 1996: 281, Vydrine, Bergman & Benjamin 2000, Williamson & Blench 2000 and Lewis 2009)[4].

As far as Mandinka and especially its Gambian variety are concerned, no grammar book, learning manual or scientific article has thus far discussed the relevant semantic and formal characteristics of the *BE NAA ...LA* construction. The expression has as of yet remained seemingly unnoticed in all grammatical studies dedicated to the Mandinka language. Quite on the contrary, the studies of cognate forms, i.e. *béna* or *na* constructions in a closely related variety of Manding, viz. Bambara, are more abundant and advanced (cf. section 5.2, below). The present article aims at correcting this crucial deficiency in the understanding of the Mandinka verbal system: it offers a detailed description of the semantics of the *BE NAA...LA* form and additionally provides its explanation and classification.

2. Framework and research strategy

In accordance with a cognitive, usage-based and grammaticalization approximation to verbal semantics, the meaning of a verbal form should be understood as a semantic potential (i.e. a polysemy) unified into a consistent map where all the components (viz. contextually induced senses) are coordinated by means of a chaining, based upon universal diachronic paths. Thus, the model represents the meaning of a form as an ordered network of contextual senses, where the extension of one constituent of the map into another is warranted by certain typologically plausible evolutionary scenarios. Let us explain this type of modeling in a more detailed manner.

Under a cognitive and usage-based view, a sense equals a value that is provided by a formation in a concrete place and time. A sense is, thus, determined and, inversely, made explicit through a concrete semantic, syntactic and/or pragmatic environment. Since senses depend on such contextual factors, the entire meaning of a construction – namely, its ordered and chained semantic potential – necessarily represents a contextual phenomenon (Dahl 2000a: 14, Couper-Kuhlen & Selting 2001: 4–5, Croft & Cruse 2004: 258, Evans & Green 2006: 352–353, 368, Nikiforidou 2009: 16–17, 26 and Helasvuo 2009: 70–72). Such senses – which, as explained, constitute components of

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[4] For a discussion of the differences between Standard Gambian Mandinka and the variety employed in Basse, see Andrason 2013b: 9–11.

a given polysemy – are necessarily related: they are conceptually connected to each other because they arise as mental extensions from one to another (Lewandowska-Tomaszczyk 2007: 140). As a result of this obligatory relatedness of the components of a semantic potential, the polysemy constitutes a solid and rational whole: this internal consistency stems from the fact that meaning extensions are propelled by universal human cognitive mechanisms (for instance, metonymy, metaphor, image-schema transposition, inference, etc.; cf. Evans & Green 2006: 331–333). However, the relation between a given constituent of a polysemy (a sense) and its immediate "companion" (another sense that has been expanded by means of determined cognitive processes) is not only conceptual (i.e. based upon such cognitive procedures) but also historical. Indeed, the conceptual link between two senses is *per vim* chronological: one sense is older (i.e. acquired at an anterior stage) while its extension must be younger (i.e. incorporated at a later stage). This implies that the conceptual chaining of constituents of a given map reproduces a diachronic progression: it traces a link that leads from historically earlier senses (initial portions of the map) to senses that are historically posterior (more distant portions of the map; cf. Tyler & Evans 2003: 344–346). The map constitutes, thus, a synchronic reflex of diachronic changes: the geometrically modeled structure of a semantic potential represents a chronological expansion or contraction of the polysemy (Lewandowska-Tomaszczyk 2007: 140; Van der Auwera & Gast 2011: 186–188).

Since the linkage of verbal formations is necessarily diachronic and since the evolution of verbal constructions follow certain universal principles (or at least well-marked tendencies), referred to as 'paths' (Bybee, Perkins & Pagliuca 1994, Dahl 2000, Ariel 2008 and Bybee 2010), it is possible to employ these typological paths as explanatory templates for the modeling of semantic potentials which are recorded synchronically, i.e. at a given time *t* (cf. Heine, Claudi & Hünnemeyer 1991: 221–225). In other words, diachronic paths can be used as typologically plausible patterns for imposing an order in a polysemous space (Heine 1997: 10). Paths (namely, evolutionary laws that are quite regularly respected in languages of the world) constitute abstract models of how aspects, tenses and moods evolve: they show the origins, the most common behaviors during the development, as well as final stages of the grammatical life of constructions that belong to a determined type (Bybee, Perkins & Pagliuca 1994 and Dahl 2000b). More concretely, they specify how cer-

tain classes of polysemies evolve by progressively incorporating new senses – they determine the order of the acquisition of new senses into a given class of semantic potentials. Since they determine the most probable extensions of senses of a given group of verbal formations, they may be employed as templates in order to represent the semantic potentials of constructions that are members of that grammatical type. Thus, with these universal (or highly plausible, at least) developmental and diachronic rules, one may hypothesize an order of a given polysemy and propose the most probable chaining of the components of a polysemous grid (Heine, Claudi & Hünnemeyer 1991: 225–227 and Bybee 2010: 198–199). Once connected by means of a path or a cluster of them, the semantic potential of a construction – superficially heterogeneous and/or accidental – can grasped in its integrity and represented as a rational, logical and homogenous whole, i.e. as a fragment of a cline. In other words, the entire variety of senses recorded synchronically is arranged so that it matches an evolutionary trajectory or a section of it (Heine, Claudi & Hünnemeyer 1991: 260–261 and Van der Auwera & Gast 2011: 186–188).

However, at this stage, the model constitutes only a highly plausible typological hypothesis: typological abstract and general laws are used to explain concrete synchronic data. In order to corroborate the proposed model, one should demonstrate that the chaining is not only typological probable but also historically realistic. This stems from the fact that paths which are employed as extension patterns for the chaining of the components of a given polysemy are understood as not only being typologically plausible (i.e. as universal templates) but also as being realistic: a theorized path is required to represent a realistic development of the construction under analysis. In order to validate this realistic correspondence between a semantic potential and its path mapping, one should provide concrete diachronic proofs. On the one hand, the input expression – the original form from which the formation emerged – should be compatible with and cognitively motivate the entire semantic potential of the construction which is modeled as a path. For example, if a verbal form is used a past tense, it should have derived from an input that is consistent with paths that lead to the formation of past tenses. In other words, the input locution is expected to prompt the path with all its senses (Croft & Cruse 2004: 1–3, Heine & Kuteva 2007: 58, 348 and Andrason 2012a: 9–10). Also, the earlier and posterior evolutionary stages of the formation should corroborate the mapping, showing that the construction simply advanced on a given

cline: at earlier phases, the semantic potential of a form should correspond to less advanced sections of the path, while at posterior phases it should match more advanced fragments. Additionally, comparative evidence is required to demonstrate that the mapping of cognate expressions in related languages makes use of the same – or highly similar – diachronic templates. However, such cognate constructions can profoundly vary in the sections of the cline they cover: some may correspond to initial stages, while others may match the ultimate section (for a detailed discussion see Andrason 2011a).

Complying with the cognitive understanding of the meaning, the analysis of the *BE NAA…LA* form will consist of the following. First, we will provide a detailed description of the semantic potential of the construction. We will enumerate and illustrate all possible temporal, aspectual, taxis and modal senses that can be conveyed by the *BE NAA…LA* locution, providing specific contexts in which a given value is activated and/or becomes evident (cf. section 3). To be exact, we will "test" the Mandinka formation for various senses (semantic domains) typically associated with grammatical categories of futures and future perfects. These semantic domains have been extracted from typological studies and are not derived from the correspondence between Mandinka sentences and their English translation.[5] Our task will thus reside in verifying whether the *BE NAA…LA* form is compatible with certain semantic domains: we will "measure" the semantic potential of this formation using as a "measurement-tool" semantic domains that are typologically attested and that are commonly expressed by futures and future perfects. The same methodology has been employed in Dahl (2000b) where grams were "tested" for their compatibility with numerous semantic domains or senses[6].

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[5] These senses are: simple future, future perfect, future of certainty, future of inevitability, proximate and immediate future, "almost" future, "false" future, perfect of certainty, venitive, goal, intention and prediction (all of them may also be located in a past time frame (cf. section 3, below). It is thus evident that the description of the semantic potential – and thus partition of the meaning of the construction into more specific senses – is not presented from the perspective of the English languages, as the English translation may suggest (cf. footnote 6, below).

[6] The cognitive approach to verbal semantics sets diversity in focus – it consists of deconstructing the semantic space of a form into as many *universal* atomic senses as is possible and *useful*. These senses correspond to cross-linguistically common *semantic domains* which may not be equalled with *grammatical categories* (although there is a link between the semantic categorization and their expression (or grammaticalization) as independent grammatical forms (see, below). All *semantic domains*, used in discover-

Next, in section 4, respecting the relatedness principle, we will propose a unification of the components of each polysemy, demonstrating that the semantic sphere of the locution can be grasped in its integrity and explained by making use of certain evolutionary clines. Thus, we will hypothesize the most plausible chaining of the components of the semantic potential by using universal paths as linking templates. In this manner, the formation will be viewed as a homogenous whole: each component of the semantics of the construction will receive a logical and strictly determined – if not necessary – place in the map. In order to corroborate the proposed linkage of the map, the chaining based upon evolutionary paths will be grounded in concrete diachronic and comparative facts (cf. section 5). First, in section 5.1, we shall examine the structure of the locution, indicating a possible genetic relation of the gram to other verbal constructions and thus proposing its formal origin. Put differently, by positing the most plausible morphosyntactic sources of the *BE NAA...LA* periphrasis, we will identify the input expression(s) that could underline(s) the form and its entire path representation. This in-

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ing nuances in the meaning of a construction, somehow differ, profiling a different type of the information to be conveyed. The most radical categorization represents each use of a form as a distinct sense: in each use a different context (syntactic, pragmatic or even extra-linguistic) is constructed and hence a slightly different sense expressed. Of course, this approach to the categorization is absolutely unpractical. As scientists we must impose the limits of precision in "measuring" realistic phenomena. The granularity of a description most commonly depends on the researcher's needs and, in particular, on the topic of a study. However, it is also possible to distinguish more objective foundations of the choice of the categories employed in an analysis. As far as this research is concerned, our cognitive approach to verbal semantics – based upon typological studies – follow four main principles in selecting semantic categories with which a given form will be "measured". First, certain *semantic domains* respect the terminology commonly used in grammatical descriptions of the languages of the world, e.g. in African languages (Botne 2006 and Nurse 2008), Afro-Asiatic and Indo-European languages (Waltke & O'Connor 1990, Hewson & Bubenik 1997, Dahl 2000b) as well as in studies devoted to general linguistics (e.g., Heine, Claudi & Hünnemeyer 1991, Bybee, Perkins & Pagliuca 1994, Dahl 2000b, Haspelmath et al. 2001). Second, in certain languages, our labels correspond to realist and independent *grammatical categories* – they typologically exist. Third, certain specific *semantic domains* have a practical application in some languages, enabling linguists to determine an exact range of similarity (or dissimilarity) between constructions whose semantic potential, although similar, is not identical. And finally, four, in some languages, a given *semantic domain* constitutes an important component in the semantic potential of a construction: it is understood as one of its different senses (either common or highly residual; the third and four principles are clearly related).

put will be shown to be cognitively compatible with the path and with all the senses arisen along it, thus motivating the polysemy by following the meaning extensions as predicted for the trajectory hypothesized previously in section 4. Afterwards, in section 5.2, comparative data from a cognate language, Bambara, will be provided which will further corroborate the hypothesized path mapping. Having verified our hypothesis by diachronic and comparative facts, and keeping in mind all the pieces of evidence introduced previously, we will formulate a synchronic semantic classification of the *BE NAA… LA* construction (section 6).

