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FROM BODY TO EMOTION IN WOLOF: A PHRASEOLOGY PROCESS

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Abstract

The aim of this paper is (i) to show that phraseology is the main process for encoding emotions in Wolof through bodily expressions, and (ii) to explore the semantic flexibility of body part terms (henceforth BPs) afforded by Multiword Expressions (henceforth MWEs) and which are semantically related to the emotional situations.

The paper comprises four parts. The first part reviews some relevant features of Wolof grammar. The second one considers the syntax of two kinds of MWEs that denote emotions: collocations and phraseologised compounds. The third part analyses the semantics of MWEs involving BPs. The fourth part proposes a set of perspectives on BPs based on the previous analyses. Language-internal arguments are promoted, although certain semantic representations proposed by two related frameworks: Natural Semantic Metalanguage (NSM) and Meaning-Text Theory (MTT), are also drawn upon.

Key words

collocations compounds semantic flexibility point of view
Meaning-Text Theory (MTT) Natural Semantic Metalanguage (NSM)

1. Introduction

1.1. *Previous semantic analyses of BPs*

In many languages, sense extensions of a few recurrent BPs such as 'head', 'back', 'face' have been created through grammaticalization. Among these new meanings, the predominant one is location. For example, Heine and Kuteva (2002: 317-336) listed prepositions such as 'behind', 'after' or 'in front of', 'before' come respectively from 'back' and 'face'.

In Wolof, BP sense and sense extensions are used in synchrony. BP terms are transcategorial in that they belong to different lexical categories (nouns in the case of body parts, prepositions in the case of location in simple sentences, conjunction in the case of argumentation in complex sentences). Robert 1997 calls these terms 'fractal terms' on the grounds that they have different functions in Wolof syntax, and considers the flexible category of BPs are 'transcategorial' terms. (2004: 225-270).

In this paper, we explore another dimension of the flexibility of BPs. We will show that MWEs involving BPs denote emotions in a systematic way via a phraseology process. BPs can thus be considered from different points of view.

1.2. *The methodology*

The procedure is as follows: (i) first, two major ways of encoding emotional concepts are distinguished, based on the syntactic and semantic flexibility of MWEs; (ii) the semantic flexibility of BPs is then examined; and (iii) different perspectives on BPs selected by MWEs are proposed. These perspectives depend on two factors: the type of emotional situation, and the nature of possession encoded by the construction; (iv) lastly, some semantic characteristics of BPs are extracted.

1.3. The structure of the paper

The structure of the paper is as follows. The first part presents some relevant facts of the Wolof grammar. The second part considers two classes of MWEs that denote emotions: collocations and phraseologised compound forms. The third part analyzes the meanings of MWEs. The fourth part proposes a set of semantic perspectives of BPs identified through the previous analyses. Concluding remarks concern the difference between collocations and compounds, and the flexibility of BPs.

2. Relevant features of Wolof grammar

2.1. Simple clause structure

Wolof is a V2 language where the verb is always in second position (1 a-e) ¹ except in the perfect form (1f) where it is in initial position. There are several possibilities for focalizing either the subject (1c), the verb (1b) or the complements (object in 1d and oblique in 1e).

(1a) **Ma** lekk ceeb ci kër gi [basic form]

NAR:1SG to eat rice LOC house DET

‘I eat some rice in the house’

(1b) **Dama** lekk ceeb ci kër gi [verb focalized]

VE:1SG to eat rice LOC house DET

‘(the fact is that) I eat some rice in the house’

(1c) **Maa** lekk ceeb ci kër gi [subject focalized]

SE:1SG to eat rice LOC house DET

‘It is me who eats some rice in the house’

(1d) **Ceeb** laa lekk ci kër gi [object focalized]

rice CE:1SG to eat LOC house DET

‘it is rice that I eat in the house’

1 Conventions

ACT: activity

COT: construct form

DET: determiner

ES: emphatic subject

IP: imperative

LOC: locative

NEG: negative

PF: perfect

POR: possessor

PRP: preposition

QUANT: quantity

BP: body part

DEF: definite

EC: emphatic complement

EV: emphatic verb

IPF: imperfective

MID: middle voice

OBJ: object

PL: plural

POS: possessive

MWE: multiword expression

SG: singular

CAUS: causative

DEM: demonstrative

ENT: entry

IDF: indefinite

ITJ: interjection

NAR: narrative

PAS: past

POD: possessed

PRD: predicative

QUAL: quality

TMP: temperature

Small capitals are used for the glosses, and capitals for the lexemes in the text.

