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## Semantic network of the Basse Mandinka BANTA form

The present study - developed within the cognitive framework - provides a description and explanation of the semantic potential offered by the Basse Mandinka BANTA construction (i.e. a verbal gram formed by the auxiliary banta - originally the verb bay 'be finished', employed in the TA tense - and the stem of a meaning verb). The evidence demonstrates that the locution displays a wide range of uses that employ two semantic domains. One includes taxis-aspectual-temporal values, such as resultative proper, present perfect, perfective past, simple past, pluperfect, resultative-stative present and past, stative present and past, simple present and imperfective past. The other consists of modal nuances: evidential, inferential and epistemic. In all concrete instances, the BANTA form combines one semantic component of the former group with one element of the latter class. Furthermore, the author shows that all these senses may be networked and chained by employing certain typologically plausible evolutionary scenarios, typical of resultative formations such as the BANTA form itself. Under this viewpoint, the gram's meaning (i.e. its entire polysemy) is represented as a grid of connected values. This connection, both diachronic and conceptual, is granted by the correspondence between the values offered by the BANTA locution and stages of three developmental processes. Namely, non-modal values correspond to stages on the resultative path, either on the anterior or simultaneous sub-cline, while modal senses mirror the evidential track.

Key words: Basse Mandinka; construction; resultative; evidential; grammaticalization.

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## 1. Introduction

### 1.1. Basse Mandinka

Basse Mandinka (BM) is a regional variety of the Gambian Mandinka (GM) language. ${ }^{1}$ GM constitutes a considerably normalized tongue whose grammatical rules and orthographic conventions have been outlined in WEC (1988a), WEC (1995) and Lück and Henderson (1993). It has commonly been employed in dictionaries and wordlists (e.g. WEC 1988b and 1995), in grammars and learning manuals (e.g. Gamble 1987; WEC 1988a and 2002; Lück and Henderson 1993; and Coley 1995), in literary texts (WEC 1989, 1991 and 1998 or IIP 1988) as well as in online publications and digital medias (e.g. www.mandinka.org or www.mandinkakango. wordpress.com). Quite the reverse, BM - a vernacular spoken in Basse (the capital of the Upper River Division, the easternmost administrative region of Gambia) and in neighboring villages - remains a principally colloquial phenomenon that lacks linguistic uniformity, such as a definite number of clear rules or a sketch of a norm. In particular, and contrary to GM, considerable variations concerning the forms and grammatical strategies are acceptable (cf. Andrason forthcoming a). Additionally, various loanwords, especially from Fula and English are highly common and widely consented. All of this signifies that BM is best viewed as a composition of all possible or available grammatical technics employed by Mandinka native speakers in Basse and its vicinity. Simply speaking, this is a Mandinka variety one may hear at the Basse market.

Having stated this, it must be observed that BM - still extremely similar to GM - displays certain more or less constant features that distinguish it from the normalized language. Of course, in the present article we cannot discuss in detail all such grammatical traits specific to BM . We shall limit this dialectological discussion to the presentation of two characteristics of BM - certainly, the most evident and easily recognizable ones that fail to exist in the normalized tongue. One is a regular use

[^0]of the voiced stop phoneme [g] (galaasoo 'ice-cube, glass' or gaaraasoo 'garage') entirely missing in GM (cf. the GM forms kalaasoo and kaaraasoo, respectively) and the other corresponds to the use of a possessive-genitival locution that employs the postposition ye instead of the GM expression with la (e.g. Laamini ye motoo 'Lamin's car' instead of the GM sequence Laamini la motoo; for a more comprehensive treatment of the differences between GM and BM, see Andrason (forthcoming a: 9-11). ${ }^{2}$

In order to preserve as much as possible of this linguistic diversity, typical to BM, for our study then native Mandinka speakers - inhabitants of Basse and surrounding villages, such as Mansajang, Bassending, Kaba Kama and Manneh Kunda - have been selected. More specifically, mirroring the linguistic and socio-ethnical non-uniformity of BM, the informants represent distinct age groups, different educational and professional strata as well as various ethnic backgrounds. Below, we offer a list of persons who participated in our research, indicating their names, age, sex, profession and place of residence: Keba Suso (13 years old, male, primary school student, Bassending), Malick Suso (18, male, high school student, Bassending), Musa Yaffuneh (24, male, watchman, Basse), Lamin Manneh (25, male, university student, Manneh Kunda), Mamanding Sanyang (27, male, nurse assistant, Basse), Musa Sanneh (29, male, driver, Kaba Kama), Baba Kamara (30, male, teacher, Mansajang), Saikou Drammeh (44, male, health worker, Basse originally from Serekunda but living in Basse for ten years), Kumba Jallow (56, female, cook, Mansajang) and Mariama Mendi (32, female, nurse, Mansajang originally from Fulla Bantang). As far as the tribal origin is concerned, the two first persons on the list are ethnically Mandinka (by father) and Fula (by mother) while the two last informants are Fula and Manjago, respectively. The remaining speakers are Mandinkas by father and mother. ${ }^{3}$

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### 1.2. Objective

The topic of the present paper is the portrayal and explanation of the meaning conveyed by the Basse Mandinka BANTA formation, an important component of the BM verbal system. This locution, exemplified in (1) below, consists of the auxiliary banta - originally the verb bay 'be finished, end', ${ }^{4}$ employed itself in the TA tense ${ }^{5}$ - and the stem of a meaning verb:

## (1) A banta $\quad a k^{6}{ }^{6}$ <br> he be.finished-TA it do <br> 'He may have done it'

A detailed description of the value offered by the BANTA gram $^{7}$ is necessitated not only by the author's major research enterprise that consists in developing a comprehensive analysis of the BM verbal system (cf. Andrason forthcoming a; see also the following studies, already published, devoted to specific verbal constructions: Andrason 2011d, 2012a and 2012b) and writing a compendious grammar of the BM language (forthcoming b). It is also unavoidable due to the fact that traditional grammatical studies - dedicated to GM or to a tongue that could be defined as such - almost entirely ignore the BANTA formation and, thus, the examination of its semantic potential. Only WEC (1995: 11) superficially mentions the banta entity and classifies it as an auxiliary verb, employed in speculations about past actions. Other works - still highly valuable for the Mandinka scholarship (cf. Macbrair 1842; Hamlyn 1935; Creissels 1983; Gamble 1987; Lück and Henderson 1993;

[^2]Colley 1995; and WEC 2002) - unfortunately pay no attention to this gram, which is a common and important component of the Mandinka verbal organization, either in the normalized GM language or in the vernacular used in Basse.

From the methodological point of view, the task of describing the meaning of the BANTA construction is not, in itself, an easy and straightforward mission. This stems from the fact that the sole issue of how verbal semantics should be analyzed and presented is not unproblematic. Therefore, before starting our empirical study and its examination, we must elucidate the basis of the procedure employed in the present paper. These theoretical foundations will enable us to refine our objective and design a more precise research strategy.