3. Empirical study – Basse Mandinka evidence

It should be noted that the data that will be introduced below was collected and recorded by the author during his field research in 2011. Ten native Mandinka speakers – representing distinct age groups, educational or professional experience and even ethnic background – participated in the study. Some examples were recorded from the spontaneous speech, while others were elicited by some sort of prompting and translations from the English language. All the informants had lived in the Basse area since they were born or for an extensive period of time. Two of them were entirely bilingual: Fula-Mandinka and Manjago-Mandinka and their ethnic background was Fula and Manjago, respectively.

As will be evident from the following description, the *BE NAA…LA* construction offers a broad range of uses where various semantic domains, either individually or jointly, are activated. Let us begin with cases where this expression is employed in a non-past timeframe. In this temporal environment, the form quite commonly functions as a future perfect (or under an alternative denomination, as a future anterior), whereby it expresses future events that will have occurred before other future activities take place.

(2)	a.	Janniŋ	m	be		taa	la,
		before	I	NONVPR	go	INF	
		Before I go,					
		m	**be**		**naa**	a	**ke**	**la**
		I	NONVPR	come	it	do	INF
		I will have done it					

b. M   **be**   naa   bukoo   ñiŋ   **safee**   **la**,
    I   NONVPR come   book   this   write   INF
    I will have written this book,
    janniŋ   m   be   taa   Gambia
    before   I   NONVPR   go   Gambia
    before I go to Gambia

However, the *BE NAA...LA* form can also hold the idea of futurity with no resultative or "perfectal"[7] nuances regarded as typical for its usage as a future anterior. For example, it may emphasize a temporal proximity of a given future action to the speaker's here-and-now. In such cases, future events are portrayed as near (3.a) or imminent, i.e. as just about to be completed (3.b). These functions will be referred to as a 'proximate future' and 'imminent future', respectively:

(3) a. M   **be**   **naa**   a   **ke**   **la**
         I   NONVPR   come   it   do   INF
         I will do it
                 miniti   dantaŋ   ñaato
                 a little   a few   in
                 in a few minutes

     b. A   fele!
         Him   look.at
         Look at him!
                 A   **be**   **naa**   motoo   ñiŋ   **tiñaa**   **la**
                 he   NONVPR   come   car   that[8] spoil   INF
                 He is just about to spoil the car

The immanency of a future event can be increased to the point where activities expressed by the formation are regarded as almost having been performed. This variety will be referred to as an 'almost'-perfect (4.a and 4.b). In

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[7] The word 'perfectal' will be employed as an adjective referring to the category of a perfect.

[8] The word *ñiŋ* frequently signifies 'this', e.g., *ñiŋ motoo* 'this car'. However, when the lexeme *ñiŋ* follows a noun, its value may correspond to the English pronoun 'that'.

scarce instances, a future action seems to be so imminent and, thus, certain that it is viewed as already having occurred, although in the actual world it is still pending completion or verification. This peculiar usage will be denominated as a 'false perfect': the intended sense is that of a perfect of current relevance even though the expressed fact has not occurred yet in the real world. One should observe that in example (4.c), the *BE NAA...LA* form fails to refer to a future time sphere – it portrays an event as having already happened. As will be evident from subsequent discussion, a future perfect in various languages can express events which are already accomplished, in an imaginary (see, footnote 9, below) or real world. For instance, the Mandinka sentence in 4.c corresponds to the Spanish Future Perfect *Ya habré muerto* 'lit. I will already have died' i.e. 'I am already dead'

Since these two uses involve the semantic domain of ("near" or "false") anteriority typical for perfects, they are conceptually related to the future perfect sense which was discussed in the previous paragraph (see again example 2.a-b, above)[9].

(4) a. Maariyo, Mariyoo,
         sir,   sir,
         Lord, Lord,
              m̀   **be**   **naa**   **kasaara**   **la**!
              we   NONVPR   come   perish   INF
              we are almost perished!

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[9] It is important to note that the semantic domains of 'almost' and 'false' perfect are not metaphorical devises imposed by the English translations. To refer to these semantic domains, we use labels that make reference to the term 'perfect'. These labels, however, are only a matter of terminology. Any other denomination could be chosen. The important fact is that this semantic domain is quite commonly associated with future perfect grams (*grammatical categories*). Put differently, some future perfects in the languages of the world convey the sense where not the nuance of futurity is profiled but rather the idea that a given action *has almost occurred* or *has already occurred (in the imaginary world)*. An excellent typological correspondence is the Spanish Future Perfect as well the Future Perfect in the Vilamovicean language (cf. also sentences in 7.a-b, below, as well as examples 15.e-g in section 4).

b. M maŋ diyaamu noo, m maŋ jeroo ke noo,
   I do.not talk can I do.not seeing do can
   I cannot talk, I cannot see,
       m **be** **naa** **faa** **la**
       I NONVPR come be.dead INF
       I am almost dead

c. M **be** **naa** **faa** **la** fokabaŋ[10]
   I NONVPR come die INF already
   I am already dead

The *BE NAA...LA* construction can emphasize not only the temporal prox-
imity of a future situation to the speaker's here-and-now, but also its certainty
or inevitability. Namely, the gram quite frequently indicates general (i.e. non-
perfect or anterior) future activities (either near or distant), portraying them
as definite and obvious facts. They theoretically belong to a common knowl-
edge or are generally recognized – at least within the enunciator's world. This
usage can be labeled a 'future of certainty'.

(5) a. Dindiŋolu **be** **naa** **ke** **la** keebaalu ti
       children NONVPR come be INF elders EXIS[11]
       Children are going to become elders
           saama
           tomorrow
           tomorrow

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[10] Diachronically, the adverb *fokabaŋ* is a grammaticalized form of an original ad-
verbial clause *fo ka baŋ* 'until the point of ending'. However, in Basse Mandinka, it reg-
ularly functions as an adverb with sense of 'already' and is most commonly found with
grams that are prototypically used in the function of a perfect: *A naata fokabaŋ* 'He has
already come' or *Ɗa a ke fokabaŋ* 'I have already done it'.

[11] The lexeme *ti* is an existential particle that accompanies certain verbs with the
meaning of 'be' or 'become' (e.g., *ke...ti* in our example). It will be glossed as EXIS.

b. Katadamfu   ñoosaboo   **be**   **naa**   **ke**   **la**
football   competition   NONVPR   come   occur   INF
Football competition is going to take place
ñiŋ   karoo   kono
this   month   in   this month

c. Moofinduulaa   la   katadamfu   ñoosaba   baa
Africa   of   football   competition   big
The Africa Cup in Football
be   **naa**   **ke**   **la**   Angola   bankoo   kaŋ
NONVPR   come   occur   INF   Angola   country   on
is going to take place in Angola

d. Yeesu   taata   Alla   le   yaa
Jesus   went   God   EMPH[12]   to
Jesus went to God
bari a **be**   **naa** **muru** **la** naŋ ne   kotenke
but   he NONVPR come   return   INF here EMPH   again
but he is going to return here again
kiitiyo   waatoo   la
judgment   time   at
at the time of judgment

e. Jamaalu   mennu   keta   foloolu   ti
many   who   are   first   EXIST
Many who are first
wolu   le   **be**   **naa**   **ke**   **la**   labaŋolu ti
those   EMPH   NONVPR   come   be   INF   last   EXIST
will be last

Future actions expressed by the *BE NAA…LA* gram may be regarded as being so certain and evident that they are inevitable given the contemporary situation. In this usage, the construction has a force similar to English peri-

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[12] The lexeme *le* (or *ne*) is an emphatic focal particle. Hereafter, it will be glossed as EMPH.

phrastic expressions with the words *inevitably*, *definitely* or *without doubt*. To this sense we will refer to as a 'future of inevitability' (cf. examples 6.a and 6.b, below). It should be noticed that in the two last uses of the *BE NAA...LA* form (i.e. as a future of certainty and inevitability), the formation expresses future events that constitute predictions (either certain and inevitable) derived from a common knowledge or a concrete present situation.

(6) a. Massi   siyaata   Ronaldo   ti;
         Barcelona   is.better   Madrid   than
         Messi is better than Ronaldo;
             a   **be**   **naa**   **gañeeroo**   **ke**   **la**   sooma
             he NONVPR   come   winning   do   INF   tomorrow
             he is going to win without doubt tomorrow

     b. Ŋa   i   koŋ   ne.
         I   you   hate   EMPH
         I hate you.
             M   **be**   **naa**   **i**   **faa**   **la**!
             I   NONVPR   come   you   kill   INF
             I will definitively kill you

The *BE NAA...LA* construction may, likewise, denote actions that are perceived as presumably already having occurred, given the available pieces of information. Thus, it depicts events that are viewed as already materialized and accomplished. This usage is similar to the sense of a false-perfect (cf. 4.c, above) but this time, the evidence from the real world seems to confirm the fact conveyed by the *BE NAA...LA* form. This usage will be denominated as 'a perfect of certainty' although it also seems to carry some evidential (or epistemic) shades of meaning. It is extremely important to note that, in these cases, the *BE NAA...LA* form does not refer to a future time sphere: it makes reference to events which are presented as anterior to the speaker's now, either in an imaginary ('false' perfect) or real world (perfect of certainty)[13].

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[13] As will be indicated in section 4.1, this is a crosslinguistically common property of future perfect formations. For instance, the grams that function as prototypical future perfects (expressions of future anteriority) in Spanish, French, Vilamovicean and Ro-

(7) a. Ñiŋ   kewo   buka   niijii,
       this   man   does.not   breath
       This man is not breathing,

            a   **be**   **naa**   **faa**   **la**
            he   NONVPR   come   die   INF
            he is already dead / he must have be dead

    b. Moo-wo-moo   te   suwo   kono;
        anyone   is.not   home   in
        There is no one at home;

            itolu   bee   **be**   **naa**   **taa** **la**   marisewo   to
            they   all   NONVPR   come   go   INF   market   to
            they are already gone to the market / they must have gone to
            the market

Additionally, in selected cases, the construction may convey venitive and intentional values. In the former use, the *BE NAA...LA* form states that the subject will literally come to perform an activity (8.a) while, in the latter, it indicates that a person has the intention of doing something (8.b). In these two uses (which are probably related to examples 5a-e), the perfect or anterior semantic component of the entire meaning of the construction is typically missing.