(1e) **Ci kër gi laa lekk ceeb** [oblique focalized]
 LOC house DET CE:1SG to eat rice
 'It is in the house that I eat some rice'

(1f) **Lekk naa ceeb ci kër gi** [Perfect form]
 TO EAT PF:1SG RICE LOC house DET
 'I ate some rice in the house'

2.2. Nominal phrase structure

Every noun in a Wolof sentence is associated with a nominal class marker. There are 8 singular classes (classes B, G, J, K, L, M, S, W) and 2 plural classes (Y, Ñ). The position of the marker depends on the degree of definiteness of the noun (ex. 2 a-b-c-d)

If the noun is indefinite, the nominal class marker is placed before the noun and prefixed by *a-* (2 a-b). If the noun is definite, the nominal class marker is placed after the noun and suffixed by a deictic *-i/a*.² If the referent is close to the speaker, the deictic is *-i* and if it is remote from the speaker the deictic is *-a*.³

(2a) May na ko **am mbubb** [indefinite singular]
 to give PF:3SG him/her ID.F.SG **boubou**
 'He/she gave him/her **a boubou**'

(2b) May na ko **ay mbubb** [indefinite plural]
 to give PF:3SG him/her ID.F.PL **boubou**
 'He/she gave him/her **some boubous**'

(2c) May na ko mbubb **mi** [definite singular]
 to give PF:3SG him/her **boubou** DF.SG
 'He/she gave him/her **the boubou**'

(2d) May na ko mbubb **yi** [definite plural]
 to give PF:3SG him/her **boubou** DF.PL
 'He/she gave him/her **the boubous**'

2 See Robert (1998) for a fuller description.

3 The *-u* marker is not mentioned here for simplicity's sake. For further details, see Robert 1998.

2.3. Verbal phrase structure

The general structure of a verbal phrase is [AUX V] except for the Perfect and Complement focalization conjugations.

The verbal lexeme is invariable but it is combined with an auxiliary which amalgamates the person, the aspect and the mood. This auxiliary can precede the verb (VE in 3a-b) or follow it (PF in 3c).

- (3a) **Damaa samp** kër gi [perfective verb emphatic form]
 VE:1SG to build house DET
 ‘(the fact is) I built the house’
- (3b) **Damaa-y samp** kër gi [imperfective verb emphatic form]
 VE:1SG-IPF to build house DET
 ‘(the fact is) I am building the house’
- (3c) **Samp naa** kër gi [perfect form]
 to build PF:1SG house DET
 ‘I built the house’

2.4. The absence of adjectives

There are no adjectives in Wolof. Adjectival meanings are expressed by state verbs (see Mc Laughlin 2004 for an extensive explanation). The examples in 4 below have the same pattern as the examples in 2. (4a-b) show that the lexemes which characterize entities (in this case, beauty) have the same predicative behaviour as verbs, and (4c-d-e) provide confirmation that they cannot be considered as nouns.

- (4a) **Dafa** ko may am mbubb / (4b) **Dafa** rafet
 VE:3SG him/her to give IDF.SG boubou / VE:3SG to be beautiful
 ‘(the fact is that) **he/she gave** a boubou to him/her’ / ‘it is beautiful’
- (4c) mbubb la / (4d) * rafet la / (4e) * **may** la
 boubou CE:3SG / to be beautiful CE:3SG / to give CE:3SG
 ‘It is a boubou’ / /

State verbs can also modify nouns. (4f-g) show that the marker of definiteness of the modified noun is at the end of the noun phrase, while (4h) shows that this definiteness marker cannot be used in relative clauses. This is the reason why lexemes which have an adjectival function cannot be considered to be verbs like other verbs. We call them 'state verbs'.

