

## A MORPHOLOGICAL APPROACH TO $\eta\epsilon$ “EYE”- COMPOUNDS IN BAMANANKAN

Issa Coulibaly,<sup>1</sup>

University of Languages and Humanities, Bamako, Mali

[issacoul@yahoo.fr](mailto:issacoul@yahoo.fr)

**Abstract:** This paper explores the extent to which lexical compounds are formed from the head  $\eta\epsilon$  (eye) in Bamanankan, a major language spoken in Mali. The study is guided by Vydrine’s (1999) construct of the classification of parts of speech in Bamanankan. The corpus is composed of words extracted from the electronic version of the Inkey Bambara dictionary and casual conversations. The study reveals that the majority of  $\eta\epsilon$ -compounds are characterised as nouns out of which a large part is both noun and verb. This particular finding is in line with Dumestre (2011) that there is porosity among the Bamanankan parts of speech.

**Keywords:** Bamanankan, compound, constituent, lexical meaning, parts of speech, semantics.

### 1. Introduction

A substantial body of research has been devoted to the study of body-parts expressions. Some of them focused on the structural and semantic analysis of some polysemous body-part words, including eyes, in the Russian, German, and Adug languages (Mugu, 2002, Hsieh and Kolodkina (2009). On the one hand, Yu (2004) compared Chinese and English to detail the conceptual metaphors containing eyes. On the other hand, Agyekum (2013) addresses the pragmatic use of ‘mouth’ expressions in Akan. Though there is a substantial body of literature on Bamanankan prosody and the distribution of parts of speech (Blecke 1988, Vydrine 1999, Dumestre 2011), the study of “ $\eta\epsilon$ ” (eye) as the head in the production of compounds is yet to be conducted. Therefore, this paper is meant to contribute to the description of words structure, particularly of the lexemes derived from  $\eta\epsilon$  (eye) in Bamanankan, a major language in Mali. Words like  $\eta\epsilon da$ , which literally translates the ‘door of eye’, will be explored in this study.

Bamanankan is classified as part of the Mandé group of the Niger-Congo family of African languages. It refers to the language spoken by the Bamanan, a major ethnic group of Mali. It is the majorly spoken language in Mali as a result of several historical realities. Of particular interest is Canut’s (1996) assertion that Bamanankan expanded in Mali due to several historical factors, namely, the history of the Mandingue Empire, the evolution of **Jula** through trade between the Southern and the Northern parts of Mali alongside with other West African countries. Canut goes deeper as to claim that other deciding factors include the use of Bamanankan in the command of the colonial military troops, the geographic situation of the capital city (Bamako), the centralization of political power in the South in the Bamanankan

---

<sup>1</sup> Corresponding author: Issa Coulibaly

speaking zone, and the movement of populations from rural to urban areas. Those factors largely contributed in the increase of the number of Bamanankan speakers. For this reason, Skattum (1997) and Konaté et al. (2010) hold that this language is either spoken or understood by about 80% of the Malian population as mother tongue and about 44% use Bamanankan as a vehicular language particularly in the southern and central parts of the country.

## 2. Typological Notes

Typologically, Bamanankan is a tonal language: a rising and falling tone fulfilling a distinctive function between lexemes. The word order in a declarative sentence is Subject-Object-Verb (S O V) and gender is not expressed by grammatical means. For instance, the terms *ce* and *muso* translate ‘man’ and ‘woman’ respectively. However, only the latter is added to animal names in an attempt to mention the female category as in *misimusu* ‘cow’, *wulumusu* ‘bitch’, *falimusu* ‘she-ass’, and *jakumamusu* ‘she-cat. An important feature of Bamanankan is the possibility of using the majority of its verbs as nouns without any morphological change and this is an indication that the distinction between these two parts of speech (noun and verb) is blurry (Bleckle 1988).