(8) a. M   **be**   **naa**   **a**   ke   **la.**
         I   NONVPR   come   it   do   INF
         I will come to do it.
                    M   be   naa   la**!**
                    I   NONVPRcome   INF
                    I will come!

    b. M   be   suwo   kono.
        I   NONVPR   home   in
        I am at home.

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manian can also encode events which have taken place prior to a present reference time (sometimes, the reference time may also be past; cf. Niculescu 2011: 438–439).

M	**be**	**naa**	bukoo	**safe**	**la**	jaŋ
I	NONVPR	come	book	read	INF	here

I am going to read the book here

Besides its frequent use in a non-past time frame, the *BE NAA…LA* locution may also be located in a past temporal sphere. In such cases, the construction conveys several shades of meaning which are closely related to the values observed in a non-past context. First, the *BE NAA…LA* form expresses the idea of a future perfect in the past (cf. examples 2a-b, discussed previously). Namely, it introduces events that were going to have been accomplished before other prospective (from a past perspective) activities would have occurred:

(9)
A	ko	nuŋ	ko
he	said	then	that

He said that

a	**be**	**naa**	n	**kumpabo**	**la**
he	NONVPR	come	me	visit	INF

he would have visited me

janniŋ a	be	taa	la	Birikama
before he	NONVPR	go	to	Brikama

before he would go to Brikama

The gram may likewise convey the idea of certainty and unavoidability of past prospective events. It expresses situations that were going to happen posteriorly and this prospective occurrence was viewed as certain and/or inevitable. For instance, the situation in the real, and especially present world, shows that a given prospective event has indeed occurred.

(10)
Ate	le	**be**	**naa**	a	**jamfaa**	**la**
he	EMPH	NONVPR	come	him	betray	INF

He was (inevitably) going to betray him (and, indeed, he did it)

Furthermore, the *BE NAA…LA* construction may indicate the immanency of the occurrence of a given prospective event when viewed from a past perspective:

(11) Saayiŋ   ate   le   **be**   **naa**   a   **faa**   **la**   nuŋ
now   he   EMPH NONVPR come   him   kill   INF   then
He was just about to kill him

The materialization of a prospective activity may still be intensified and the activity portrayed as if it had almost been accomplished and materialized (an 'almost'-pluperfect):

(12) a. A   kuuranta,   fo   a   **be**   **naa**   faa   **la**
he   was.sick   until   he   NONVPR come   die   INF
He was so sick that he was almost dead (had almost died)

   b. Baabaliolu   dunta   kuluŋo   kono   fo
   waves   entered   boat   in   so.that
   The waves entered into the boat so that
         kuluŋo   **be**   **naa**   faa   **la**   jiyo   la
         boat   NONVPR come   be.full   INF   water with
         the boat was almost filled (or full) of water

   c. Kabiriŋ   nte   **be**   **naa**   **siinoo**   **la**
   when   I   NONVPR   come   sleep   INF
   When I was almost sleeping,
         n   terimaa   naata
         m   friend   came
         my friend came

Finally, the *BE NAA…LA* form may convey past venitive and intentional senses. It expresses that a subject was on his or her way to execute a given activity (13.a) or that he was aiming at doing something (13.b), respectively.

(13) a. A   be   minto   kunuŋ   talaŋ   seyi?
he   NONVPR   where   yesterday   hour   eight
Where was he yesterday at eight?
         A   **be**   **naa**   m   **kumpabo**   **la**
         he   NONVPR   come   me   visit   INF
         He was coming to visit me

b. N lafita   ka   ñiŋ   motoo   saŋ   kunuŋ.

I   wanted   to   this   car   buy   yesterday

I wanted to buy this car yesterday

Ŋa   n   kali.   M **be**   **naa**   a   **saŋ**   **na**

I   myself   swear   I NONVPR   come   it   buy INF

I swear! I was going to buy it.

4. Model of the meaning – unifying the semantic potential

The evidence shows that the semantic potential of the *BE NAA...LA* locution in Basse Mandinka consists of various specific senses. First, the gram may be used as a regular future perfect. It also offers other senses where the idea of anteriority, resultativity or "perfect-ness" is available: it expresses future events that are visualized as almost accomplished ('almost'-perfect) and that are portrayed as having already occurred without, however, having been materialized in the real world (false perfect). Moreover, the construction may denote events that must have certainly occurred in light of the present state of affairs (perfect of certainty). Second, the formation can likewise introduce non-perfectal future activities. Namely, it indicates that a future event is near or imminent (proximate future and imminent future) or that it is certain (future of certainty) or inevitable (future of inevitability). In this last case (future of certainty and inevitability), the construction expresses predictions that are regarded as assured and infallible given the common knowledge or a present situation. And third, the *BE NAA...LA* form conveys a venitive sense and intentional shades of meaning. Here, any perfectal or anterior nuances are unavailable and the future reference is significantly less evident – the formation depicts presently ongoing actions of coming or a current desire to do something. Additionally, a highly similar group of values has been identified with a past temporal reference where the formation expresses the ideas of prospective anteriority (future perfect in the past), certainty and unavoidability, as well as imminence of posterior events. It can also be employed as an 'almost'-pluperfect. It is furthermore able to introduce a past venitive prospective value and intentional undertones.

Having presented the entire range of the polysemy offered by the *BE NAA...LA* formation, the following questions emerge. How can we explain such an extensive polysemy? Is there any conceptual relation between these

senses? How can we grasp the semantic potential of the gram in its totality? What type of a cognitive definition or mapping may be proposed? How can we classify the *BE NAA...LA* form?

As will be evident from the subsequent discussion, in order to chain all the senses displayed by the *BE NAA...LA* expression, one must recur to two typological templates: the future perfect path (and its past variety: the future-perfect-in-the-past path) and the venitive path. In the following section of this article we will explain these evolutionary patterns showing how they can – although each one only partially – account for the polysemy of the Basse Mandinka construction.

4.1. Future perfect map

A future perfect map or path may be employed as a template for networking the following senses offered by the Mandinka locution: a) perfect-anterior related senses: namely, the future perfect, 'almost'-perfect, false perfect and present perfect of certainty; and b) certain non-anterior senses: the proximate and imminent future as well as the future of certainty and inevitability. Let us explain this path in more detail.

It is a well-known fact that original resultative proper formations (such as the English locution *it is done*) can be located in a future time frame (respectively, *it will be done*), and gradually acquire the value of a future perfect. In some languages such future perfects may, additionally, evolve into simple futures. The first part of this process (which represents the change from a resultative into a future perfect) is highly common and can be illustrated by multiple examples in a broad spectrum of languages. The immense majority of future perfects correspond to analogous present perfect formations with the difference that their time frame is future. This future reference is always contextual and can be either covert (whereby it stems from the temporal value of the sentence or entire passage) or overt (whereby it derives from the use of a specific lexeme, in particular, an introductory verb or auxiliary). See the following examples from Spanish (14.a-b) and Vilamovicean (14.c-d)[14].

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[14] Vilamovicean is a Germanic language spoken in Southern Poland.

(14) a. **He   escrito**   una   carta
     I.have   written   letter
     I have   written   a letter

 b. **Habré   escrito**   una   carta
     I.will.have written   a   letter
     I will have written a letter

 c. Der   nökwer   **ej**   **gykuma**
     the   neighbor   is   come
     The neighbor has come

 d. Der   nökwer   **wyt**   **zåjn**   **gykuma**
     the   neighbor   will   be   come
     The neighbor will have come

The other portion of the development, which leads from a future perfect into a simple future, is less frequent, although it can be observed in several linguistic families. The phenomenon whereby future perfects gradually acquire simple future values with no traces of resultativity or perfectal undertones may be illustrated by the evolution of the imperfective future in Polish *będzie pisał* 'He will write'. This construction historically derives from a future perfect locution with the sense of 'he will have written'. However, nowadays, any taxis connotations, originally available and still documented in Old Polish, have entirely been lost. In Modern Polish, this formation introduces simple or durative future activities and situations with no perfectal or anterior shade of meaning (Długosz-Kurczabowa & Dubisz 2003: 310). An analogical development can be illustrated by some future perfects in Latin where certain verbs in the future perfect morphology denote simple future actions with no perfect senses: *meminero* 'I will remember' or *odero* 'I will hate' (Zawadzki 2003: 322–333)[15].

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[15] Other examples of the use of original future perfects as simple futures may be found in Russian (Andersen 2006), Vilamovicean (Andrason 2010: 7), as well as in various Semitic languages (for instance, Classical Hebrew, Classical Arabic and Akkadian; cf. Andrason 2011b, 2011d and 2012b).

Besides a rather common development of future resultatives into future perfects and, subsequently, simple futures, one may identify another diachronic tendency related to the category of future perfects. Future perfects quite commonly provide senses related to the ideas of certainty and inevitability on the one hand, and immediacy and immanency, on the other. In other words, future perfects offer meaning extensions which indicate that a given future event is certain, inevitable, proximate and imminent. Additionally, in some languages, grams that typically function as future perfects may also refer to activities that are almost accomplished ('almost'-perfect), that have happened in an imaginary world (false perfect) or that must certainly have happened (present perfect of certainty). We can illustrate all these properties by using the construction that prototypically functions as a future perfect in Spanish. The Spanish Future Perfect regularly expresses future anterior activities (the sense of an exemplary future perfect; 15.a). However, it may also introduce activities which will occur very soon (15.b) or are about to happen (15.c), future actions (of any temporal distance) that are viewed as certain or inevitable (15.d), activities viewed as almost being performed (15.e) and as already being materialized albeit contrasting with the situation in the real world (false-perfect; 15.f). Additionally, this construction may denote events that must certainly have occurred given the current state of affairs (15.g):

(15) a. Cuando   vuelvas   mi   madre   ya   **habrá**   **llegado**
          when   you-return my   mother already will-have arrived
          When you come back, my mother will have already arrived

      b. **Habrá**   **llagado**   en   5   minutos
          he-will-have   arrived   in   5   minutes
          He will arrive in 5 minutes

      c. **Habrá**   **llagado**   ahora   mismo
          he-will-have   arrived   now   right
          He is about to arrive now

      d. Si   no   hacemos   nada   ahora,
          if   not   do   nothing   now
          If we do not do anything,

		la	humanidad	**habrá**	**perecido**	en 100	años[16]
		the	humanity	will.have	perished	in 100	years

the humanity will certainly perish in 100 years

e. Casi   **habrá**   **llegado**
   almost   he-will-have   arrived
   He has almost arrived

f. Ya   **habramos**   **muerto**
   already   we-will-have   died
   We are already dead

g. **Habrá**   **llegado** hace   unos   minutos[17]
   he-will-have   arrived ago   some   minutes
   He must have arrived

All of this means that conceptual semantic extensions of resultative formations located in a future time frame – and, hence, their historical developments – follow two closely related clines. On the one hand, there is a clear path leading from future resultativity to the value of a simple future tense, through the stage of a future perfect. On the other, one can identify a trajectory relating future resultatives and, especially, future perfects to the senses of future certainty and inevitability, proximate and imminent future, 'almost'-perfect and false perfect and to the sense of a present perfect of (evi-

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[16] It is important to notice the difference in meaning between the use of the Future Perfect (*habrá perecido* '(lit.) will have perished' just like in sentence 15.d) and the Simple Future (*perecerá* 'will perish'). The Future Perfect offers a significantly stronger nuance of certainty and inevitability that the Simple Future: the event is portrayed as absolutely predictable and inescapable. This value of certainty and inevitability is much less evident if the Simple Future is employed.