(4f) May na ko **am mbubb mu** rafet [characterised
IF noun]
to give PF:3SG him/her IDf.SG **boubou** which to be
beautiful

‘He/she gave him/her **a beautiful boubou**’

(4g) May na ko **mbubb mu rafet mi** [characterised
DF noun]
to give PF:3SG him/her **boubou which** to be DF.SG
beautiful

‘He/she gave him/her **the beautiful boubou**’

(4h)* **Goór gu** ko may **gi**
man who him/her to give DF.SG

Verbs and nouns are the major lexical categories in the lexicon. They do not have the same predicative behaviour nor the same system of agreement: verbs agree with person, mood and aspect, while nouns agree with spatial definiteness and nominal classes. Lastly, Wolof does not have any adjectival categories: adjectival meanings are expressed by state verbs.

2.5. Possessives Phrases

There are several kinds of possessive constructions in Wolof; only those that are the most relevant for the BPs in this paper will be briefly presented here.⁴ For each kind of possessive construction below (examples 5a-g), I have chosen a basic cultural item as the possessed item, namely a house. Consider example (5a) below where the possessed item precedes the possessor with the possessive marker *-u* suffixed to the possessed item.

(5a) Tuug demal kër Sàmba Yomb **kër-u xaj** ya [genitiv
al POD-
U POR]
ITJ to house Sàmba Yomb house- dog DET
go.IP:2SG COS

‘Blasted dog! Go to Samba Yombe’s, the dogs’ house’

Various terms are used to qualify the morphological marker *-u* in genitival constructions such as (5a) above. Sometimes it is called ‘connecteur’ (Robert 1998) or ‘construct form marker’ (Creissels 2009). This type of construction shares certain features with the one called ‘construct state’ (Kihm 2000, 1998) or ‘construct form’ (Creissels) found in Semitic and East African languages.⁵ For our purposes, a remark made by Kihm (2000: 158) is of interest

⁴ To my knowledge, there are unfortunately no general studies available on possession in Wolof.

⁵ The the following properties, *inter alia*, can be mentioned: (i) the head precedes the genitival dependent as here in (5a) (ii) all the modifiers of the head noun come after the genitival dependent (iii) the definiteness of the whole construction is marked on the genitival dependent (iv) construct forms

here: construct forms make it possible to form compounds. This is the case in Wolof, for example DIGGU KĒR 'yard' lit. middle house (Ka 1981:82). The most relevant point here is that the constructor can be omitted, thus yielding some juxtaposition constructions in which the possessed item precedes the possessor as in construct forms: examples (5b-c) below illustrate this feature. We will return to this point in section 5 when examining the relationship between the BP and its possessor in MWEs.

(5b) **Boroom kër gi** du ko yëg [compounding POD POR]
 chief house DET NEG:3SG it/him/her to feel
 'The family's chief is not here'

(5c) Tey siggil na **kër Maaram** [juxtaposition POD POR]
 today to give pride PF:3SG house Maaram
 'Today he/she honoured Maaram's family'

Juxtaposition is common and combines with another possessive constructions such as the pronominal one in (5d) and the predicative one in (5g).

[pronominal SUBJ+ juxtaposition]

(5d) Man dégg naa ne **sa kër** baay neex na
 me to hear PF:1SG to say POS:2SG house father to be sweet PF:3SG
 'I heard that your father's house is a nice place to live'

[pronominal OBJ]

(5e) Jinne xam **sa kër** te doo xam **këram** ⁶
 sorcerer to know POS:2SG house and NEG:2SG to know house.POSS:3SG
 'The sorcerer knows your house. And you don't know his'

Traditionally, analyses of possessive constructions have focused on the ways in which possession is encoded: nominal vs predicative possession (Mithun 2001 emphasizes this point) and internal vs external possession (Payne and Barshi 1999) on the syntactic level, or alienable vs inalienable possession and part-whole vs spatial vs cultural ownership relations on the semantic level (Chappel and Mc Gregor 1996). The sentences presented here show that many other examples can be given to illustrate these syntactic differences. (5f) is an illustration of a prepositional construction in which the possessed item is introduced by the only locative preposition in Wolof, *C-i/a*.⁷ In this case, the possessed item is in oblique position. Example (5g) shows that the verb AM 'to have' the preferred option for encoding predicative possession.

are available to form compound nouns. All these properties are shared by the genitival construction in Wolof. See Kihm (2000) for a more detailed analysis.

⁶ The 3SG possessive pronoun *-am* is suffixed to the possessed item.

⁷ *-i/a* are the deictic spatial markers already cited in subsection 2.2. above.