## 3. Theoretical Framework

This study builds on Vydrine’s (1999) inventory of parts of speech in Bamanankan. Following Vydrine (1990), the Bamanan language encompasses verbs of process and qualifying verbs. The first group of verbs is referred to as dynamic because these verbs conjugate with the suffix *-to* which expresses the process as in: *nato* (coming), *taato* (going), or *wilito* (getting up). By opposition qualifying verbs are intransitive and they accept only two predicative markers: **ka** and **man**. The first is a particle which links a subject to a predicative adjective to express the affirmative form. The latter is another particle connecting a subject to a predicative adjective to express negation. They are placed after the noun they qualify as it can be seen in the examples below:

- Cε in **ka** jan.  
 Man dem. Posit Pred mark tall.  
 Man this be tall → This man is tall.
- Cε in **man** jan.  
 Man dem. Neg Pred. mark tall  
 Man this not be tall. → This man is not tall.

In his analysis of the different approaches to the problems of parts of speech in Bamanankan, Vydrine (1999) holds the view that there are three (3) main parts of speech: syntactic (nouns, verbs, adjectives), morphological (qualifying verbs), and auxiliary (predicative markers, particles, conjunctions, and postpositions). Specifically, he maintains that any lexical unit that goes with the combination **N + dòn** or **tε** and appearing as the head of a syntagm is a noun. Accordingly, we can have the following example:

- (3) Bataki dòn. ————— Bataki tε.  
 letter pos.pred. letter neg.pred.  
 It is a letter. It is not a letter.

In addressing the phenomenon of “eye” derived lexemes in Bamanankan this paper is structured in the following sections: introduction, typological notes on Bamanankan, theoretical framework review of related literature, methodology, the morphological analysis of “je” compounds, and conclusion.

#### 4. Studies on Body Part Expressions

Turpin (2002) addresses the question of how feelings are expressed in Kaytetye, a language spoken in Central Australia. She explores the extent to which specific body part terms relate to different types of feelings, based on linguistic evidence in the form of lexical compounds, collocations and the way people mention feelings. Her investigation highlights that particular body part terms collocate with different feeling expressions for different reasons. This collocation is either due to the fact that the body part is the perceived locus of the feeling, or a lexicalized polysemy of a body part term, a metonymic association between a body part, behaviour, and a feeling.

Charteris-Black (2004) notes a high frequency of body part metaphors in American Presidential Speeches. She points out that several parts of the body are metaphorically used to refer to particular actions. Thus, “the **hand** is metonymically associated with all types of physical action, the **heart** with feeling, the **head** with thinking and the **eyes** with seeing (and metaphorically with understanding)” (Charteris-Black 2004, p. 105).

With different lenses, Agis (2007) investigated the use of different facial sensory organs in Judeo-Spanish and Turkish proverbs and idioms to express a certain emotion from a cognitive pragmatic perspective. He utilized various proverb and idiom dictionaries indicating negative and positive emotions through facial organs: the eyes, the ears, the nose, and the tongue. He used Lazarus’ (1991) classification of positive and negative emotions according to which the negative emotions include: disgust / hate, fright / anxiety, shame / guilt, sadness, jealousy / envy, and anger. By contrast, the positive emotions encompass happiness / joy, relief, pride, and love / affection. The statistical analysis revealed that more Judeo-Spanish proverbs and idioms employ the eyes and ears in order to express disgust / hate, and only the eyes to express jealousy / envy and love / affection, whereas more Turkish proverbs and idioms employ the nose to express sadness, anger, and pride, and the tongue to express disgust / hate and sadness for some socio-cultural reasons.

In a different register, Almajir (2013) directed his attention to the study of the head with its sub-parts which are the eyes, the ears, the nose, the mouth, the face, and the forehead in the Hausa language. To do so, he used the model of descriptive lexical semantics. His study sets out with the assumption that the head and its sub-parts are a rich repertoire for metaphorical meanings. For example, with respect to eye, he postulates that “An eye is an opening for information to reach into the heart. Raw information received has to be processed by the heart before it can turn into knowledge and wisdom. Therefore, eyes are windows into the mind and can be a source of polysemy when used in various expressions” (p. 103). Almajir’s paper concludes that the figurative use of body part terms represents a rich source of metonymic and metaphoric expressions in everyday language use.