[17] One should clearly notice that the Future Perfect form in 15.g refers to an event that is believed to have already occurred. In other words, it does not refer to a future time sphere but encodes an event which is anterior to the reference time that, in this case, is the present. The Future Perfect form in 15.f also makes a reference to an event which has already taken place, albeit only in an imaginary world. The property of future perfect constructions to refer to prior events (sometimes with evidential or epistemic nuances) is crosslinguistically well-attested, and may be found not only in Spanish but also in French, Romanian and Vilamovicean (cf. Niculescu 2011: 438–439).

dential) certainty. According to this sub-cline future perfects, originated in future resultative expressions, may acquire further perfectal ('almost'-perfect, false perfect and present perfect of evidential certainty) and non-perfectal (future of certainty, future of inevitability, proximate future and imminent future) senses. The two evolutionary sub-clines, which determine the grammatical life of future resultative constructions, are related, because they share the stage of a future perfect from which they bifurcate into two more specific semantic domains. This entire development – henceforth referred to as a 'future perfect path' – may visually be schematized as follows (cf. Andrason 2013a)[18]:

FUTURE RESULTATIVE ⟶ FUTURE PERFECT

SIMPLE FUTURE

FUTURE OF CERTAINTY AND INEVITABILITY
PROXIMATE FUTURE AND IMMINENT FUTURE
'ALMOST'-PERFECT
FALSE PERFECT AND PERFECT OF CERTAINTY
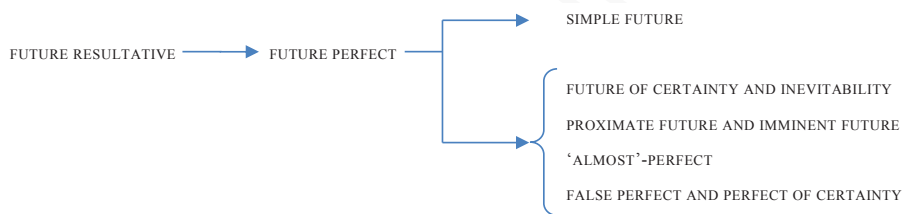
Figure 1: A model of the future perfect path

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[18] This bifurcation stems from the fact that, in some cases, the change of a future perfect into a simple future does not necessitate any comparable acquisition of senses related to the idea of future certainty or inevitability, proximity or immediacy, the value of an 'almost'-perfect, and especially the sense of a false perfect and a present perfect of certainty. For example, the Polish future (a successor of an Old Polish future perfect) is limited to simple future senses with no traces of the other class of senses. It should, however, be clearly emphasized that our model of a future path is an approximation and, as any scientific generalization, it simplifies reality. More importantly, the two domains may in fact interact and influence each other. Moreover, determined values related to the concept of certainty and inevitability may also be prompted by the meaning of the lexical input from which the form emerged. Nevertheless, although in some cases the modal sense of certainty and its extensions may indeed be linked to the auxiliary verb that was used in the original periphrasis from which a given future perfect derived (cf. the modal origin of the Spanish future and hence its perfect variety: *cantare habeo* 'I have to sing' > *cantaré* 'I will sing'), there are various cases where a future perfect (or at a posterior developmental stage, a simple future) with all its senses of certainty is a successor of non-modal expression. Two formations in Biblical Hebrew, i.e. the *qatal* and the *weqatal*, constitute some of the most evident cases (see Andrason 2011b, 2012b and 2013a).

According to the evidence presented in section 3, the *BE NAA...LA* form covers the all stages of the future perfect path with the exception of a future resultative sense.[19]

4.2. Future perfect in the past map

The values that are analogical to those chained above by means of the future perfect cline, but offered by the *BE NAA...LA* gram in a past temporal environment (future in the past perfect, proximate and imminent future in the past, 'almost'-pluperfect, and future of certainty and inevitability in the past), can be mapped by making reference to a meaning extensions' template typical for the category of a future-perfect-in-the-past. This evolutionary pattern is highly similar to the future perfect path, as designed in the previous section, with the difference that, this time, the future perfect expression is additionally located in a past time frame. Typically, such constructions evolve into past conditionals. This means that in various languages, past conditionals not only express several modal meanings (e.g. unreal counterfactuality) but also function as future perfects in the past (what corresponds to the sense of their historical inputs) and indicate the idea of certainty or unavoidability, near or imminent completion of posterior events, observed from the past perspective. Let us explain this map (in particular, its conceptual extensions and relation to future perfect constructions) in a more detailed manner.

While future resultative constructions and future perfects are equivalent constructions (and semantic domains) to present resultatives and present perfects, on the one hand, and to past resultatives and pluperfects, on the other – the only difference consists of the fact that now the original resultative expression is located in a future temporal sphere and not in a present or past time frame –, past conditionals are counterparts of future perfect grams re-

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[19] Of course, at this stage, the proposed map constitutes a hypothesis derived only from synchronic data (inventory of senses) and a diachronic template. Thus, an attentive reader could accuse the author that his (the author's) model uniquely and heavily depends on how certain examples are semantically categorized, for instance as a future of certainty, false perfect, perfect of certainty, etc. As explained previously, any mapping limited to synchronic data constitutes nothing more than a hypothesis and therefore must be contrasted with other evidence. In section 5.1.2, we will provide further rationale for the use of the future perfect cline as a template for chaining the semantic potential of the *BE NAA...LA* gram.

located in a past temporal sphere. Thus, what originally distinguishes past conditionals from future perfects is the following: the idea of prospective resultativity and/or anteriority is now situated in the past. Put differently, the "re-location" of future perfect formations in a past time frame delivers, in some languages, future-perfect-in-the-past constructions which later evolve into past conditionals. Although this sounds like a cognitive brain-breaking or a complete paradox, this conceptual construct constitutes, in fact, a common practice in deriving exemplary past conditionals. Indeed, if we analyze the morphological or morphosyntactic shape of past conditionals in various languages, these constructions are commonly original combinations of future, perfect and past morphemes or analytical expressions: they are initially future-perfect-in-the-past categories. As a result, there is a clear "genetic" link between future perfects (prospective perfects in non-past) and past conditionals (prospective perfects in past)[20].

   As already mentioned, the future-perfect-in-the-past origin of past conditionals may commonly be perceived in the polysemy of past conditional constructions, which is offered at highly advanced developmental stages. To be exact, besides expressing various shades of the unreal counterfactual meaning, so characteristic for prototypical (or well-evolved) past conditionals, past

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   [20] The Spanish past conditional *habría escrito* 'he would have written' can be a good illustration of this phenomenon. The Spanish formation reproduces the morphological pattern of the future perfect: *habrá escrito* 'he will have written'. However, in the past conditional locution, the auxiliary verb *haber* 'have' stands in the conditional tense (*habría*) instead of being employed in the simple future (*habrá*). The conditional itself (i.e. the form *habría*) is a historical successor of the original future-in-the-past periphrasis – a "past" variety of the simple future (i.e. *habrá*). In other words, the conditional *habría* comes from the Latin future-in-the-past periphrasis *habere* (infinitive) + *habebam* (imperfective past; lit. Lat. 'I had to have' > Sp. 'I would have') while the future *habrá* reflects the Latin sequence *habere* (infinitive) + *habeo* (present; lit. Lat. 'I have to have' > Sp. 'I will have'). As a result, the past conditional formation originally offered the following *verbatim* value: 'he had (*habebam*) to have (*habere*) + participle (in our case, 'he had to have written'; cf. Hopper & Traugott 2003: 31 and 52–55). An analogical relation between past conditionals and future perfects may be detected in Germanic languages. For example, the English, Icelandic or Swedish past conditionals (*he would have written*, *hann myndi hafa skrífað* and *hann skulle ha skrivit*, respectively) are past varieties of the future perfect expressions (*he will have written*, *hann mun hafa skrífað* and *han ska ha skrivit*). All of this signifies that if future perfect constructions are situated in a past time frame (this may be achieved overtly or covertly), they regularly evolve into past conditionals.

conditionals may also provide senses that are closer to the original sense of the input locution from which they have emerged. First, some past conditionals may introduce events that are prospective, from a past viewpoint, and anterior to other prospective (again from the past perspective) activities: this is a prototypical future-perfect-in-the-past value. In other uses, they may also express the idea of past prospective certainty and unavoidability as well as the sense of proximity and imminence of posterior events, as observed from a past perspective. For example, the Past Conditional in French (a diachronic successor of an earlier future-perfect-in-the-past expression) is used as a future perfect of the past (*future anterieur du passé*; Grevisse 1975: 733): it indicates that an event – viewed from the standpoint of the past – would be accomplished at a certain posterior point of time (16.a) or it can denote anteriority of an event with respect to another action that was going to occur (16.b). Furthermore, the construction can substitute the periphrasis with the verb *devait* 'it must have/was necessary' and express the certainty (either prospective or already accomplished; cf. the value of a pluperfect of certainty), inevitability and imminence of a given prospective activity with no shadow of doubt, eventuality and condition as in properly conditional functions. (ibid.: 733–734).[21] The values of past prospective certainty or inevitability and values of proximity or imminence may also be illustrated by prototypical past conditionals in Spanish and Polish[22]. In example (16.c), the Spanish formation (which, as already explained, is derived from an original future-perfect-in-the-past periphrasis) expresses a prospective event viewed from a past perspective and perceived as certain or inevitable – no idea of doubt is involved in this use. Similarly, the Polish past conditional[23] in (16.d) introduces a certain and temporarily proximate prospective activity with no nuances of improbability. In examples (16.d) and (16.e), the same Polish construction denotes past prospective events that are imminent and that had almost occurred,

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[21] In accordance with the typological tendency, typically modal unreal counterfactual uses of the past conditional in French correspond to later meaning extensions (Grevisse 1975: 734).