[prepositional]

(5f) Njèkke yu ndaw ya **ca** **kër** **ga** di
first friend who to be small DET LOC house DET PRD

buub di raxas
to pick up a PRD To wash
bundle

'The younger sisters take care of the refuse and the washing-up'

[predicative + juxtaposition]

(5g) Waaye nag ku **am** **kër**
but also who to have house

nijaay **am** **nga** **kër** **baay**
uncle to have 2SG house

'But a father's house is just as good as an udetle's'

Semantic prototypes (Wierzbicka 2002, 1996 among others) ⁸ of these constructions can be proposed showing that inalienability is preferably encoded by construct forms (genitival, compounding and juxtaposition) or by the predicative construction ⁹, and that pronominal and prepositional constructions are more often used to encode alienable possessions. The analysis proposed here is that Y and X are variable with regard to the possessed item and with regard to the possessor respectively. It should be stressed that the following semantic prototypes are simplified and do not describe the different kinds of relationships between the possessed item and the possessor (part-whole, spatial, ownership) nor do they consider the variability of the possessed item (artefact, BP), unlike Ameka (1996: 783-840). However, these simplified semantic prototypes are in agreement with the more detailed ones given by Ameka.

One can think of X and Y like this: [inalienable possession]

Y is a part of X/ Y and X are part of the same thing/ Y and X are one thing
When one think of Y one cannot not think of X

One can think of X and Y like this: [alienable possession]

Y is like a part of X
X can do things with Y (PRO SUJ)/ Somebody can do things to Y (PRO OBJ)
When one thinks of Y one can think of X

The difference between the two kinds of constructions is the relative independence of Y towards X. However, the relationship between X and Y is not sufficiently definite in the two constructions to clarify the difference between the two possessions. When we come to

⁸ Semantic prototypes and scripts (see section 4 below) both use the semantic primes according to the NSM framework. For a recent list of primes, see Wierzbicka 2009.

⁹ Even though Kihm does not consider the predicative possession, he suggests analyzing the construct form by admitting a *predicate* in the deep structure.

examining the perspective that possessive constructions in MWEs confer on BPs (see section 5 below), it must be remembered that the part-whole relation seems to be a generic one. Hopefully this rather lengthy presentation of some relevant typological features in Wolof has brought out the salient points that need to be considered when we examine MWEs involving BPs and denoting emotions. This is addressed in the following two sections.

3. The syntax of Multiword Expressions involving body part terms in Wolof

Lexemes are obviously not the only lexical units. There are also complex lexical units such as collocations, idioms, locutions, and compounds, among others. In this paper, I will use the generic term Multiword Expressions (MWEs) to name complex lexical units.¹⁰

3.1. *Lexical use of MWEs*

It must first be pointed out that some MWEs function as clauses in themselves as in (6a-b), while others are used as arguments in a clause, as in (6c-d). The second part of the sentences (6a-b, i.e. 'with the work he/she did') can be deleted while it is necessary to add a predicative form in (6c) to obtain a whole clause such as (6d).

(6a) **sama xol sedd na ci liggéey bi mu def**
 POSS:1SG **heart to be cold** PF:3SG LOC work DET 3SG to do
 'I am satisfied with the work he/she did'

(6b) **bég naa ci liggéey bi mu def**
to want PF:1SG LOC work DET 3SG to do
 'I am satisfied with the work he/she did'

(6c) **liggéey bu sedd xol [...] / la**
 work which **to be cold heart** [...] / EC:3SG
 'a satisfying work [...] / (this is)'

Secondly, some MWEs combine with conjugations and commute with verbs as in (5a-b) while others commute with state verbs as in (5d-e).

(6d) Omar **ku tàng xol la**
 Omar which **to be hot heart** EC:3SG
 'Omar is frustrated' (a frustrated man)

(6e) Omar **ku baax la**

¹⁰ The terminology used to name these lexical units is increasing (Bolly 2008: 21, Svensson 2004: 13 n.3). I use the neutral term *Multiword Expressions* because my approach does not exclude *a priori* any kind of phraseologised form. Rather, it covers both collocations and compounds, the two phenomena focused on here.