## 2. Theoretical background and its implication for our study ${ }^{8}$

### 2.1.Verbal meaning

Following the opinion defended by cognitive linguistics, the meaning of a verbal gram will be understood as the form's entire semantic potential. Put differently, the meaning equals a set-theoretical summation of all individual senses that are activated in concrete empirical cases, viz. in contexts. Due to the fact that all such concrete senses heavily rely on their contextual milieus, the overall meaning of a gram is necessarily influenced by contextual factors (Evans and Green 2006: 352-353, 368; and Nikiforidou 2009: 17 and 26). In turn, since the total meaning of a gram viewed as a form's complete polysemy - depends on textual and pragmatic environments, all such individual, atomic and empirically accessible senses will be treated with an equivalent relevance: all of them equally contribute to the total meaning of the construction (cf. Dahl 2000a: 14; Couper-Kuhlen and Selting 2001: 4-5; Croft and Cruse 2004: 258; Nikiforidou 2009: 16; Helasvuo 2009: 70-72).

### 2.2. Model of verbal meaning

If the meaning corresponds to the total semantic potential displayed by a grammatical construction, the following question arises: how can we represent it? Or in other words, do we possess a model that would allow us to systematically portray such a complex object? Again, the solution may be encountered in cognitive linguistics which bestows us with a neat representation of the gram's semantics where the

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form's polysemy is graphically pictured as a "meaning space", i.e. as a network of interconnected specific senses. The components of this grid - concrete atomic values - spread one from another by means of human cognitive mechanisms such as conceptual metaphors and image schema transformations. These cognitively based extensions ensure the conceptual connection of all elements of the network (Evans and Green 2006: 331-333). However, the relation between one sense and another, in particular with its immediate extension that has been developed by employing universal cognitive devices is not only conceptual. Equally relevant and empirically obligatory is their historical connection: one value diachronically precedes another and inversely one sense chronologically derives from another.

All of this signifies that the total meaning, understood as a gram's polysemy, constitutes a synchronic manifestation of a real diachronic process and, thus, that any modelling of the form's meaning in terms of a network of inter-related senses must reflect such a concrete evolutionary development (LewandowskaTomaszczyk 2007: 140). The chaining procedure - that shows the linkage among senses - reflects not only conceptual relations among components of the map but also their diachronic expansion. It shows how polysemy has developed from original senses to values that are gradually more distant (both cognitively and historically) from the proto-meaning (Tyler \& Evans 2003: 344-346). Consequently, the chaining of constituents of the map or the explanation of the derivation of one value from another must per vim agree with a realistic development during which novel values have sprouted from more archaic ones (van der Auwera and Gast 2011: 186-188).

In certain - or even quite frequent - cases, however, direct historical data fail to be available. In particular, we are sometimes unable to reconstruct a given historical process that has indeed occurred in the language and that could be employed as an explanatory vehicle of a gram's semantic network. In such instances and despite the lack of empirically evidence, we may still posit a potential diachronic chaining. To be exact, the linkage of the components of a grid can be achieved by making use of typological laws or universal diachronic principles. In that manner, our conceptual and, supposedly, historical chaining - if it is not based upon first-hand facts is required to be at least typologically plausible. Such a typological plausibility is a solid basis for establishing a conceptual-diachronic model for the semantic network of a concrete verbal gram.

Linguistic typology bestows us with a collection of universal tendencies or, under a stronger theory, deterministic laws that control the evolution of a similar type of formations. In general terms, these developmental trends or rules depict an ex-
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emplary grammatical life of categories of aspect, tense and mood - they demonstrate their origin, growth and death (Maslov 1988; Bybee, Perkins and Pagliuca 1994; Dahl 2000b). Visual geometrical representations of such evolutionary principles have been referred to as paths - linear unidirectional trajectories composed by well-ordered consecutive stages. Each phase represents a period where a new value has been acquired by the gram and incorporated into its semantic potential, thus expanding or modifying the form's polysemy. With such clines, which principally represent historical processes, we can logically arrange and connect elements of a given synchronic network, encompassing the semantic potential of a form and thus its total meaning diversity. In other words, by means of typological evolutionary universals, we reconstruct a diachronic relation between the components of a map, positing their conceptual linkage. Thus, a synchronic collection of values offered by a gram is arranged in accordance with a typologically plausible developmental scenario - the network of senses is ordered so that it match a path (Andrason 2010a: 1-63, 2011b: 351-383, 2011c: $1-50$ ). As a result, the total meaning of a gram - its entire semantic potential - is portrayed as diachronically and hence conceptually chained network that mirrors a portion of a certain trajectory or a cluster of them (Van der Auwera and Gast 2011: 186-188, 281 as well as Andrason 2010a: 22 and 2011a: 69-73; 2011c: 30-31).

### 2.3. Study strategy

In accordance with the theoretical principles outlined above, our task, which should consist in describing the meaning of the BANTA gram, may be reformulated in the following manner. In order to account for the entire polysemy of the construction and design the model of its semantic network, we must first identify all the components of such a grid. Consequently, we will decompose the meaning of the gram into more basis or atomic senses that belong to typologically common or universal domains of verbal semantics: taxis, aspect, tense and mood. The choice of these categories is not arbitrary or subjective. Quite the opposite, it is substantiated by three solid methodological pillars. First, our categories are frequently used in grammatical descriptions of African (Nurse 2008), Semitic (Waltke and O'Connor 1990) or Indo-European languages (Hewson \& Bubenik 1994 and Dahl 2000b), as well as in studies devoted to general linguistics (cf. Bybee, Perkins and Pagliuca 1994; Haspelmath et al. 2001). Second, in certain languages, the labels, employed in this paper to determine more specific values of the BANTA gram (e.g. resultative proper, inclusive perfect, experiential perfect, evidential perfect, etc.), are grammaticalized as independent categories - they are typologically realistic objects. And third, such atomic categories have a "practical benefit," permitting lin-
guists to determine an exact range of correspondence between grams whose meaning, although similar, is not identical. For instance, the existence of the category of an inclusive perfect and hodiernal (and, in certain case, hesternal) definite past enables us to establish a precise semantic difference between the English and Spanish present perfects (Bybee, Perkins and Pagliuca 1994: 98) - the English form is not normally used in the function of a hodiernal-hesternal past while the Spanish gram fails to provide the value of an inclusive perfect. Their remaining perfect uses (resultative, experiential, iterative and indefinite) are equivalent.

Once we provide a complete inventory of more specific atomic senses, the composition of the network will be feasible. Since we lack any direct diachronic evidence that could suggest the structure of the network and thus the chaining of its components, typological laws must be employed. This signifies that we will define the meaning of the BANTA form as a network of connected atomic values - accounting in that manner for the gram's entire polysemy - by employing a number of universal paths as a binding mechanism, both conceptual and diachronic. To be explicit: we will arrange the senses displayed by the BANTA locution so that they match a given typologically plausible evolutionary scenario.