Lusekelo and Kapufi’s (2014) study was concerned with the investigation of the way names of body parts are artistically used to convey meanings and messages in Kifipa, a Bantu language spoken in Tanzania. They focused on the metaphoric expressions relating to foot, waist, heart, eye, breast, finger, head, brain, and mouth. Their study revealed that the metaphoric use of names of body parts in Kifipa relies on Watts’ construct of politeness (2003), stylistic, and cognitive hypotheses (Jilala, 2012) (as cited in Lusekelo & Kapufi, 2014, p. 106). These expressions are also beneficial in word economy. They further postulate that the context of use

alongside with the background knowledge is determinant in decoding metaphors related to names of body parts. Contrary to Lusekelo and Kapufi, Hsieh and Lu (2014) made a cross-linguistic cognitive and semantic investigation of eye expressions in Chinese, Spanish, and German. The analysis of the data collected from corpora and dictionaries revealed that the verbs of eye expressions are of paramount importance in expressing emotion. They also demonstrated that the verbs deriving from other body parts, such as the **hand** and the **mouth**, are extended to the sight domain and assist in communicating emotions effectively.

Overall, the aforementioned studies echo similar characteristics of terms derived from body parts in that they are a source for metaphoric use. However, these studies did not view body parts expressions with the lenses of word formation processes. Therefore, the present study will focus on eye-derived expressions as a source of word formation process in Bamanankan.

## 5. Methodology

The majority of the data for this study were sourced from the electronic version of the dictionary Inkey Lexique Pro Bambara Mali. The words constituting the corpus have been selected on the basis of the morphological structure provided in the aforementioned dictionary. It was also the main reference in crosschecking the spelling of various other lexical units used in this paper. Some other words were collected from casual conversations and radio news. Besides, a part of the data was compiled from peer interactions in the staff room of the department of English during off-pick hours. Fellow lecturers, who taught Bamanankan to first-year university students, also contributed in the correct production of some of the compounds. In addition, a fellow lecturer assisted the author of this study with the literal translation of several words into English. The corpus for this study contains 40 lexical units because whenever it was difficult to highlight the structure of any morpheme, that one was ruled out from our data. The table below showcases

**Table 1.***Eye Compounds with their English Equivalents*

	<b>Bamanankan</b>	<b>Literal meaning</b>	<b>English equivalent</b>
1	ɲɛbila	Eye leave	Prospect, preparations, preliminaries
2	ɲɛda	Door of eye	Face
3	ɲɛdimi	Eye pain	Something that should be done instantly, conjunctivitis
4	ɲɛdiya	Eye sharp, tasty	Physiognomic
5	ɲɛdon	Eye knowledge	Knowing how
6	ɲɛdona	Eye entrance	Disobey, lack of respect
7	ɲɛfilatigi	Owner of two eyes	A witch
8	ɲɛfo	Eye say	Explain
9	ɲɛgoya	Eye bad	Not physiognomic, jealousy
10	ɲɛgan	Eye heat	Suffering, pain
11	ɲɛjugu	Eye wicked	Greedy, wicked
12	ɲɛjuru (jan)	Eye rope	Desire, curious
13	ɲɛji	Eye water	Tears
14	ɲɛkumun	Eye sour	Sadness, gloomy
15	ɲɛkili	Egg of eye	Eye
16	ɲɛkomi	Eye wink	Wink
17	ɲɛkɔɔ	Eye under	Before, near
18	ɲɛmalo	Eye shame	Shyness
19	ɲɛmine	Eye catch	Lead, direct
20	ɲɛmɔɔ	Eye person	Leader, boss
21	ɲɛnatɔɔ	Eye choose	Choose, select
22	ɲɛnabɔ	Eye moving out	Share out
23	ɲɛnafin	Eye darkness	Nostalgia
24	ɲɛnaje	Eye enjoyment	Jubilation, feast
25	ɲɛnamini	Eye dizzy	Dizziness
26	ɲɛnasisi	Eye smoke	Sadness
27	ɲɛnawoloma	Eye select	Choice, selection
28	ɲɛnɔɔ	Eye stick	Prefix
29	ɲɛsen	Eye leg	Front leg
30	ɲɛsi	Eye hair	Eyelash, eyebrow
31	ɲɛsisi	Eye burnt out	Bad appearance
32	ɲɛsigi	Eye sit	Prospect, preparation, destiny, make provision for
33	ɲɛsin	Eye direct	Face, focus on
34	ɲɛsɔɔ	Eye find	Solve
35	ɲɛsuma	Eye shade, recovery	Happiness, wealth
36	ɲɛsiranya	Eye scare	Fear
37	ɲɛtaa/ɲɛtaga	Eye, front part movement	Development, progress
38	ɲɛwolo	Eye skin	Eye lid
39	ɲɛyɛɛ	Eye opening	Initiation, childbirth, to be on the alert
40	ɲɛpini	Eye search	Research, cast a spell on