[22] Observe that the Polish gram is rarely used in the modern language.

[23] The Polish formation is a 'surcomposé' variety of the Present Conditional *napisał-by* 'he would write' that, in turn, is a successor of an analytical construction consisting of the verb *byti* 'to be' in the Aorist tense (which replaced the earlier optative form *bimь*) and the participle of a meaning verb, e.g. *neslъ byxъ > niósłbym* (cf. Rosenkranz 1955: 131, Lunt 1974: 98–99, Schmalstieg 1983: 156–158 and Nandris 1988: 156–157).

respectively. Finally, the sentence in (16.g) provides an example of the use of the Spanish past conditional with the force of a pluperfect of certainty[24].

(16) a. Hier   à l'   aube,   je   savais   qu'   à   dix   heures
     yesterday   at the   down   I   knew   that   at   ten   hours
     Yesterday at down, I knew that at 10 o'clock

        le   vaisseau   **aurait**   **sombré**
        the   ship   would.have   sunk
        the ship would have sunk

   b. Je   savais   que   le   vaisseau   **aurait**   **sombré**
      I   knew   that   the   ship   would.have   sunk
      I knew that he ship would have sunk
      quand   le   secours   arriverait
      when   the   rescue   would arrive
      as soon as the rescue would arrive

   c. Sabía   que   este chico
      he.knew   that   this   boy
      He knew that that this boy
        le   **habría**   **traicionado** en   unos   pocos   días
        him   would.have   betrayed   in   some   few   days
        would have betrayed him in a few days (was going to betray him)

   d. Powiedział,   że   **byłby**   **przyszedł**   za   5 minut.
      he.said   that   he.would.have come   in   5 minutes
      He said he would have come in 5 minutes (was going to have come)
      No   i   przyszedł!
      then   and   he.came
      And he came!

   e. Już   **bylibyśmy**   **wygrali**   ten   mecz.
      just   we.would.have   won   this   math
      We were just about to win this match.

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[24] Equally possibly is the use of the formation as a false-pluperfect.

Niestety nasz najlepszy zawodnik złamał noge.
unfortunately our the.best player broke leg
Unfortunately, our best player broke his leg

f. Wczoraj prawie **byłbym** go **zabił**
yesterday almost I.would.have him killed
I had almost killed him yesterday

g. Viendo como estaba su habitación me dijo
seeing how was his room to.me he.said
Seeing his room, he said to me

que su hermano ya **se habría ido**
that his brother already himself would.have gone
that his brother had already left

It is important to acknowledge that some past conditionals (or future perfects located in a past time frame) may encode events that are anterior to the reference time, which in these cases is the past (cf. Niculescu 2011: 438–439). In this manner, past conditionals and future perfects display a similar behavior: besides their prototypical use as expressions of prospective anteriority (either from a present (future perfect) or past perspective (past conditional)), they are able to express the idea of non-prospective anteriority, referring to events that are prior to a given reference time (again, either present or past; cf. section 4.1, above).

The entire map of meaning extensions that involves future-perfect-in-the-past formation may be represented in the following simplified manner:
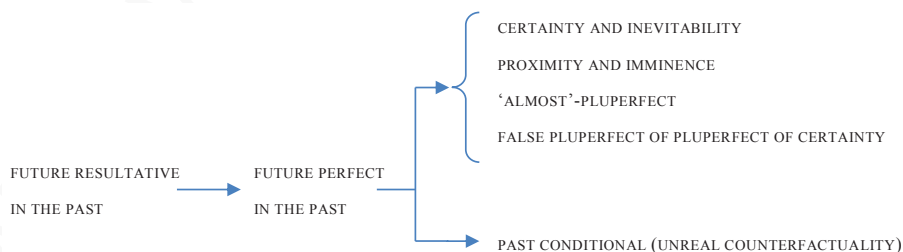
Figure 2: A model of the future-perfect-in-the-past path

As explained at the beginning of the section, the *BE NAA...LA* form covers the following stages of the future-perfect-in-the-past cline: future in the past perfect, proximate and imminent future in the past, 'almost'-pluperfect, and future of certainty and inevitability in the past. This signifies that the Mandinka construction does not offer senses that correspond to the stages of a future resultative in the past, false-pluperfect and pluperfect of (evidencial) certainty. Additionally, it fails to be employed in a prototypical past conditional (unreal counterfactuality) value.

4.3. Future path of movement

Although the mappings based upon the future perfect path and its past variety (viz. future-perfect-in-the-past cline) can account for a broad range of senses displayed by the *BE NAA...LA* construction, these evolutionary scenarios fail to provide an explanation for venitive and intentional uses of the form. In other words, neither venitive nor intentional values can be related to a stage on the future perfect cline and viewed as a meaning extension from the original resultative future (or resultative future in the past) sense. Consequently, these two values must be explained by making use of another chaining template and, thus, another path.

As documented by various typological studies, allative (including venitive) and intentional nuances typically arise due to the most common trajectory leading to creation of future tenses – the so-called 'movement path'. The movement path specifies the grammatical life of future tenses that develop form verbs of movement, especially from predicates with the meaning of *going* and *coming* (cf. the English *he is going to do it* or the Spanish *va a hacerlo*; Heine, Claudi & Hünnemeyer 1991: 172–175 and Bybee, Perkins & Pagliuca 1994: 265–267). In both cases, the original expression includes an allative semantic component (either ablative in the *go*-type or venitive in the *come*-type; see example 17.a extracted from Hopper & Traugott 2003: 69) which allows an extension of the meaning to a sense of aiming at and/or reaching a goal (cf. Heine, Claudi & Hünnemeyer 1991: 174 and Bybee, Perkins & Pagliuca 1994: 268). From this, an intentional value emerges: the subject, typically human or animate, exerts a control over the activity which he or she intends and plans to accomplish (17.b; Heine, Claudi & Hünnemeyer 1991: 174 and Bybee, Perkins & Pagliuca 1994: 269). Later, the formation built on a movement verb

acquires the sense of prediction: at this stage, the subject may be non-human and, if human subjects are involved, they lack the control over a situation (see 17.c and 17.d respectively; Heine, Claudi & Hünnemeyer 1991: 172 and Hopper & Traugott 2003: 69). During a posterior phase, an intentional future may develop into a general (simple) future tense (Heine, Claudi & Hünnemeyer 1991:174 and Bybee, Perkins & Pagliuca 1994: 272–273). Finally, all other future modal senses acquired by futures build from movement verbs (for instance, their generalization in conditional apodoses and protases or the use as imperatives) correspond to posterior, usually highly advanced extensions (Bybee, Perkins & Pagliuca 1994: 267–268).

All futures derived from movement verbs *grosso modo* follow the above-sketched scenario. However, future expressions that are based on the venitive predicate *come* display certain additional properties. Namely, after the stage of an intentional meaning, 'come'-futures typically develop the sense of an imminent future, expressing events that are just about to occur or that are on the point of being occurring (Heine, Claudi & Hünnemeyer 1991: 174, Bybee, Perkins & Pagliuca 1994: 269, 271–273). The imminent (and later on proximate) future is thus understood as a stage between the allative (in this case, venitive) and intentional futures on the one hand and general (simple) future tenses on the other, somehow parallel to the stage of prediction. In contrast with the prediction meaning, this usage emphasizes the imminence of an activity and not the expectation (Bybee, Perkins & Pagliuca 1994: 273; for a detailed analysis of development of 'come'-futures and their illustrations, see Bybee, Perkins & Pagliuca 1994: 271–273).

(17)   a.   There **are going to** visit Bill (Hopper & Traugott 2003: 69)
         b.   I **am going to** draw this … so that he can have a full picture (Heine, Claudi & Hünnemeyer 1991: 172)
         c.   It'**s going to be** hot today (ibid.)
         d.   We'**re going to** have a new mum (ibid.)

Summa summarum, the movement path for 'come'-futures may be represented in the following – approximated and figurative – manner:

Figure 3: A model of the venitive future path

Just like the future perfect cline can be located in the past time frame delivering the future-perfect-in-the-past path or mapping, the venitive trajectory and, hence, chaining based upon it, may be placed in a past time frame. The corresponding senses would be: past allative (was going to come), past intentional (was going to draw), past imminent (was just going to come), and past prediction (it was going to rain). At later stages of the development, from this last value, various modal senses of probability and counterfactuality emerge. Accordingly, this cline could account for the past venitive and past intentional values offered by the *BE NAA...LA* form, which remains unexplained by the future-perfect-in-the-past map.

Consequently, certain components of the semantic potential of the *BE NA...LA* form would match the following stages of the venitive path: venitive proper, intentional, proximate and imminent future, and future prediction.

5. Corroborating the hypothesis

In the previous section, we have hypothesized that all the components of the semantic potential of the *BE NA...LA* construction in Basse Mandinka can be chained – and thus the entire polysemous space of the form mapped – by means of two evolutionary scenarios: the future perfect path and the venitive path. Both clines and mappings based on them may be located in a non-past and a past time frame, thus accounting for non-past and past shades of meaning, respectively.

Nevertheless, as explained in section 2 of the paper, at this stage of analysis, the proposed explanation of the meaning of the Basse Mandinka formation remains only a tentative hypothesis because the designed mapping constitutes nothing more than a typologically plausible postulation built on the synchronic review of senses. Namely, in light of the synchronic evidence available in Basse Mandinka, we have supposed that a given typological principle that governs the extension of senses and formation of a determined

type of polysemies (in our case, the templates schematized as the future perfect and venitive paths) can be employed as an explanatory vehicle for our form. However, this correspondence between the semantic potential of the *BE NAA...LA* construction and the two mapping templates, is only a typologically and synchronically based supposition: a highly plausible one, but still only a supposition. In order to corroborate the hypothesis and demonstrate the mapping as also being realistic, diachronic and comparative supporting evidence is necessary.

5.1. Possible input: structure and "genetic" relations

Given that paths that are employed as templates for the mapping of polysemies are assumed to be not only universal (typologically plausible) but also realistic (they really occurred), one expects that the posited mapping be consistent with the original expression from which the gram has emerged. More exactly, the historical input – either documented or reconstructed – should cognitively motivate the path with all its senses and, hence, should be cognitively plausible for the form's semantic potential at any moment of the development. Since the Gambian Mandinka language (the Basse variety included) lacks direct diachronic facts – especially old texts that could witness the development of the tongue – the identification of the historical source of the *BE NAA...LA* construction must rely on data that are presently available and thus must derive from a morphosyntactic and semantic relationship with other grammatical forms, from internal reconstruction and from comparative evidence.