It must be observed that our technique of decomposition of the total meaning into atomic senses also stands in harmony with the cognitive and grammaticalization understanding of polysemy whereby the overall meaning of a gram constitutes a context induced phenomenon (see above in this section; cf. likewise Dahl 2000a: 6-7, 14; Croft \& Cruse 2004: 258; Evans and Green 2006: 352-353, 368; and Nikiforidou 2009: 16-17). Namely, to demonstrate that the BANTA form provides a given value, we will construct a context where the sense in question is activated. Thus, when we state that the construction functions as a perfect, past, evidential or modal category we mean that it is compatible with an environment where such nuances are made evident and palpable. Consequently, in our categorizations, the labels such as 'present perfect', 'past perfect', 'evidential perfect' etc. make reference to semantic domains. Inversely, they do not imply that the formation is an invariant present perfect, past perfect, or evidential perfect grammatical category.

## 3. Evidence

### 3.1. Understanding the form - the value of the components

Before tackling the issue of the semantics of the BANTA construction, let us explain the value of the components of this formation. First, we will describe the meaning conveyed by the TA gram (3.1.1). Next, all taxis-aspectual-temporal senses of the verb bay in the TA form will be discussed (3.1.2). Finally, the value of the predicate bay used in another periphrastic locution will be briefly explained (3.1.3). All of this will help us to understand the semantic potential displayed by the BANTA gram (see section 3.2) and, especially, the chaining of its atomic senses that will be posited in part 4.

### 3.1.1. TA form

The TA gram - the verbal form in which the predicate $b a y$ is employed when it appears in the BANTA periphrasis - is a semantically complex construction. It commonly functions as a prototypical present perfect, providing all of its more specific vales, e.g. resultative, inclusive, iterative, experiential or indefinite ${ }^{9}$ (cf. Andrason 2011d).
(2) a. A funtita le he go.out-TA EMPH ${ }^{10}$
'He has left (i.e. he is not here)'

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b. $M$ baamaa faata kabiriy 2003
my mother be.dead-TA since 2003
'He has been dead since 2003'
c. $N$ ketuta siiñaa jamaa bii

I faint-TA time many today
'I have fainted many times today'
d. Ite nene taata Birikama?
you ever go-TA Brikama?
'Have you ever gone (been) to Brikama? (i.e. you may have come back)'
Haa, $\quad n$ taata jee
Yes, I go-TA there
'Yes, I have gone (been) to Brikama (i.e. I may have returned)'
Still with the value of anteriority, the TA formation may be used as a pluperfect and - although exclusively in a certain type of subordinated clauses - as a future perfect:
(3) a. Da kuwolu je mennu keta
I.did things see which happen-TA
'I saw the things that had happened'
b. $N$ te a domo la kotenko, foniy $n$ terimaa naata I benot it eat to again unless my friend come-TA 'I will not eat again unless my friend has come'

With a great frequency, the gram is employed as a definite past tense (of any distance from the enunciator's here-and-now), either perfective or simple, viz. aspectually unmarked. In the latter usage, the formation can introduce durative situations (4.b):
(4) a. A faama faata kari saba kooma his father die-TA month three ago 'His father died three months ago'
b. Kurayo naata kunuy suutoo bee electricity come-TA yesterday night all
'Yesterday the electricity was on the whole night' (from Andrason 2011d)
Verbs that constitute intransitive equivalents of active transitive predicates - thus,
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their passive homologues - may offer a resultative proper reading ${ }^{11}$ in the TA formation:
(5) A katita saayip
it be.broken now (cf. a kati 'to breake something')
'It is broken now'
Finally, static and adjectival roots are usually employed in the TA construction with the force of a present resultative-stative, present - actual or persistent - stative and simple present tense (cf. 6.a-d). ${ }^{12}$ Similarly to what we have observed with prototypically dynamic verbs, these three senses may be detected not only within a present time frame, but also in past ${ }^{13}$ and - again only in subordinated clauses - future temporal spheres (cf. 6.e-g; for a detailed discussion of the TA gram, see Andrason 2011d).

## a. $M$ bataata

I be.tired-TA
'I am tired (I have gotten tired and now I am tired)'
b. Bii, a kuuranta le
today he be.sick-TA EMPH
'He is sick today'
c. $A$ ñaamenta
he be.wise-TA
'He is wise (wisdom is his permanent quality)'
d. $N$ lafita taa la Komboo

I want-TA go to Komboo
'I want to go to Komboo'
e. Kипиу a saasaata
yesterday he be.sick-TA
'He was sick yesterday’

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f. Ì kuuranta fo luy tan
they be.sick-TA until day ten
'They were sick during ten days'
g. Mansa lafita i faa la
king want-TA them kill to
'The king wanted to kill them'

### 3.1.2. Verb BAD in the TA form

The primordial component of the BANTA locution is the verb bay that when used as a non-auxiliary main verb conveys the idea of being finished or ending. In cases where it stands in the TA "tense", it provides - as expected - resultative proper ('it is finished'; 7.a-b), present perfect (has been finished; 7.c-e) and past senses (got finished/ran out of; 7.f-g):

[^6]It is also possible to employ the predicate bay in the TA form with the force of a pluperfect (had been finished) or a resultative past (was finished; cf. 8.a) and - exclusively in determined subordinated clauses - as a future perfect (will have been finished; cf. 8.b):
(8) a. Kabiriy $n$ naata jee kinoo banta nuŋ when I came there food be.finished-TA then 'When I came, the food had been finished / was finished'
b. Ì te a domo la fonig mbanta
you be.not it eat to unless I be.finished-TA
'You will not eat unless I have finished / I am finished ${ }^{14}$

### 3.1.3. BANTA + verbal noun $+l a$

The predicate bay 'be finished, end' may also appear in a periphrasis with a verbal noun, derived from another verb and introduced by the postposition $l a$ 'to, at'. This locution - schematized as $b a y+$ verbal noun $+l a-$ indicates that the subject is finished with doing something. When the predicate bay, itself, is employed in the TA formation, the taxis, aspectual and temporal values of this entire analytic locution stand in perfect harmony with the senses provided by the TA gram and the banta form that have been discussed in sections 3.1.1 and 3.1.2 above. This means that the construction expresses resultative proper (9.a), present perfect (9.b), past (9.c) and pluperfect (9.d) nuances. ${ }^{15}$ It should, however, be noted that the resultative value is the one that is probably most commonly encountered.
a. $M$ banta domoroo la!

I be.finished-TA eating with
'I am done with eating!'
b. $M$ banta tabiroo la kabiriy talay saba I be.finished-TA cooking with since hour three 'I have been finished with cooking since three o'clock'
c. A banta safeeroola talay seyi he be.finished-TA writing hour seven

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'He finished writing at seven o'clock'
d. Kunuy kabiriy mbanta diyaamoo la, a ko $n$ ye ko yesterday when I be.finished-TA talking at, he said me to saying 'Yesterday, when I had finished talking, he said to me:...'