Omar which **to be good** EC:3SG

'Omar is an honest man'

(6f) * Omar **xolam**¹¹ **sedd** la

Omar heart.POSS:3SG **to be cold** EC:3SG

(6g) Omar **xolam** **sedd** na

Omar heart.POSS:3SG **to be cold** PF:3SG

'Omar is satisfied' lit. Omar's heart is cold

(6a-b) show that there is a kind of MWE with a structure BP V which can be used as a verb plus its subject while (6c-d-e-f-g) show that there is another kind of MWE with a structure V BP which can be used either as a state verb or as a noun-modifier through a categorial translation.

3.2. Criteria to distinguish MWEs

I follow Mel'cuk 2008, 2006, 1998 and Gross 1996 who propose two clear criteria to distinguish MWEs from other word combinations: the restricted and the regular combination and selection of their constituents. The restricted combination is proven by testing (i) the degree of combination of the constituents, (ii) the degree of modification of the constituents, and lastly (iii), the degree of structural analogy of MWEs with other word combinations (Kahane 2008). The following section applies these tests to different MWEs involving BPs in Wolof.

3.2.1. *Structural analogy with other combinations*: the most obvious criterion to distinguish the two kinds of MWEs under consideration here is structural analogy with other combinations. Kahane 2008 defines structural analogy:

'Une combinaison A+B est dite (**structurellement**) **analogue** à une combinaison A'+B' si A a une distribution équivalente à A', B à B' et A+B à A'+B'" (page 9) ¹² i.e.

'An A+B combination is said to be (**structurally**) **analogous** to an A'+B' combination if A has a distribution equivalent to A', B to B' and A+B to A'+B'"

In examples 7 below (7a-b-c), the two constituents of the combinations XEL DAL and DAL XEL DAL have an equivalent distribution (XEL is a noun and DAL is a verb). The two combinations have a different distribution, however (XEL DAL commute with a simple clause or a full predication whereas DAL XEL commutes with a noun or a state verb, see subsection 3.1 above).

(7a) Xel mu dal ca la
Mind 3SG to land LOC DET

'(we) are not anxious' lit. 'the mind is landing there'

(7b) Dal-xel googoo ko ko waral (Diouf: 2003, ent. DAL-XEL)

11 The 3SG possessive pronoun *-m* is suffixed to the possessed item.

12 The pagination is mine.

to land- DEM it/him/her it/him/her to cause
mind

'It's his lightheartedness which is the cause'

(7c) Ku dal-xel nga may nirool (Diouf 2003, ent. DAL-XEL)

Who to land-mind 2SG 1SG.IPF To be like?

'You look carefree to me'

We will call combinations such as XEL DAL collocations and combinations such as DAL XEL compounds. Henceforth, following the notation used in MTT to distinguish between the two types of combinations, collocations will be represented by a set of two lexemes BP V or V BP (depending on the internal order) while an underscore will separate the two constituents of compounds V_BP.¹³ Concerning internal word order, a point to note is that in collocations, word order can vary depending both on the function of the BP and on the valence of the verb. In (7a), the internal order is BP V because the BP is the subject of an intransitive verb. However, when the verb becomes transitive by adding the causative suffix *-al*, the order inside the combination becomes DALAL XEL 'to calm someone' lit. to cause to land the mind. We argue that these combinations have a structural analogy with free combinations like NV or VN consisting of a verb plus its argument. To understand now the internal word order of BP compounds, it should be borne in mind that examples (1-2-3) above show that the modifier comes after the noun in the case of a noun-dependent construction or in the case of genitival construction. Instead of having a noun followed by a modifier (a state verb in this case), BP compounds comprise a state verb followed by a noun. This state of affairs contradicts the normal rules of attributive constructions in Wolof. The deviant word order thus indicates that the MWE is a compound. The reverse does not hold: many compounds respect the right word order (Ka 1981: 75-96). We argue that BP compounds have structural analogy with construct forms (see subsection 2.5 above).

In this paper, we will contrast two kinds of MWEs: collocations and compounds showing that either their syntax or their semantics is basically different.¹⁴

3.2.2. *Combination of the constituents*

Consider the VN combination LEKK CEEB 'to eat rice' in example (1a), section 2.1. The verb which is the first constituent of the combination commutes freely in this combination.

'On dit que A **commute librement** dans la combinaison A+B si 1) l'ensemble des éléments qui commutent proprement avec A est assez régulier et peut notamment se déduire des ensembles d'éléments qui commutent avec A dans d'autres combinaisons et 2) dans l'ensemble des éléments qui commutent proprement avec A dans la combinaison A+B, il existe une proportion importante d'éléments qui ont une distribution similaire à A'. (Kahane 2008: 3)¹⁵ i.e.