In the present section, we will demonstrate that it is possible to identify two distinct sources of the *BE NAA...LA* construction which, as expected, are cognitively consistent with the two hypothesized mappings: each one of them constitutes a conceptual and diachronic center of its own network. More specifically, since the *BE NAA...LA* formation is a sequence composed by the non-verbal predicator *be* 'be', the auxiliary verb *naa* 'come', the base of a meaning verb and the infinitive marker *la* 'to', the said structural properties of the form will enable us to link the construction to two entirely different grammatical expressions existing in the Basse Mandinka language. In this manner, we will posit two distinct arrangements of the constituents of the *BE NAA...LA* construction that directly reflect two distinct sources from which this formation have most probably derived.

5.1.1. Venitive NAA

First, it is clear that the structure of the *BE NAA…LA* form may be related to a venitive-intentional periphrasis, built on the verb *naa* 'to come', exemplified in (18.a). From a purely formal perspective, this periphrasis is almost identical to the *BE NAA…LA* construction: it includes the predicator *be*, the verb *naa* 'come' and a meaning verb introduced by the infinitive marker *la*. The difference consists of the fact that the venitive-intentional expression frequently contains a "second" *la* intervening just after the predicate *naa*. The sense of this expression invariably corresponds to a prospective venitive or intentional category: *I will come in order to do something* or *I was going to come in order to do something*.

(18) a. M   **be**   **naa**   **la**   **siinoo**   **la**
        I   NONVPR   come   to   sleep   INF
        I will come in order to sleep

     b. M   **be**   **naa**   **la**   bukoo   **safee la**
        I   NONVPR   come   la   book   read   INF
        I will come in order to read a book

If we analyze the morphosyntactic arrangement of this venitive-intentional periphrasis, it constitutes, in fact, a compound of the *BE…LA* future[25] of the lexical verb *naa* 'come', which subsequently introduces another verb (see, again examples 18.a and 18.b). The *BE…LA* future (exemplified in 19, below), itself, conveys a broad range of meanings. However, its most frequent uses may be grasped together under the label of a (modally colored) future and future-in-the-past category. More specifically, the gram principally indicates future events and situations, portrayed as simple facts or as aims and intentions. It is likewise extensively employed as a future in the past, providing additionally modal values of possibility, probability and past counterfactuality[26].

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[25] Sometimes also labeled a 'future tense' or 'future aspect' (Macbrair 1842: 17–18, Creissels 1983, Gamble 1978, Lück & Henderson 1993, Coley 1995: 7, 15, WEC 2002: 17––18, 20).

[26] It is important to observe that all Mandinka verbal grams that are located within the present and/or future time frames, may likewise be used in the past time sphere. Inversely, there are no exclusively past morphologies, which would constitute counterparts

In dynamic-grammaticalization terminology, the construction's semantic potential has been networked as a manifestation of a future predestination path (for details, see Andrason 2012c).[27] Consequently, the venitive-intentional periphrasis, which (due to the semantic properties of the *BE...LA* form itself) could be located both in a non-past and past time frame, harmonizes with the semantic map of the *BE NAA...LA* expression, organized along the venitive path. In both cases (i.e. in the venitive-intentional and *BE NAA...LA* constructions), the venitive component constitutes the nucleus of the network, from which, first, an intentional value and, later, other senses emerge.

(19)	M	**be**	a	**ke**	**la**
	I	NONVPR	it	do	INF
	I will do it				

It shall be noted that the infinitive marker *la* of the *BE...LA* future tense – and thus the first *la* entity in the venitive-intentional sequence in 18.a and 18.b may be omitted. This stems from the fact that the infinite marker is optional in the *BE...LA* future in case of the verb *naa* 'come'. As a result, the *BE...LA* future of the predicate *naa* can be either *m be naa la* (with *la*) or *m be naa* (without it) 'I will come'. When this "deletion" takes place in the venitive-intentional periphrasis, the entire locution becomes formally indistinguishable from the *BE NAA...LA* construction.

To conclude, both formal and semantic correspondence between the *BE NAA...LA* form and the venitive-intentional periphrasis suggests the follow-

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of the present or future grams in the Mandinka language. Their past equivalents are simply derived by locating the gram in the past time frame (sometimes the adverb *nuŋ* 'then' is added in order to specify the temporal context).

[27] The predestination cline is one of the modally-based future paths and represents a development of original expressions of predestination into future tenses. At the beginning, this type of formations provides a strong value of predestination, additionally accompanied by the sense of obligation. Subsequently, the predestination (as well as the obligation) shades of meaning prompt the sense of intention, giving subsequently rise to properly future uses. These exemplary future senses trigger, in turn, further modal extensions, typical for future tenses (Bybee, Perkins & Pagliuca 1994: 262–263). The predestination path may be illustrated by the Latin future in -*b*- or the Scandinavian future with the predicate *bliva* (for a typological description of the predestination path, see Bybee, Perkins & Pagliuca 1994; for a more detailed analysis of the *BE...LA* form and its mapping by means of the predestination path, see Andrason 2012c).

ing: it is likely that the *BE NAA...LA* expression originated in the venitive-intentional periphrasis. Thus, the venitive sense constitutes the conceptual center of the map from which other related senses have expanded. Due to the grammaticalization process and an optional deletion of the marker *la*, if it is headed by the verb *naa*, the original sequence *a be naa la a ke la* was "simplified" to *a be naa a ke la*. This means that the construction with one *la* is more grammaticalized than the venitive expression with two *la* since the reduction of form typically accompanies the increase in grammaticalization. Nevertheless, if the speaker wishes to emphasize and explicitly express venitive and intentional senses, he or she may again recur to the overly venitive-intentional periphrasis (i.e. to the locution with two *la* markers). This reconstruction of the formal and semantic origin of the *BE NAA...LA* construction coincides with an analogical proposal formulated for a cognate form *béna* in Bambara whereby this future or prospective expression derives from a venitive periphrasis built on the verb *ná* 'come' (cf. Bird, Hutchison & Kanté 1976).

5.1.2. *Anterior NAA*

While the venitive-intentional periphrasis is compatible with the venitive map of the *BE NAA...LA* form, constituting its historical source, the network based upon the future perfect path may be related to an entirely different phenomenon in Basse Mandinka. Namely, the *BE NAA...LA* construction that is mapped by means of the future perfect template could be regarded as genetically related to formations in which the *naa* entity expresses the idea of completion, anteriority or perfective-ness of an event and activity.

The most common construction that employs the maker *naa* is the *NAATA* form. The *NAATA* form (exemplified in 20.a, below) is a morphosyntactic locution compounded of the verb *naa* 'come', itself employed in the *TA* form[28] and the base of a meaning verb. As was the case of the *BE...LA* gram (dis-

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[28] The *TA* form is sometimes referred to as completive-perfective aspect or past tense (see Macbrair 1842:16, Rowlands 1959, Creissels 1983, Gamble 1987: 17, Lück & Henderson 1993 and Colley 1995: 15). The *TA* gram is formed by adding the suffix *-ta* to the verb, as in our case: *naa* 'to come' > *naata* 'has (have) come / came'. The *TA* formation displays a broad range of uses. It approximates the categories of present perfect, past (perfective, simple and durative), pluperfect, future perfect (exclusively in certain subordinated clauses), stative and present (for a complete review of meanings conveyed by the *TA* expression, see Andrason 2011c).

cussed in the previous section), also the *NAATA* expression conveys a broad range of values. Nearly all of them can, however, be encompassed under the label of a perfect (or anterior) and perfective past category. This means that in the majority of occurrences, the formation functions as a dynamic present perfect (resultative, iterative, experiential, inclusive and indefinite) or as a perfective past tense (punctual, terminative and ingressive)[29]. Within the dynamic-cognitive framework, the gram has been mapped as a manifestation of the anterior cline (Andrason 2012d)[30].

Less common – albeit by no means rare or isolated – are uses of the entity *naa* with other verbal forms, for instance with the modal future *SI* (20.b), with the modal (jussive, hortative and imperative) *YE* and with the negative perfect (20.c) and perfective past *MAƉ* (20.d). In all such uses, the morpheme *naa* emphasizes the fact that a given action is completed (resultative perfect sense), anterior (sense of the present perfect of current relevance) or perfective (sense of a perfective aspect). In (20.b) the form *naa* adds a perfective or completive value to the modal future, contrasting with *a si a ke* 'He will do it'. The same completive and perfective emphasis may be observed in (20.c) and (20.d). To demonstrate this patent taxis or aspectual undertone imposed by the use of the entity *naa*, the *YE* and *MAƉ* formations with *naa* may be compared with "bare" (i.e. without *naa*) forms: *a ye sii!* 'be seated'[31] or *a maŋ ke moo tilindiŋo ti* 'he was not a righteous man'.

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[29] Additionally, the gram may express the idea of non-intentionality, accidentality or spontaneity ('something happened to occur'). Finally, in rare cases, the locution approximates the category of a simple past – a preterite (for a detailed study of the semantics of the *NAATA* gram, see Andrason 2012d).

[30] The anterior path predicts that resultative constructions first evolve into perfects (in the beginning, resultative and inclusive present perfects, later experiential and indefinite varieties) and later into past tenses (initially, recent and discursive, and next general, remote and narrative ones). During the acquisition of a past temporal value, present perfects – now used as definite past tenses – frequently acquire an explicit aspectual marking and thus function as perfective pasts (for a detailed description of the anterior path see Bybee, Perkins & Pagliuca).

[31] Here, the English translation is not very accurate because it provides some resultative undertones included in the participle. A better solution would be translation in Polish, a language which possesses imperfective and perfective imperatives. The sentence *a ye si* may be rendered by means of the imperfective imperative *siedź* (sometime also perfective *usiądź*) while the sentence *a ye naa sii* regularly corresponds to the perfective imperative *usiądź* or *siądź*.

(20) a. A   **naata**   **taa**
         he   come-TA[32]   go
         He has gone / he went

     b. A   **si**   **naa**   a   **ke**
         he   will   come   it   do
         He will have done it / he will do it (completely)

     c. Ite   **ye**   **naa**   **sii**   siiraŋo   kaŋ!
         you   may   come   sit   chair   on
         Sit down on the chair!

     d. A   **maŋ**   **naa**   **ke**   moo   tilindiŋo   **ti**
         he   did.not   come   become   person   righteous   EXIS
         He did not become a righteous man

As explained in section 4, from the typological perspective, future per-
fect formations usually employ morphosyntactic features which are used in
order to derive a future tense and a perfect or perfective, at the same time.
This means that in the Mandinka language, a future perfect category would
be likely to combine formal characteristics of a future and those that are dis-
played by a prototypical perfect or perfective.