### 3.2. The meaning of the BANTA formation

Generally speaking, the BANTA locution introduces assumptions, speculations or suppositions in respect to present and past activities or states of affairs. Within this broad modal domain, it is possible to distinguish three main sub-groups of senses: evidential, inferential and epistemic. ${ }^{16}$

### 3.2.1. Evidential

The BANTA gram may be used with an evidential force, approximating the category of a "guessing" gram. In this function, the speaker deduces from available physical and tangible facts that a given action, personally non-witnessed, must have occurred or that a present situation is occurring. This means that although the enunciator has, himself, not witnessed a particular activity or state, he assumes that it has taken place or currently takes place because certain results, still palpable, suggest it.

In respect to the domains of taxis and time, the evidential value may concern a previous activity whose effects are still currently relevant - it is thus an evidential variant of the TA form in the function of a present perfect.
(10)a. A banta taa suwo kono
he finish-TA taa house in
'He must have gone home / I guess they have gone (I guess they are not

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here)'
b. A bantabo saayin
he finish-TA leave now
'He must have left now / I guess he has left (I guess he is not here)'

## c. Ì bantanaa jay

they finish-TA come here
'They must have come here / I guess they have come (I guess they are here)'
However, as already mentioned, the evidential sense may likewise refer to a present situation, portrayed either as a resultative-stative or as a pure stative. This typically occurs when the locution is derived from adjectival and static roots. In that manner, the BANTA gram constitutes an evidential counterpart of the stative (bot resultative and non-resultative) value of the TA formation. ${ }^{17}$
(11) a. $A$ may naa! A banta saasaa
he has.not come he be.finished-TA be.sick
'He has not come. He must be sick / I guess he is sick'
b. A may naa! A banta bataa he has.not come he be.finished-TA be.tired 'He has not come. He must be sick / I guess he is tired'
Closely related to the resultative-stative usage are instances where the BANTA gram displays an evidential resultative proper sense. In this case, however, the predicate used in the BANTA expression, instead of being static or adjectival, tends to constitute a passive counterpart of an active dynamic verb (cf. soo 'be punctured' vs. a soo 'to puncture something'):
(12) Ponosimo be feeteeriy. A banta soo tire is flat it be.finished-TA be.punctured
'The tire is flat. It must be punctured / I guess it is punctured '
Probably less common are examples where the BANTA gram is employed in an evidential manner, referring to overtly past events (either perfective or simple) or past situations (both stative and imperfective):
(13)a. A fele! $A$ be bataariy bii
him look.at he is be.tired-PART today

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'Here is he! He is tired today.'
A banta duloo min kunuŋ
he be.finished-TA alcohol drink yesterday
'He must have drunk [alcohol] yesterday / I guess he got drunk yesterday'
b. Kипиŋ a may naa. A banta kuuray yesterday he did.not come he be.finished-TA be.sick 'He did not come yesterday. He must have been sick / I guess he was sick'

Even less frequent are uses where the deduction refers to an event that preceded another past action, corresponding to a pluperfect sense of the TA gram:
(14) Kипиŋ soomandaa $n$ taata Laamini yaa.
yesterday morning I went Lamin to
'Yesterday morning I went to see Lamin'
A te suwo kono. A la motoo te jee fanay he be.not house in he of car be.not there also 'He was not at home. His car was not there either.'

A banta taa nuy marisewo to
'He must have gone to the market / I guessed he had gone to the market'

### 3.2.2. Inferential

Sometimes, an inferred prior action or current state is not derived from perceptible or tangible phenomena but is rather deduced from general assumptions, obvious for the speaker and evident in his cognitive world. In such a usage, the locution approximates the category of an inferential gram.

Yet again, as far as the taxis and temporal properties are involved, when formed with dynamic verbs, the construction refers to present perfect events or to resultative proper activities (15.a). In the case of non-dynamic predicates, the inference concerns resultative-stative (15.b) or stative present situations (15.c). In the former cases, the BANTA locution constitutes an inferential variant of the present perfect and resultative proper TA gram while in the later it may be understood as an inferential equivalent of the resultative-stative and stative TA form:
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(15) a. A la dimmusoo banta futuu
he of daughter finish-TA get.married 'His daughter must have gotten married / I suppose, she has been married (and she is still married)'
b. A keebaayaata bake sanji tay kooma
she be.old-TA very.much year ten ago
'She was old ten years ago'
Saayij a banta faa
now she be.finished-TA be.dead
'She must be dead now / I suppose she is dead now'
c. Angaliteeri mansakunda banta kummaayaa bake

England government finish-TA be.important much
'The English government must be very important / I suppose, it is important'

Such generally inferred events or situations may also concern overtly past events as well as, although very infrequently, activities that occurred before other past actions. In these uses, the BANTA formation is an inferential homologue of the past (both perfective/simple and stative/imperfective varieties) and pluperfect TA gram, respectively.
(16) Laamini anin Maaliki be keloo ke la kunuŋ Lamin and Malik be fighting do to yesterday 'Lamin and Malik were going to fight yesterday'

Doo fuloolu banta faa nup
another the.two be.finished-TA be.dead then
'One of them must have been killed / I suppose one of them got killed then [i.e. yesterday]'

### 3.2.3. Epistemic

Although evidential and inferential uses are possible, most commonly however, any connotation of the speaker's deductive cognitive processes - whether based upon physical facts or general knowledge - is absent or, at least, irrelevant. In such instances, the construction expresses the sole idea of probability or likelihood, corresponding to epistemic periphrases with the verb may or might in the English language or to locutions with the adverb probably.

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This epistemic value may again concern previously accomplished activities that nevertheless belong to the present cognitive sphere of the enunciator. In this usage, the locution behaves as an epistemic counterpart of the TA gram when it is employed with the sense of a present perfect.
(17)a. Maalik banta taa Basse

Malik finish-TA go Basse
'Malik may have gone to Basse / Malik has probably gone to Basse (i.e. he is probably there)'
b. Laamini banta dalasi 10,000 gañee

Lamin be.finished-TA dalasi 10,000 win
'Lamin may have won 10,000 dalasi (i.e. he is probably rich now)'
However, with an equal frequency, a given hypothetical situation refers a definite past event (simple or perfective; 18.a and 19.a) or situation (either stative or imperfective; cf. $18 . \mathrm{b}$ and 19.b-c) with no direct link to the enunciator's here-and-now. In this usage, the gram constitutes a modal (epistemic) variant of the definite past TA form.
(18) a. A banta motoo say kunuy
he finish-TA car buy yesterday
'He might have bought the car yesterday / he probably bought the car yesterday (but he may have sold it back)'
b. Dindiyolu banta kuuray kabiriy a taata Banjulu children finish-TA be.ill when he went Banjul
'The children might have been ill when he went to Banjul / the children were probably ill when he went to Banjul (but they may have recovered),