Table 1 includes a set of words having similar meanings. As a result, they can be interchangeable. For example, **ɲekumu** (14) and **ɲesisi** (31) are germane terms translating similar facial features; **ɲenatɔmɔ** (21) and **ɲenawoloma** (27) are also near in meaning. By contrast, some words are antonymous such as **ɲediya** (4) and **ɲegoya** (9); **ɲegan** (10) and **ɲesuma** (35); **ɲenafin** (23) and **ɲenajɛ** (24).

## 6. Morphological Analysis of ɲɛ-Compounds in Bamanankan

Eye compounds follow the general morphological structures, that is, they are made up of Noun + Noun, Noun + Verb, or Noun + Adjective. The clue to the particular word formation process of the corpus is the noun **ɲɛ** (the head) + another part of speech which is either a verb or an adjective. The internal morphology of the terms under study applies to the structures below:

Noun + noun = ɲɛda, ɲɛmalo, ɲɛji, ɲɛjuru, ɲɛdimi, ɲɛsuma, ɲɛdiya, ɲɛgoya, ɲɛkili, ɲɛwolo

Noun + verb = ɲɛsigi, ɲɛbila, ɲɛyɛɛ, ɲɛkɔmi, ɲɛpini, ɲɛtaa, ɲɛnɔɔ, ɲɛsin, ɲɛsɔɔ.

Noun + adjective = ɲɛjugu, ɲɛnafin, ɲɛgan

Some of the compounds under study contain a linking element between the two constituents. This element is /**NOUN1+na+NOUN2**/ as in **ɲenamini**, or **NOUN+na+VERB** as in **ɲenabɔ** and **ɲenatɔmɔ** which is germane to **ɲenawoloma**. Hence, there couldn't be **ɲenamini** and **ɲenawoloma** without **-na-** inserted into the middle of compounds to “help them conform to the phonotactic rules of the language” (Harley, 2006, p.94). Overall, the corpus presented in table 1 contains seven (7) instances of compounds having the **-na-** link. They range from number 21 through 27 in the table. However these two terms can be differentiated only in use as illustrated in the sentences below.

(1) Muso ye malo ɲɛ na tɔmɔ.

Woman aux. rice eye link el. Pick up.

The woman processed rice.

(2) Cɛ in bɛka fini ɲɛ na woloma.

Man this part. cloth eye link el. sort

This man is sorting cloth.

Compounding is a word formation process which allows the combination of two or more words in one compound. A compound consists of a head and constituents. A distinguishing feature of Bamanankan is that of the left-headed compound. This means that the left head functions as the semantic one whereas the right constituent is the modifier. This is well illustrated in the examples below with regard to eye derived lexical units.

3 (a) ɲɛ+sigi (prospect), ɲɛ+dɔn (knowing how), ɲɛ+mɔɔɔ (leader)

(b) ɲɛ+siranya (fear), ɲɛ+fila+tigi (witch)

In 3(a) the compound contains the left head “**ɲɛ**” to which one constituent is added; hence, we have: **ɲɛ** + sigi, **ɲɛ** + dɔn, **ɲɛ** + mɔɔɔ. These constituents translating respectively “sit”, “knowledge” and “person” modify not only the meaning of “eye” but also its grammatical category. Therefore, “ɲɛsigi” and “ɲɛdɔn” can be either nouns or verbs. The sentences below showcase this possibility.

3 (aa) U ye ɲɛsigi jumen kɛ?

They aux. preparation what do?