On the one hand, as mentioned previously, the *BE…LA* form most fre-
quently functions as a future. In fact, it is the most prototypical future expres-
sion in Basse Mandinka[33]. On the other hand, the entity *naa* is an exemplary
vehicle of the sense of a perfect or perfectivity. As indicated above, particu-
larly frequent, is its use in the *NAATA* form, although it may also be found in
other constructions such as the *SI*, *YE* and *MAŊ* forms. Consequently, a for-
mal merger between the *BE…LA* construction and the entity *NAA* could be
regarded as one of the most plausible sources of the future perfect sense and
thus as the cognitive (both conceptual and diachronic) center of the future-
perfect map of the *BE NAA…LA* form. Consequently, the underlying struc-
ture of the phrase *a be naa a ke la* would not be venitive with the meaning of

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[32] The auxiliary *naa* in the *NAATA* formation will be glossed respecting its origin, i.e.
'come-TA', i.e. the verb *naa* 'come' in the *TA* tense.

[33] The other common expression of futurity, viz. the *SI* form, is more modally marked.

'he is coming to do it', but would rather consist of the *BE...LA* future of the meaning verb (in this case, of the predicate *a ke* 'do something'; i.e. *a be ke la* 'he will do it') and the perfect-completive-perfective marker *NAA*. In other words, the *BE NAA...LA* form would reflect a morphosyntactically "mingled" construction or an amalgamation of the *BE...LA* (future) and the *NAA* marker (perfect and perfective aspect). Put it simply, since *naa* is a highly grammaticalized marker of 'perfect' or 'perfective aspect', it can be employed in various verbal construction (for instance, in the future *BE..LA*), deriving their perfect or perfective counterparts.

It is also important to observe that verbs with the meaning of coming (just like the root *naa*) are not only frequent inputs of future tenses (cf. the venitive path) but also constitute one of the main sources of perfects (Bybee, Perkins & Pagliuca 1994:63–64, 67).[34] This means that from a typological perspective, a movement verb 'come' may be employed in deriving two types of constructions: a) grams that develop along a venitive path giving rise to future tenses and b) grams that evolve along a resultative path delivering perfects, perfectives and past tenses.[35] The latter development may be observed in the Mandinka language where the root *naa* 'come' is employed in forming a highly common perfect and perfective gram (*naata* + infinitive; cf. above).

One should also bear in mind that in Basse Mandinka there is a clear difference in meaning between two context-free phrases[36] of which one includes the *BE NAA...LA* form and the other uses the "simple perfect" *BE...LA* (cf. 21.a-b, below). As in Spanish (cf. the contrast between the Future Perfect *habrá hecho* and the Perfect *hará*), the two Mandinka grams offer two different connotations. Sentence 21.a is a simple statement about a future fact and corresponds to a future sense of the Simple Future *Lo haré* 'I will do it'

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[34] Bybee, Perkins & Pagliuca (1994: 64, 67) find 'come' perfects or resultatives in the following languages: Margi (three formations: *era*, *çivar* and *savar*), Yagaria and Kanuri. Among Indo-European languages one may identify two clear cases: the periphrasis *venir de* + infinitive in French (Juge 2007: 34) and Spanish (e.g. *vengo de hablar con él* 'I have just talked to him').

[35] This behavior of verbs with the meaning of coming has been observed by many authors (cf. Juge 2007: 35–36) and most likely stems from distinct semantic properties and/or different conceptualizations of such movement predicates in individual languages (Juge 2007: 37; see also Botne 2006).

[36] Such context-free values refer to "first-come-to-mind manifestations" of meaning and are usually understood as the most prototypical and frequent sense (Guilquin 2006: 180).

in Spanish. However, sentence 21.b portrays the future event as certain and inevitable, being equivalent to the value of a future of certainty/inevitability conveyed by the Future Perfect *Lo habré hecho* (lit. 'I will have done it'). Thus the main contrast between the two Basse Mandinka formations involves the idea of certainty and inevitability; so typical for grams developing along future perfect cline.

(21) a.	M	**be**	a	**ke**	**la**	
	I	NONVPR	it	do	INF	
	I will do it					

b.	M	**be**	**naa**	a	**ke**	**la**
	I	NONVPR	come	it	do	INF
	I will certainly do it					

In light of all the evidence provided, it is highly plausible to assume that a portion of the semantic potential of the *BE NAA...LA* form should be mapped by means of the future perfect cline: a) *BE NAA...LA* provides values that are typical for the future perfect cline, including those which cannot be explained by making use of "simple" future paths, e.g. the venitive cline; b) *BE NAA...LA* prototypically conveys the idea of future certainty and inevitability, one of the archetypal senses of categories of future perfects; c) by doing so, the *BE NAA...LA* clearly interacts with a "simple future" *BE...LA* – this corresponds to typologically common behavior whereby a future perfect morphology indicates future certainty while a simple future form fails to do so; d) although infrequently, the *BE NAA...LA* provides uses where the expressed events fail to refer to a future time frame (cf. 'false' perfect and perfect of certainty) – these values are prototypical for the future perfect path and usually do not arise along future paths such as the venitive cline; e) the *BE NAA...LA* gram uses a typologically regular morphosyntactic device in deriving future perfects: a composition of a future and perfect/perfective morphology; f) from a typological perfective, verbs of coming (such as *naa*) are commonly used both in forming future expressions on the one hand (cf. the venitive path) and perfect/perfective grams, on the other (cf. the resultative path); g) the entity *naa* is used as a common perfect or perfective marker in Basse Mandinka (especially in the *naata* form but also in other construc-

tions). In sum, the meaning, morphosyntactic properties and interaction (both formal and semantic) with other grams in the verbal system, jointly confirm the mapping of certain senses offered by the *BE NAA...LA* locution by means of the future perfect cline.

Additionally, since the *BE...LA* formation can also be employed in a past time frame as a future-in-the-past (see the section 5.1.1, above), the same morphosyntactic blending (i.e. the use of the *BE...LA* category and the *NAA* marker) motivates all the values chained by means of the future-perfect-in-the-past cline. Since all Mandinka verbal grams that are located within the present and/or future time frames may likewise be used in the past time sphere, so also the original future perfect *BE NAA...LA* could be employed in a past time sphere, delivering, in the company of the morpheme *naa*, the category of a future-perfect-in-the-past.

As a result, both the formal and semantic properties of the *BE NAA...LA* form suggest that the semantic potential of this construction mapped by means of the future cline (and future-in-the-past cline) have originated in a "mixing" of two formations that typically deliver future perfect (and future perfect-in-the-past) categories: a future (i.e. *BE...LA* form) and a completive-perfect-perfective form (i.e. the *NAA* marker)[37].

5.1.3. *Two maps – two conceptual inputs*

Morphosyntactic properties of the *BE NAA...LA* formation indicate that this construction may have originated in two different types of inputs which motivated the hypothesized mappings with all their senses. The *BE NAA... LA* form can be regarded as a successor of the venitive-intentional periph-rasis *NAA* + infinitive + *la* 'come to do something' where the auxiliary *naa* stands in the *BE...LA* construction, itself a future and future-in-the-past-modal category. This source is entirely compatible with the structure of the

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[37] Here, we assume that a "new" grammatical construction provides a value which, at least originally, corresponds to a union set (summation) of the meanings displayed by their genetic sources. Such a move is justified by a wide number of examples where a novel form F is derived from two underlying expressions (A and B) and offers a value that simultaneously includes the meaning conveyed by the gram A and the gram B. For instance in English, the progressive aspect (*be + ing*) and the simple past tense give the past progressive form (*was +ing*); the perfect construction (*have* + participle) and the simple past give the past perfect gram (*had* + past participle), etc.

BE NAA…LA form, especially if one takes into consideration the common omission of the marker *la* after the verb *naa* in the *BE…LA* future. It also justifies the portion of the semantic potential of the *BE NAA…LA* construction, mapped by means of the venitive path. However, the *BE NAA…LA* locution may, likewise, be understood as deriving from a future perfect expression, i.e. as a conglomerate of the *BE…LA* form (the most common vehicle of futurity in Basse Mandinka) and the entity *NAA* (a completive-perfect-perfective marker, regularly employed in the *NAATA* expression but not infrequent with other temporal-aspectual-modal markers, e.g. *SI*, *YE* and *MAŊ*). This source constitutes a typologically common manner of deriving future perfect categories and thus can account for the semantic potential of the *BE NAA…LA* construction, networked by means of the future perfect cline. Furthermore, since the *BE…LA* construction, itself, besides introducing future activities, can also be used in a past time frame, thus approximating a future in the past category, both sources motivate and account for the venitive and future perfect mappings located in a past temporal sphere. In this manner, they justify the semantic potential derived from a venitive-intentional past nucleus and future-perfect-in-the-past center.

Consequently, formal characteristics of the *BE NAA…LA* formation enable us to relate this construction to two different sources, which account separately for two distinct mappings, proposed in section 4. In this manner, the hypothesized chaining and path representation is corroborated by a possible diachronic origin of the form. In accordance with the posited two-path mapping, the *BE NAA…LA* construction reflects two independent inputs: one is a venitive while the other is a future resultative.

5.2. Values of the cognate constructions

The understanding of cognate forms in related languages, especially in Bambara, coincides with the mapping developed in section 4, above. Let us first review traditional explanations of the future forms built on the verb *naa* (i.e. *béna*) in Bambara. Samassekou (1981) proposes that the formation is an inchoative future or indicative non-completed ("l'indicatif inaccompli"; see also Blecke 2004: 14). Koné (1984: 14) defines the *béna* form as a definite and properly temporal future. Similarly, according to Tera (1984), the *béna* future should be understood as an unmarked or neutral future ("futur non marqué

ou neutre") and as simple future which does not require any additional se-
mantic specification or contextualization. Blecke (2004: 39–40) emphasizes
that the *béna* form (just like the *bɛ́* and *ná* futures) denotes certain-to-occur
future activities, while modal senses of probability and counterfactuality ap-
pear exclusively in the proximity of the lexeme *tùn* 'then'. In a similar vein,
Idiatov (2000: 13–15) postulates that the *béna* construction expresses the val-
ue of certitude, especially if it refers to an immediate (i.e. proximate) future
sphere. In such cases, the formation expresses actions or situations that will
occur soon and inevitably. However, this author importantly notes that the
béna future may likewise convey the idea of intention. This intentional value
derives from its venitive use (Bird, Hutchison & Kanté 1976).[38]

   As for the locution with the sole *ná* morpheme (i.e. a construction with no
bɛ́ auxiliary), Brauner (1977: 385–388) defines it as a general, indefinite and
extended future. According to Tera (1984: 32), the form with *ná* expresses
future events – either close or remote – which are viewed as inevitable or as
results of certain conditions. Thus, the idea of futurity conveyed by the *ná*
formation is certain and/or inevitable and inversely fails to include a modal
undertone of uncertainty.