This past epistemic value may be indicated overtly by means of the particle nuŋ 'then':
(19)a. A banta naa Basse nuŋ he finish-TA come Basse then
'He might have come to Basse / He probably came to Basse'
b. Dindiyolu banta saasaa nuy children finish-TA be.sick then 'The children might have been sick / they were probably sick'
c. A banta lafi motoo saŋ nuŋ he be.finished-TA want car buy then
'He might have wanted to buy a car / He probably wanted to buy a car'
Nevertheless, with an equal regularity, the formation expresses probability of present conditions and activities. Thus, it functions as an epistemic homologue of the TA gram when it is employed as a resultative proper (typically for dynamic verbs; 20.a) or when it approximates a resultative-stative (20.b), stative present (20.c-d) and simple present tense (20.e; in all such cases, non-dynamic predicates are usually employed):
(20) a. A banta tiñáa
it be.finished-TA be.destroyed
'It may be destroyed / It is probably destroyed'
b. İtolu banta bataariy saayiy
they finish-TA be.tired now
'They may be tired / they are (have gotten) probably tired now'

## banta kuuray

Lamin finish-TA be.sick
'Lamin may be sick / Lamin is probably sick'
d. - Maaliki lee?

Malik where.is?
'Where is Malik?'

- A banta siinoo suwo kono

He be.finished-TA sleep house in
'He may be sleeping at home / he is probably sleeping at home'
e. $A$ banta a loy
he be.finished-TA it know
'He may know it / he probably knows it'
Finally, the idea of probability may also refer to a past event or situation that precedes another past activity, thus corresponding to the TA in its pluperfect usage:
(21) A maŋ naa kunuŋ he did.not come yesterday
'He did not come yesterday
kaatuy a banta taa Tubaabuduu
because he be.finished-TA go Europe
'because he had probably gone to Europe'

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It shall be observed that non-evidential, non-inferential and non-epistemic readings are impossible in cases where the BANTA gram is employed. The locution may not be understood as a present, perfect or past category that displays certain modal extensions - as stated above, there are no non-modal uses of the BANTA gram.

## 4. Explaining the BANTA gram's polysemy

The evidence provided in the previous part of the article indicates that the BANTA gram makes use of two semantic spaces. On the one hand, as far as the modal component is concerned, it offers deductive and speculative meanings functioning as an evidential and inferential gram. Even more commonly, it expresses general suppositions, conveying the idea of probability or likelihood. In that function, it indicates that a fact might have occurred or may currently take place. On the other hand, in respect to the taxis, aspectual and temporal sphere, the locution covers domains of a present perfect, past perfect, definite past, resultative proper, present resultativestative, present stative and simple present, as well as stative and imperfective past. The stative (present and past) and imperfective (past) senses are normally encountered if non-dynamic verbs are employed in the BANTA gram (cf. kuuray 'be sick', saasaa 'be sick', lafi 'want' or a loy 'know'). Our data demonstrate that the taxis, aspectual and temporal meanings conveyed by the BANTA construction are entirely analogous to the semantic properties offered by the TA form (cf. section 3.1.1 as well as Andrason 2011d). Given that - and bearing in mind the modal properties of the BATAN locution -, we may affirm that the BANTA gram constitutes a regular evidential, referential and especially epistemic variant of the TA formation.

It must be emphasized that the two sets of values are always mixed. This means that in a given empirical case, a concrete sense of the BANTA locution uses two elements: one belongs to the modal group of values while the other is a part of the "perfect-past-present" class. What type of chaining can account for such a profound semantic diversity? Are there typologically plausible paths that can connect the components of the meaning of the BANTA gram? The answer is positive: one may identify three diachronic trajectories that successfully unite the entire polysemy of the BANTA locution. Two of them - i.e. the anterior and simultaneous clines - belong to the so-called resultative path, an evolutionary scenario that governs the grammatical life of resultative inputs and their conversion into past and present tenses, respectively. The third trajectory - viz. the evidential path - codifies a developmental process during which originally resultative constructions acquire certain non-firsthand values and modal extensions. Let us explain the three paths in detail, presenting their principal formative segments. In that manner, the corre-
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spondence between the components of the semantic potential of the BANTA form and the two trajectories - and, thus, the relation between synchronic senses and diachronic stages - will be patent.

### 4.1. Resultative path and evidential path

### 4.1.1. Resultative path: anterior and simultaneous clines

The resultative path is a complex evolutionary scenario that describes the grammatical life of originally resultative proper constructions. In particular, it specifies the order in which resultative inputs acquire taxis, aspectual and temporal senses, thus offering a model of their gradual development into new grammatical categories. The path consists, itself, of two major clines: anterior and simultaneous tracks.

The anterior path establishes that present resultative proper grams quite regularly evolve into simple past tenses, passing through the phases of a present perfect and, in certain cases, perfective past (Nedjalkov and Jaxontov 1888: 3-63; Bybee, Perkins and Pagliuca 1994; Dahl 2000b; Nedjalkov 2001: 928-940; Andrason 2010b: 325-345, 2011a: 35-38, and 2011c: 11-13). First, resultative inputs develop into present perfects, successively acquiring the following perfect values: inclusive, resultative, iterative, experiential and indefinite. Subsequently, such originally resultative proper formations become acceptable in explicit past contexts - they develop properties of definite past tenses. Once admissible in an overt past environment, grams usually escalate their temporal separation or detachment from the enunciator's here-and-now, acquiring more and more distant past values: immediate, hodiernal, hesternal, recent, general and remote. In a number of tongues, during the transformation of a present perfect into a definite past tense, it is possible to observe a lateral change - and hence posit a distinct historical stage - where an upcoming definite past is aspectually marked as a perfective. Subsequently, perfective pasts typically transmute into simple past tenses (for detail, see Bybee, Perkins and Pagliuca 1994: 55-57, 98, 104-105; Squartini and Bertinetto 2000: 406-407, 414417 and 422; Dahl 2000a: 15; Heine and Kuteva 2007: 151; and Andrason 2011c: 13-15).

The simultaneous ${ }^{18}$ path portrays a gradual development of resultative inputs into present tenses. First, resultative proper constructions, when formed from adjectival roots or static verbs and employed in a present time frame, give rise to

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resultative-stative uses stressing a resulting static condition that is concurrent with the main reference time, the present. At this stage, the idea of an anterior event that has led to such a present situation is still available although significantly less evident and relevant that in the case of a resultative proper and especially present perfect (cf. footnotes 10 and 12, above). Next, resultative-statives acquire a pure stative sense. Any connection between the achieved state and the activity from which it has emerged is abandoned. This means that the formation denotes the idea of a non-dynamic condition with no traces of a resultative nuance. Finally, statives may be generalized as simple presents, indicating not only states but also more dynamic activities and even processes ${ }^{19}$ (cf. Maslov 1988: 70-71; Bybee, Perkins and Pagliuca 1994: 74-78; Drinka 1998: 120; Andrason 2011a: 282-283, 305-307 and 2011c: 42).