N bɛ i ɲɛsigi sinin.

I aux. you make provision for

tomorrow.

What preparation did they do?	I'll get something for you tomorrow.
3 (ab) Geseda <b>ɲɛdɔn</b> tɛ Ali la.	A tɛ o <b>ɲɛdɔn</b> .
Weaving knowing how not Ali post pos.	S/he neg. that know.
Ali has no knowledge of weaving.	S/he does not know that.
3 (ac) Anw <b>ɲɛmɔɔ</b> nana kunun.	Anw ɲɛmɔɔ tɛ.
We leader came yesterday.	We leader not.
Our leader came yesterday.	He is not our leader.

In the examples 3(aa) and 3(ab), **ɲɛsigi** and **ɲɛdɔn** are used as nouns in the left column. They are verbs in the right column. However, 3(ac) proves that **ɲɛmɔɔ** can only be used as a noun, be it in the affirmative or negative form.

- (4) (a). **ɲɛsiranya** (fear) and **ɲɛfilatigi** (witch)
- Denw carila dutiki **ɲɛsiranya** kosɔn.  
 Children disperse head of family fear because of.  
 Children dispersed out of fear of the head of the family.
- (b). **ɲɛfilatigi** bɛ kabako caaman kɛ.  
 Witch aux. miracle lot of do  
 The witch does several miracles.

It can be inferred from the examples above that conversion (the possibility for a word to change from one class of word to another one without any alteration) as a process of derivation is prominent in the corpus for this study. As a result, several items in table 2 below are not only nouns because they can be followed by the predicative markers **dɔn** or **tɛ**, but they can also be prefaced by **ka** which indicates that they are verbs. Thus, **ɲɛbila dɔn** (it is a preliminary), **ka ɲɛbila** (to prospect), **ɲɛkumun** (sadness), and **ka ɲɛkumu** (to be gloomy) are, among others, instances of zero change.

**Table 2.**  
*Distribution of 'ne' Compounds*

	<b>Compounds</b>	<b>Nouns</b>	<b>Verbs</b>
1	nebila	+	+
2	nedā	+	-
3	nedimi	+	-
4	nediya	+	-
5	nedōn	+	+
6	nedona	+	-
7	nefilatigi	+	-
8	nefō	-	+
9	negoya	+	-
10	negan	+	-
11	nejugu	+	-
12	nejuru (jan)	+	-
13	neji	+	-
14	nekumun	+	+
15	nekili	+	-
16	nekōmi	+	+
17	nekōrō	+	-
18	nemalo	+	-
19	nemine	-	+
20	nemōgo	+	-
21	nenatōmō	+	+
22	nenabō	+	+
23	nenafin	+	-
24	nenaje	+	+
25	nenamini	+	+
26	nenasisi	+	+
27	nenawoloma	+	+
28	nenōrō	+	+
29	nesen	+	-
30	nesi	+	-
31	nesisi	+	+
32	nesigi	+	+
33	nesin	+	+
34	nesōrō	+	+
35	nesuma	+	+
36	nesiranya	+	-
37	netaa/ netaga	+	-
38	newolo	+	-
39	neyeɛ	+	+
40	nepini	+	+

The upshot of table 2 is that 38 words, representing 95%, correspond to the characteristics of nouns out of which 18 words, making 47%, can be both nouns and verbs. Only two terms, (5%), are exclusively verbs. This observation concludes with Hurford's et al (2007, p.227) submission that "a derived word formed by combining two pre-existing words in a language is



called a **Compound** word because they consist of two pre-existing root words in the language rather than a root word together with either a prefix or suffix.” All of the data collected for this study comply with this definition apart from **ɲɛsiranya** in which –ya is the suffix expressing the state in Bamanankan.

## 7. Conclusion

This paper has discussed major lexical units derived from **ɲɛ** (eye) in Bamanankan. **ɲɛ** is a rich head for the production of several compound nouns and verbs. Two major assumptions deserve particularly being noted: all N+N compounds play the role of subject or object in a sentence. The N+V compounds can either be subjects or verbs in a sentence. They are formed by a recursive system of rules that enables the formation of several nominal and verbal lexemes. The particular word formation process in **ɲɛ**-compounds is non-morphological to which Vydrine (1999) refers as conversion. The compounds under study are obtained by way of three major combinations: noun + noun, noun + verb, and noun + adjective and few instances the lexical units of our concern contain a linking element.