   In accordance with the main line of analysis, the semantic potential of *béna*
form (as well as the variety with the sole *ná*) consists of two – to an extent sep-
arated and in some regions exclusive – sets of values. On the one hand, the for-
mation is viewed as an expression of future certainty, especially if indicating
proximate and immediate future events. And on the other, it may also express
an intentional and even venitive senses. These two ranges of values of the cog-
nate forms in Bambara coincide with two sets of semantic potentials of the *BE
NAA...LA* gram in Basse Mandinka: one related to the idea of certainty and
immediacy (and their extensions in accordance with the future perfect cline)
and the one related to the idea of intention derived from the venitive sense (and
their extensions along the venitive cline; the proximate future sense belongs
also here). This fact provides additional support for the two-map networking
of the semantic potential of the *BE NAA...LA* form, as proposed in section 4[39].

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   [38] One may also mention the position defended by Houis (1981: 18, 47) who classifies
the periphrasis with the verb *nà* 'come' as an "éventuel", a form which is external to the
system, in contrast to the "absolutive" and central future in *bé*.
   [39] However, as counter-evidence, it must be acknowledge that Manding varieties do
not provide direct cognate forms which would show a formal merger of a future form

6. Conclusion

The present study has demonstrated that the semantic potential offered by the *BE NAA...LA* formation in Basse Mandinka may be networked – and, hence, holistically grasped and dynamically explained – by means of two templates based upon two distinct evolutionary paths. On the one hand, the future perfect path has been employed as a template for chaining the senses of a future perfect, proximate and imminent future, 'almost'-perfect, false perfect, future of certainty and inevitability and present perfect of certainty. On the other hand, the venitive path has been used to map venitive and intentional values, which constitute senses that fail to be available on the future perfect trajectory. However, the venitive cline additionally accounts for certain senses that already "exist" on the future perfect cline. Namely, the values of prediction (evident in the function of a future of certainty and inevitability) and the values of the proximate and imminent future find their cognitive explanation as meaning extensions typical for future expressions derived from venitive locutions. In this manner, the two mappings partially overlap: they share the domain of a proximate and imminent future and motivate the sense of prediction (during the future perfect path the prediction is just understood as certain and/or inevitable). An analogical mapping may be posited for the uses where the *BE NAA...LA* form refers to a past time frame. In such instances, the values of a future perfect in the past, certain and inevitable future in the past, proximate and imminent future in the past, and 'almost'-pluperfect can be mapped by means of the future-in-the-past-cline (a past counterpart of the future perfect cline). The senses of venitive (future) in the past, intentional future in the past, proximate and imminent future in the past, and future prediction in the past can be mapped by a past venitive path (a past counterpart of the venitive cline that leads to the creation of futures)[40]. Again, both templates partially coincide covering the domain of a proximate and imminent future in the past and, to an extent, the domain of the future prediction in the past.

(cf. the Basse Mandinka *BE...LA*) and a perfect/perfective marker *NAA* (such as in *naata*), triggering an evident future perfect meaning.

[40] The examples that could demonstrate the senses of a false-pluperfect and pluperfect of certainty (corresponding to the value of a false-perfect and perfect of certainty mapped by means of the future perfect template) are lacking in our database.

As required, morphosyntactic characteristics of the *BE NAA...LA* constructions have enabled us to link the two path mappings to two independent sources that motivate the two templates with all their meaning extensions. The *BE NAA...LA* of the venitive map derives from the venitive-intentional periphrasis, such as *a be naa la a ke la* 'he will come in order to do it', while the *BE NAA...LA* of the venitive path originates in a future perfect locution where the entity *NAA* – in accordance with its use in the *NAATA* form and with other verbal formations – is reinterpreted as a completive-perfectal-perfective maker. The two inputs also account for the analogical maps developed within a past time frame. In this manner, the diachronic reconstruction of the origins of the form – which was based upon the formal and semantic relation between the *BE NAA...LA* and other constructions, presently available in the language – confirmed the hypothesized mappings. Finally, we have demonstrated that the semantic potential of cognate constructions is likewise organized along two main "surfaces" that harmonize with the proposed mappings. This fact additionally supported the two-map networking of the semantic potential of the *BE NAA...LA* form.

As a result, we may classify the *BE NAA...LA* form as a complex entity whose meaning is organized along two paths and/or templates that overlap in certain regions. This dynamic definition bestows us with a possibility to grasp the meaning of the construction in its entirety and represent as a consistent and logical category: a summation of portions of two paths (in fact, of their non-past and past varieties) – a future perfect path and venitive path. The mapping of the components of the semantic potential displayed by the *BE NAA...LA* form (limited to the non-past time sphere)[41] and networked by means of the future perfect and venitive paths may be schematically represented in the following manner:

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[41] The map accounting for the values offered in a past time frame is analogical with the distinction that, as explained, the senses of a false-pluperfect and pluperfect of certainty seem to be lacking.
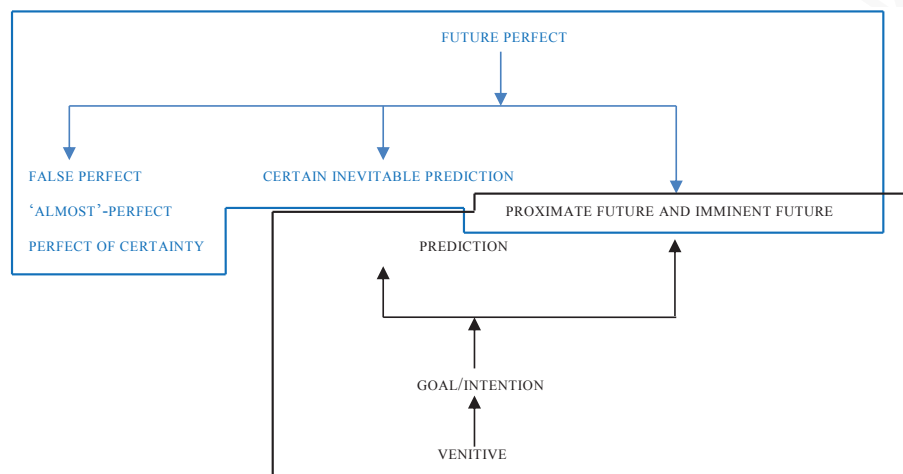
Figure 4: Map of the meaning of the BE NAA…LA form in a non-past time frame[42]

Our map thus shows that the *BE NAA…LA* form has two conceptual – and hence diachronic – sources or original senses from which other values, following two distinct paths, have emerged. One input is the semantic domain of a future perfect while the other is the venitive sense. On the one hand, as a prototypical future perfect construction (whose exemplary sense is that of future anteriority), the *BE NAA…LA* underwent a development along the future perfect cline: it acquired senses (or semantic domains) of false perfect, 'almost'-perfect, perfect of certainty, future (prediction) of inevitability and

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[42] The two surfaces delimited by different colors represent the two types of mapping: one is based upon the future perfect path template while the other relies upon the venitive path template. The labels used in the figure stand for senses offered by the *BE NAA… LA* form, chained in accordance with the corresponding evolutionary patterns (cf. Figure 1 and 3, above). The arrows represent a conceptual extension and thus a diachronic spread of one sense to another. The value of a proximate and imminent future is shared by the two templates and thus may have arisen following each one of them. Figure 4 also makes "visible" another semantic similarity between the components of the two clines and chaining patters: the sense of prediction is available on the two paths. However, the future perfect trajectory typically represents the idea of prediction as additionally accompanied by the undertones of certainty and inevitability. Therefore, in this figure, the sections related to the concept of prediction are "touching" each other without, however being overlapped (as it is the case with the sense of a future proximity and imminence). It must again be emphasized that this is a modeled representation which, as any model, constitutes a simplified, approximating and abstract vision of realistic phenomena.

certainty, proximate and imminent future. On the other, as a prototypical venitive construction (whose exemplary sense is that of a venitive motion), it experienced the evolution along the venitive path incorporating the following values: goal/intention, prediction, proximate and imminent future. It is important to notice that while the *BE NAA...LA* form has acquired various meaning extensions typical for the future perfect and venitive paths – thus advancing on the two trajectories –, it has not lost its original senses. It simply accumulated new values, expanding its semantic potential. No important reduction of the semantic space may be observed yet. It is important to acknowledge that grams advance on their paths by incorporating new values. This incorporation, however, does not necessitate the loss of senses acquired previously. Quite the reverse, they may persist for a long time to the point that the semantic potential of a form can span the entire cline. As explained in section 3, one form may be used with various senses and these senses may correspond to different – more original or more advanced – stages on the grammaticalization path.

Despite the two path-templates mapping, the *BE NAA...LA* construction is viewed by native speakers as a unified and single form (although with a rather extent polysemous surface), but not as two independent forms. This conceptual "fusion" of the two mappings – or in other words, the confusion and merger between the two sources and networks – could be favored by two facts. First, both sources lead to the acquisition of the sense of an imminent/proximate future and to the value of prediction: thus, constructions evolving along the venitive and future perfect path partially overlap semantically. Second, this identification of the future perfect source with a venitive construction and its path could be enhanced by the fact that the venitive expression can delete the second *la*, becoming formally identical with the locution built on the completive-perfectal-perfective marker *NAA*. Due to semantic and formal proximity, the two periphrases merged into a single and highly polysemous form.[43]

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[43] This could be viewed as a morphological convergence whereby locutions that derive from different inputs and whose mapping involves distinct clines become superficially identical. Thus, they deliver a category whose mapping must refer to different clines. This process is by no means infrequent and occurred for instance in Slavic and Semitic languages (cf. Andrason 2011d: 59–61). One of the most evident examples is provided by the Biblical Hebrew *yiqtol* form which derived from three different Proto-Semitic

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inputs (and thus followed three different paths): resultative *yáqtul (resultative path), reduplicative progressive *yaqattal (imperfective path) and modal *yaqtúl (modal path; for details, see Andrason 2010b).

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**Kognitywny model konstrukcji czasownikowej *BE NAA…LA*
w języku Mandinka (Basse Mandinka)**

(s t r e s z c z e n i e)

Niniejszy artykuł zawiera szczegółowy opis i analizę znaczeń konstrukcji czasownikowej *BE NAA...LA* w języku Mandinka we wschodniej części Gambii (Basse Mandinka), z perspektywy językoznawstwa kognitywnego i teorii gramatykalizacji. Autor udowadnia, że rozmaite znaczenia wymienionej formacji można połączyć, a samą konstrukcję można przedstawić holistycznie – za pomocą dwóch typologicznych matryc ewolucyjnych lub łańcuchów gramatykalizacyjnych, tj. za pomocą '*future perfect path*' oraz '*venitive path*'. W konsekwencji znaczenie formacji *BE NAA... LA* definiuje się jako sumę dwóch pól semantycznych wytyczonych przez powyżej wskazane schematy rozwojowe. Połączenie matryc ewolucyjnych, organizujących znaczenia konstrukcji *BE NAA LA*, ma swe źródło w formalnym ujednoliceniu dwóch początkowych wyrażeń, które stanowią konceptualny i diachroniczny zaczątek obu łańcuchów gramatykalizacyjnych, a także w podobieństwie wytyczonych przez nie pól znaczeniowych.