Both anterior and simultaneous clines may develop in a past time frame, giving rise to values that are equivalent to the previously mentioned ones with the distinction that, this time, their temporal setting is a past. Thus, the anterior trajectory in the past generates a past perfect (viz. pluperfect; later also remote past, cf. Bybee, Perkins and Pagliuca 1994: 102) while the simultaneous track triggers resultativestative past, stative past and imperfective past values or categories (the imperfective past is a past equivalent of a broad simple present; for detail, see Bybee, Perkins and Pagliuca 1994: 80, 102; Andrason 2010b and 2011c).

### 4.1.2. Evidential path

The evidential path shows how certain resultative proper constructions develop non-firsthand values, turning into modal categories. At the beginning, resultative proper grams indicate actual effects of previously performed actions (Comrie 1976; Johanson 2000). This initial meaning gradually develops into an indirect sense. The available results and human deductive capacity permit the enunciator to suppose that a previous action must have happened although he has himself not witnessed it (evidential). ${ }^{20}$ Subsequently, the inference may also be founded on general

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knowledge, widespread assumptions and hearsays (inferential). ${ }^{21}$ Afterwards, the construction acquires reportative senses, functioning as a referential gram. Finally, it may introduce a broad range of non-firsthand meanings (Aikhenvald 2004: 112-$117,279-281) .{ }^{22}$ Consequently, the emergence and generalization of modal extensions for originally resultative proper grams can be structured and represented as a cline of the following consecutive stages: direct witness (resultative proper) $>$ inference based upon direct physical fact (evidential) $>$ inference based upon general knowledge, assumptions and hearsays (inferential) > reported events (referential). At later phases, when the original resultative construction expresses a broad range of non-firsthand senses, the gram may develop certain epistemic extensions and acquire the function of a non-indicative mood of probability and doubt (conditional, dubitative, epistemic modality; Bybee, Perkins and Pagliuca 1994: 95-97; Aikhenvald 2004: 116, 147). It shall be noted that according to Bybee, Perkins and Pagliuca (1994: 97), evidential-inferential-referential categories are generated from resultatives that originate in stative verbal sources. Inversely, resultatives derived from dynamic verbal sources are less propitious to develop modal extensions (on the evidential path, see Bybee, Perkins and Pagliuca 1994: 95-97; Aikhenvald 2004: 112-177, 147, 279-281).

### 4.2. The model of the meaning of the BANTA gram - networked and chained

It is evident that the BANTA gram may be understood as an originally resultative formation. First, its structure - a periphrasis built on the verb bay 'be finished'corresponds to a typologically common mechanism of deriving broadly understood resultative formations and perfects (cf. Bybee, Perkins \& Pagliuca 1994: 54-67). Second, the BANTA form is based upon the TA gram - a formation that, itself, most probably originated as a resultative proper locution (cf. Andrason 2011d and 2012b). Third, the BANTA construction - as well as the verbal TA form - still provides a resultative proper value and, closely related to it, senses of resultativestative and perfect. And four, a highly similar formation that employs the verbal noun instead of the verb's bare stem, regularly conveys various shades of resultative (either dynamic or stative) meaning (see, section 3.1.3).

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This resultative sense most likely constitutes the starting point of remaining values - it is thus a central component or core unit in our network. From it, other meanings and extensions have arisen in accordance with human general cognitive aptitudes and following the evolutionary scenarios that govern the grammatical life of resultative proper inputs.

The exact range of atomic taxis-aspect-time senses displayed by the BANTA construction confirms our supposition that we are dealing with an initially resultative formation. Namely, various taxis, aspectual and temporal values offered by the BANTA gram match stages of the two major evolutionary schemas established for resultative inputs, viz. anterior and simultaneous paths. The semantic components such as a present perfect, perfective past and simple past correspond to consecutive phases of the anterior cline. The values of a resultative-stative present, stative present and simple present harmonize with the simultaneous cline. Other senses mirror segments of the two clines in cases where the two developmental scenarios occurred with an originally past time reference. Thus, the senses of a resultative-stative past, stative past and imperfective past reflect stages of the simultaneous cline in the past temporal sphere while the value of a dynamic pluperfect matches a stage of the anterior cline, again, situated in a past time context.

Furthermore, values belonging to the modal set - evidential, inferential and epistemic modality - may be ordered so that they concord with another developmental principle that affects original resultative proper grams, viz. the evidential path. In that manner, a resultative proper sense triggers an evidential value that, in turn, generates inferential nuances. At the end, the "deductive" or non-firsthand mood gives rise to epistemic extensions. Consequently, the evidential cline can be treated as a conceptual connector of modal senses displayed by the BANTA locution, imposing their order and supposed historical relation.

The entire network of senses with its conceptual-diachronic chaining may be schematically represented by the geometrical - certainly simplified - grid in Fig. 1 below.

The present and past perfect (pluperfect) spheres-stages may additionally be divided into more specific phases: inclusive, resultative, iterative, experiential and indefinite. Similarly, the past domain may be split into more fragmentary conceptual and diachronic "boxes": immediate, hodiernal, hesternal, recent, general and remote. Each one of these more specific senses would then interact with the three modal domains-stages: evidentiality, inferentiality and epistemic modality. In our schematic representation, such an atomization of values is avoided in order to make
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the model neat and transparent.


Figure 1. The meaning of the BANTA gram - network of senses. ${ }^{23}$

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## 5. Conclusion

The present study has provided a detailed description of the semantic potential displayed by the BANTA gram. The evidence demonstrates that the locution may not be equaled with an invariant epistemic past (cf. WEC 1995) - quite the contrary, it offers a significantly wider range of uses that regularly employ two semantic domains. One includes taxis-aspectual-temporal senses: present perfect, perfective past, simple past, pluperfect, resultative-stative present and past, stative present and past, simple present and imperfective past (values that match the semantic potential displayed by the TA form). The other consists of the following modal nuances: evidential, inferential and epistemic (probability or likelihood). In all concrete instances, the BANTA form combines one atomic semantic component of the former group with one atomic element of the latter class.

Additionally, we have proved that all these senses - active in concrete realizations of the BANTA construction - may be networked and chained by employing three typologically plausible evolutionary scenarios (anterior, simultaneous and evidential clines), characteristic for resultative formations, such as the BANTA gram, itself. Under this view, the gram's entire polysemy is represented as a grid of connected values. This connection - both conceptual and diachronic - is granted by the correspondence between the values offered by the BANTA locution and stages of the three developmental processes. More specifically, non-modal values correspond to stages on the resultative path, either on the anterior (present perfect, perfective past, simple past and pluperfect) or simultaneous sub-cline (resultative-stative present and past, stative present and past, simple present and imperfective past). Also the resultative proper sense belongs to this set of values. Modal senses (evidential, inferential and epistemic), on the other hand, mirror the evidential track.