'A is said to **commute freely** in the combination A+B if 1) the set of elements which commute strictly with A is quite regular and can be deduced from the sets of elements which commute with A in other combinations and 2) in the set of elements which commute with A in the combination A+B, there is a high proportion of elements which have a distribution similar to A' (Kahane 2008: 3)

13 Although some authors use a distidettive notation for compounds (Diouf: 2003, 2001, Ka: 1981), it is neither systematic nor related to other MWEs.

14 On compound forms belonging to MWEs, see subsection 2.5. above and Mel'cuk 2006 and Gross 1996.

15 See note 13 upon.

Firstly, the set of elements which commute with LEKK 'to eat' is very regular since it contains many words which denote a transfer such as MAY 'to give' or which denote an activity such as BEY 'to cultivate'. Secondly, many elements of this set have the same distribution: they are verbs (see subsection 2.1. above). The same can be said of the second constituent in this combination, namely CEEB 'rice'. The set of elements which commute with CEEB 'rice' contains many words which denote food such as JËN 'fish' and many elements of this set have the same distribution: they are nouns (see subsection 2.2. above). The combination LEKK CEEB is thus free:

'On dit que A et B se combinent librement si A et B commutent l'un et l'autre librement dans la combinaison A+B' (Kahane 2008: 3) (french) i.e.

'A and B are said to be in free combination if A and B both commute freely in the combination A+B'

Consider now the combinations BP V or V BP above in examples (6a-d) and (7a-d) which denote emotions. It must be pointed out that the two constituents are not equal in the combination. The BP is freely chosen and determines the choice of the other constituent. (6a-b) are antonyms but the BP is the same. The second constituent varies depending on the particular emotion. The first constituent will be called the base of the MWE (BPs here) and the second constituent will be called the collocate. On examining these combinations, one finds that the combination BP V, XOL SEDD 'with good grace', is less free than LEKK CEEB 'to eat rice' since the collocate commutes only with a few other state verbs. (8b) shows that commutation with the antonym is used to express the opposite emotional concept. This is not the case, however, with another combination V BP as in (8c-d): here, the commutation with another verb of movement is impossible.

(8a) *ci xol bu sedd* 'with good grace' lit. in heart which is cold

(8b) *ci xol bu tàng* 'with bad grace' lit. in heart which is hot

(8c) *dal xel* 'to be carefree' lit. to land mind

(8d) ? *dem xel*

The collocate can commute in the first combination and this change is clearly motivated, while it is impossible in the second kind of combination. While both combinations are more restricted than others V BP such as LEKK CEEB 'to eat rice', which are free, one of them is more restricted since the BP base cannot commute.

3.2.3. Modification of the constituents

Different tests can be conducted to determine the degree of modification of the constituents inside the combination. (Gross 1996, chap.2). The goal here is to show that some combinations accept modifications of both the base and the collocate, while others do not accept any internal modification.

3.2.3.1. Modification of the BP base by the pluralization test: Pluralization of the BP base can be performed in example (9b) while this is impossible in example (10b).

(9a) **Tiye** nga **sa** **lammiñ** [singular form]
to hold 2SG Poss:2SG tongue
'you are discreet'

(9b) **Tiye** ngeen **seeni** **lammiñ** [plural form]
 to hold 3_{PL} POSS:3_{PL} tongue
 'you guys are discreet'

(10a) **Dafa** **rattax** **lammiñ** [singular form]
 EV:3_{SG} To be slippery tongue
 'he is not discreet'

(10b) * **Dañu** **rattax(i)** **Lammiñ (yi)** [plural form]
 EV:3_{PL} to be slippery.PL tongue (PL)

However, note that the pluralization in (9b) agrees with the collocate which is the head of the combination. Modification of the BP base is therefore not independent of the collocate. The following test will show that it is possible to modify the two constituents independently.

3.2.3.2. *Modification of the BP base by the deletion test*: consider the MWEs in (11 a-b) where the causative suffix *-al* could allow deletion of the object. However, deletion of the BP base is impossible in (11b).