## References

1. Ağış, F. D. (2007). A comparative cognitive pragmatic approach to the judeo-spanish and turkish proverbs and idioms that express emotions. A Master's thesis submitted to Hacettepe University Graduate School of Social Sciences English Linguistics, Ankara.
2. Agyekum, K. (2013). The pragmatics of 'mouth' expressions in Akan. *In Ghana Journal of Linguistics 2.1: 1-17*, pp. 1-17.
3. Almajir, T. S. (2013). The polysemy of body part terms in Hausa within the frame of image schemas. *Studies of the Department of African Languages and Cultures*, 47, 93-111
4. Amani L. & Daudi, I. K. (2014). An analysis of metaphoric use of names of body parts in the Bantu Language Kifipa. *International Journal of Society, Culture and Language*, 2 (1).
5. Blecke, T. (1988). La fonction du morpheme **tun** en Bambara. Une analyse dans le système de temps, aspect et mode. *Llacan.vjf.cnrs.fr*. consulté le 11/08/2020.
6. Canut, C. (1996). Dynamique plurilingue et imaginaire linguistique au Mali : entre adhésion et résistance au Bambara. *In Langue et Société*, 78, pp.55-76.
7. Charteris-Black, J. (2004). *Corpus approaches to Critical Metaphor Analysis*, Basingstoke.
8. Creissels, D. (1985). Les verbes statifs dans les parlers manding. *In Mandenkan*, 10, pp 1-32.
9. Dumestre, G. (2011). A propos du Bambara, ou de l'art d'accommoder les restes. *In Mandenkan*, 47, pp. 3-11.
10. Harley, H. (2006). *English words: A linguistic introduction*. Oxford: Blackwell Publishing.
11. Hsieh, S. C-Y., & Kolodina, E. (2009). Eyes and hands expressions: Embodiment of lexical meanings. *Proceedings of the 18th international congress of linguists (CIL 18)*, Seoul: Korea University.
12. Hsieh, S. C-yu., & Lu, Hui-chuan (2014). Emotion and culture of eye metaphors in Mandarin, Spanish and German. *In CIRCULO de Linguistica Aplicada*, 58.
13. Hurford, J. R., Heasley, B., & Smith, M. B. (2007). *Semantics: A coursebook*, (2<sup>nd</sup> ed). Cambridge University Press.

14. Konaté, M. K., Diabaté, I., & Assima, A. (2010). Dynamique des langues locales et de la langue française au Mali : un éclairage à travers les recensements généraux de la population (1988 et 2002), Observatoire démographique et statistique de l'espace francophone/Université Laval, Rapport de recherche de l'ODSEF.
15. Lusekelo, A., & Kapufi, D. I. (2014). An analysis of metaphoric use of names of body parts in the Bantu language Kifipa. *International Journal of Society, Culture & Language (IJSCL)*, 2(1), 106-117.
16. Mugu, R. Y. (2002). Polysemantics of somatic lexicon in Russian and Adug. Unpublished doctoral thesis, Maikop State University.
17. Skattum, I. (1997). L'éducation bilingue dans un contexte d'oralité et d'exoglossie: Théories et réalités du terrain au Mali. In *Nordic Journal of African Studies*, 6, (2), pp. 68-97.
18. Tijjani, S. A. (2013). The polysemy of body part terms in Hausa within the frame of image Schemas. <https://www.cejsh.icm.edu.pl/cejsh/element/bwmeta>.
19. Turpin, M. (2002). Body part terms in Kaytetye. In *Pragmatics & Cognition* 10:1/2, pp. 271–305. John Benjamins Publishing Company.
20. Vydrine, V. (1990). Les adjectifs prédicatifs en Bambara. In *Mandenkan*, 20, pp. 47-90.
21. Vydrine, V. (1999). Les parties du discours en Bambara : Un essai de bilan. In *Mandenkan*, 35, pp. 73-93.