Finally, our study may also have certain important typological implications. First, the BANTA gram does not provide any palpable referential value. The conceptual and hence diachronic extension directly leads from an inferential phase to an epistemic stage. Consequently, it seems as if the segment responsible for the referential sense could be omitted within the sequence of phases of the evidential trajectory. Second, evidential-inferential-epistemic nuances are available for all the senses along the anterior and simultaneous clines. Namely, the three modal values may be linked to resultative proper, present perfect, perfective past and simple past values (senses that cover the entire anterior cline) and to resultative-stative present, stative present and simple present values (senses that span the entire simultaneous cline). In other words, modal values are not restricted to present perfect uses. And third, the BANTA gram demonstrates that - contrary to Bybee, Perkins and

Pagliuca's (1994: 97) opinion - evidential-inferential-epistemic nuances may develop from resultatives or perfects that originate in non-stative verbal sources (stative verbal sources are predicates that express the idea of being, remaining, keeping having etc.). In our case, however, modal extensions have their roots in a formation that employs a dynamic root 'finish', although used intransitively or passively.

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## SEMANTIČKA MREŽA KONSTRUKCIJE BANTA U VARIJANTI GAMBIJSKOG JEZIKA Mandinka s POdručJa Basse

Ovaj rad predstavlja kognitivnolingvistički opis i objašnjenje semantičkog potencijala konstrukcije BANTA u regionalnoj varijanti jezika Madinka s područja Basse (konstrukcija predstavlja glagolski gram koji se sastoji od pomoćnog glagola banta - nastalog iz glagola bay 'završiti', u odgovarajućem vremensko-vidskom obliku - i osnove leksičkog glagola). Dokazi upućuju na širok raspon upotreba ove konstrukcije, koje se oslanjaju na dvije semantičke domene. Jedna od njih uključuje vrijednosti u dimenzijama relativno vrijeme-vid-vrijeme, kao na primjer prava rezultativnost, složeno sadašnje vrijeme, svršeno prošlo vrijeme, jednostavno prošlo vrijeme, pluskvamperfekt, rezultativno-stativno sadašnje i prošlo vrijeme, stativno sadašnje i prošlo vrijeme, jednostavno sadašnje vrijeme i nesvršeno prošlo vrijeme. Druga se semantička domena sastoji od sljedećih elemenata modalnosti: evidencijalnost, inferencijalnost i epistemičnost. U svim konkretnim primjerima konstrukcija BANTA objedinjuje po jednu semantičku komponentu iz svake skupine. Nadalje, autor pokazuje da se svi navedeni smislovi mogu objediniti u semantičku mrežu i povezati u semantički niz primjenom tipološki vjerodostojnih evolucijskih scenarija tipičnih za rezultativne konstrukcije - kao što je sama konstrukcija BANTA. S obzirom na to, značenje ovog grama (tj. njegova cjelokupna polisemna struktura) prikazano je kao mreža međusobno povezanih vrijednosti. Ta veza, koja je dijakronijska i konceptualna, predstavlja podudarnosti između vrijednosti konstrukcije BANTA i stadija triju razvojnih procesa, pri čemu nemodalne vrijednosti odgovaraju fazama na razvojnom putu rezultativnosti, bilo anteriornog ili simultanog tipa, dok modalni smislovi odražavaju razvojni put evidencijalnosti.
Ključne riječi: varijanta jezika Mandinka s područja Basse; konstrukcija; rezultativnost; evidencijalnost; gramatikalizacija.


[^0]:    ${ }^{1}$ As far as the genetic classification of Mandinka is concerned, this language is the westernmost variety of Manding. Manding, itself, corresponds to a cluster of relatively mutually intelligible dialects or regional varieties such as - beside Mandinka - Bambara (employed in Mali) and Malinké (spoken in Guinea (Wilson 2000: 109). Manding, in turn, is classified as a member of the western branch of the Mandé family, a sub-group of the Niger-Congo realm (Kastenholz 1996: 281, Vydrine, Bergman and Benjamin 2000; and Williamson and Blench 2000). A complete genetic relation of Mandinka to the Manding, Mandé and Niger-Congo languages may be summarized in the following manner: Mandinka < ("belongs to" or "is a member of") Manding-West < Manding < Manding-Mokole < Manding-Vai < Manding-Jogo < Central < Central-Southwestern < Western < Mande $<$ Niger-Congo (Lewis 2009).

[^1]:    ${ }^{2}$ It should however be noted that a relative number of distinctive traits does not necessarily signify that BM could, in fact, be viewed as a genuine dialect. Quite the reverse, GM and BM are profoundly similar and Mandinka native speakers in the Upper River Division - certainly conscious of their grammatical idiosyncrasy - never regard their own idiom as systemically distinct from the normalized GM language (although, they do refer to GM as "Komboo Mandinka" saying: so speak people in Komboo).
    ${ }^{3}$ This empirical study is a result of an extensive research project, carried out by the author in Gambia in 2010-2011 and dedicated to the documentation of the Basse Mandinka language. More than 5,000 sentences - composed and uttered by native speakers have been recorded, classified and carefully studied. Afterwards, this massive database has been employed as a first-hand source for the work on the Basse Mandinka Grammar (cf. Andrason forthcoming a).

[^2]:    ${ }^{4}$ In should be observed that the verb bay 'be finished, end' is an intransitive counterpart of the verb a bay 'finish something'. In Mandinka, transitive (active) constructions must include an overt direct object (an object that precedes the verbal stem), while the lack of the direct object indicates an intransitive reading, cf. a tiñaa 'spoil something' vs. tiñaa 'be spoiled'. In our glosses, the form banta is treated as being derived from the intransitive verb bay.
    ${ }^{5}$ On the TA form, see section 3.1.1 below.
    ${ }^{6}$ All relevant verbal forms will be given in bold type. Given that this study is dealing with a variety of Gambian Mandinka, the author employs the official spelling convention as outlined in A Practical Orthography of Gambian Mandinka (1988). This standardized orthography - with two exceptions (pronouns $\grave{n}(\grave{m})$ 'I, me, my' and $\grave{i}$ 'they, them, their') - fails to indicate tone. Since 1988, the "tone-free" spelling has extensively been employed in grammars (e.g. Lück and Henderson 1993; WEC 2002; and Coley 1995; cf. also Gamble 1987), dictionaries (e.g. WEC 1988b and 1995), scientific articles (e.g. Wilson 2000) and literary texts (e.g. WEC 1989, 1991 and 1998), as well as in schools and governmental agencies in Gambian. It is also almost invariably used in digital media and online publications.
    ${ }^{7}$ The term 'gram' will be used as a synonym of 'grammatical form(ation)', 'grammatical construction', 'grammatical locution', etc.

[^3]:    ${ }^{8}$ Due to its general and methodological character, this section, in which the framework of reference is presented, - without being literally reproduced - may be similar to theoretical parts in other articles published by the author.

[^4]:    ${ }^{9}$ The resultative perfect emphasizes the value related to an anterior event and, hence, offers a more dynamic sense if compared with a resultative proper gram (cf. footnote 12). The static sense of a resultant state is weakened and the formation stresses the current relevance of a prior activity (McCawley 1971; Jónsson 1992: 129-145; and Squartini and Bertinetto 2000: 407; Mitkovska and Bužarovska 2008: 132). The inclusive anterior denotes activities that continue without an interruption from a determined moment in the past to the present time, e.g., I have known Max since 1960 or I have known him for 10 years (cf. Jónsson 1992: 129-145). The iterative perfect usually indicates that a given resultative event has been occurring repeatedly (see, for instance, the Portuguese perfect Ultimamente o João tem lido muitos romances ‘Recently John has read many novels’ (Squartini and Bertinetto 2000: 409).The experiential perfect suggests that the subject has the experience of having performed a given action at least once within a timeframe that includes the present moment (Nurse 2008: 154; and Mitkovska \& Bužarovska 2008: 132). The indefinite perfect (labeled also 'an indefinite past') indicates clearly past events, without however specifying their temporal location. Thus, as for the former property, the gram approximates a past tense. However, given the latter characteristic, the formation behaves as a typical present perfect.
    ${ }^{10}$ The lexeme $l e$ is an emphatic particle which will be glossed hereafter as EMPH.

[^5]:    ${ }^{11}$ Resultative proper grams are formations whose meaning consists of two equally relevant components: one indicates the currently attested state of an object or person and the other makes reference to an action, formerly accomplished, from which this on-going state develops. In such expressions, neither the prior dynamic event nor the posterior static result is emphasized - both semantic elements are indissoluble and interconnected.
    ${ }^{12}$ In the resultative-stative function, the main emphasis is put on the resulting state while the prior action is only merely suggested. The stative sense implies that resultative undertones are unavailable and the only patent value is a static quality or situation.
    ${ }^{13}$ The equivalent of a simple present sense in a past temporal frame is the imperfective past.

[^6]:    (7) a. A banta le!
    it be.finished-TA EMPH
    'It is finished'
    b. Kinoo banta ferey saayin
    food be.finish-TA completely now
    'Now, the food is completely finished'
    c. $\begin{aligned} & \text { Sigareetoolu } \\ & \text { cigarettes }\end{aligned} \begin{aligned} & \text { banta } \\ & \text { be.finish-TA }\end{aligned} m$ bulu siiñaa fula bii
    'I have run out of cigarettes twice today!'
    d. Dookuwo banta kabiriy kunuŋ work be.finished-TA since yesterday 'The work has been finished since yesterday'
    $\begin{array}{llll}\text { e. } A & \text { banta siiña saaba bii } \\ \text { it } & \text { be.finish-TA time } & \text { three today }\end{array}$ 'It has been finished three times today'
    f. Sigareetoolu banta $m$ bulu kunuŋ cigarettes be.finish-TA me at yesterday 'I ran out of cigarettes yesterday'
    g. Soojaaroolu banta mansa Aruturu bulu soldiers be.finish-TA king Arthur at 'King Arthur ran out of soldiers'

[^7]:    ${ }^{14}$ The English language employs here a present perfect form although the expressed action makes reference to future event that precedes another future action. It is thus a typical future perfect sense and context.
    ${ }^{15}$ It is likewise possible to construct a context where the expression conveys past stative and - very infrequently - future perfect values.

[^8]:    ${ }^{16}$ Even though evidentiality is sometimes regarded as a distinct category, it will be treated as a subset of modality. The relation between modality and evidentiality has widely been recognized: evidentials quite frequently give rise to various modal extensions and, inversely, various modal expressions acquire evidential readings (cf. Givón 1994; Bybee, Perkins and Pagliuca 1994; Aikhenvald 2004; and Mortelmans 2007:870-871). Furthermore, given the cognitive, grammaticalization and typological orientation of this article, the labels 'evidential', 'inferential' and 'epistemic' are preferred instead of 'inferentive', 'presumptive' and 'probabilitive', respectively, because the former and not the latter - have extensively been employed in modern cognitive, grammaticalization and typological studies (cf. Bybee, Perkins and Pagliuca 1994; Wierzbicka 1994; Floyd 1999; Dahl 2000b; Nurse 2008; Aikhenvald 2004; Haspelmath et al. 2001; Mortelmans 2007; Bybee 2010; Dixon 2010; and De Haan 2011).

[^9]:    ${ }^{17}$ An evidential simple present sense is also possible; for instance, if the verb lafi 'to want' is employed in the BANTA gram: A banta lafi a la 'He must like it'.

[^10]:    ${ }^{18}$ The term 'simultaneous' makes reference to the fact that, in respect to the original sense of resultative proper formations, the emphasis is put on the resultant state that is simultaneous (and not anterior) to the main reference time.

[^11]:    ${ }^{19}$ The most exemplary case of a resultative construction which has evolved to the peak stage of the simultaneous path is provided by Germanic preterite-present verbs (Bybee, Perkins and Pagliuca 1994: 77-78).
    ${ }^{20}$ This inferential value of resultatives and present perfects is a typologically common phenomenon. For example, it may be detected in Nordic Germanic languages. Namely, the Swedish and Icelandic perfects (descents of an earlier resultative expression) may function as an inferential guessing perfect gram (Haugen 1972; Jónsson 1992; Lindstedt 2000).

[^12]:    ${ }^{21}$ See, for instance, the Persian perfect, labelled "distanced past" (Lazard 1985).
    ${ }^{22}$ Such advanced stages of the development may be illustrated by the Turkish evidential mis-perfect (both an evidential-inferential and referential or non-first hand category, Johanson 2003) or by the Macedonian perfect in $l$ (Lindstedt 2000).

[^13]:    ${ }^{23}$ The arrows symbolize diachronic and conceptual progressions in accordance with the anterior, simultaneous and evidential paths. The dashed lines relate components of the three "sequences" of values, leading to complete meanings that may be encountered in empirical cases. These three sequences match three evolutionary scenarios: anterior cline, simultaneous cline (taxis-aspect-tense set of senses) and evidential cline (modal set of senses). Consequently, each concrete occurrence of the BANTA gram regularly makes use of two components: taxis-aspectual-temporal properties (values that mirror the anterior or simultaneous paths) and modal properties (values that mirror the evidential path). The labels 'resultative present' and 'resultative past' stand for 'resultative-stative' present and past, respectively. It shall be noted that in our model - again for the sake of simplicity and neatness of the entire scheme - we do not posit any conceptual relation between the modal set of senses and the resultative proper value. Of course, the BANTA gram may also convey resultative proper evidential, inferential and epistemic ideas (cf. section 3, above).