(11a) Mu di leen fêex-al seen Xol
 3_{SG} PRD 3_{PL} to be fresh-CAUS 3_{PL} heart
 'He/she/it refreshes their heart' (Becher 2003: 61)

(11b) * Mu di leen leen fêex-al
 3_{SG} PRD 3_{PL} 3_{PL} to be fresh-CAUS

It seems that deletion of the BP base is unlikely in MWEs. This test cannot distinguish between the two kinds of combinations considered here. They are nevertheless useful to distinguish between collocations and locutions. As pointed Kahane 2008 (7-8), a collocation can be distinguished from a locution by its ability to commute the collocate and to modify the two constituents independently. These modifications operate when the MWEs denote temporary emotional states as in (11 a-b) above and (12a-b) below.

(12a) Lii mën naa yàq sa der (Diouf 2003: ent. DER)
 DEM to be able to PF:3_{SG}.? to destroy POSS:2_{SG} skin
 'This could harm your reputation'

(12 b) Sama der bi yàq-u (Becher 2003: 65)
 POSS:1SG skin DET destroy-MID
 'I am ashamed' lit. 'my skin is destroyed'

The BP bases XOL 'heart' and DER 'skin' can be modified in the two combinations by changing the number of the pronominal pronoun (respectively SEEN 'their' and SA 'your'). On the other hand, the verbal collocates can be modified by deleting the causative suffix *-al* in example 9 and adding a middle voice suffix *-u* in example 10.

4. The general meanings of Multiword expressions involving body part terms in Wolof

The semantic transparency of MWEs can vary. Intuitively, we could be tempted to consider that (11a) is more transparent than (11b-c) (see above subsection 3.2.1). The emotional concept of absence of anxiety is easier to grasp with a combination such as XEL DAL lit. Mind to land than with a combination such as DAL XEL. A detailed analysis shows, however, that both collocations and compounds here are semantically motivated, thus reducing their possible opacity. To carry out this analysis, the relationships between the BPs and their collocates have to be specified. It is thus necessary to bring out the roles of BPs in emotional situations encoded by MWEs, and to characterize the relation between the BP and their possessor in possessive constructions.

I assume here different types of emotional situations, which be labelled as follows: emotional entities will be called emotional dispositions and emotional loci; passive feelings will be called emotional states; and active feelings will be called emotional attitudes.

4.1. Emotional disposition

There are numerous examples of such cases where the general structure can be considered as to be formed of a support verb in a predicative relation with a BP complement. The support verb can be a state verb which denote a formal quality (size, dimension, shape, position) or a verb of predicative possession, usually AM 'to have '. We have already pointed the structural analogy between the two constructions (see subsection 2.5 above) as in the following examples:

(13a) [SV as a quality state verb of positive evaluation with an equative predication]

ku rafet xol la
 which **to be beautiful heart** Ec:3sg

'This person is **good**'

(13b) [SV as a quality state verb of temperature with an equative predication]

ku tàng xol la
 which **to be hot heart** Ec:3sg

'This person is a bad-tempered person'

(13c) [SV as a quality state verb of tactile appearadete with an existential predication]

danga dëgër bopp de

VE:2SG **to be hot heart** ITJ

'You (really) are obstinate'

(13d) [SV as a predicate of possession, BP in MWE Emotion: ownership]

danga am xol

VE:2SG **to have** heart

'you are spiteful'

[BP in MWE Emotion: ownership]

(13e) **xol-u gaana** la am

heart-COT **leprous person** CE:3SG to have

'he is a cruel person' lit. 'he has the **heart of a leprous person**'

These constructions convey the same emotional situation, namely a permanent characteristic of the possessor. The general meaning of these MWEs is 'to be a person X which is (sometimes) in the emotional state A'. I call this fact 'to be a person X having an emotional disposition A'. This meaning can be represented by the following script ¹⁶where Y is the possessed BP, X the possessor and A the predicative relation between them:

One can say this about person X:

- (a) BP Y and X are one person
- (b) (Sometimes) BP Y can be like this
- (c) When BP Y is like this, person X is like this

When one thinks of Y one cannot not think of X

Because of this one can say of X:

X is (sometimes) what Y is (sometimes)

4.2. *Locus of emotion*

BP is preceded by the only locative preposition in Wolof, namely CI 'in, to, into, on, for' (see subsection 2.5. above). In (14a) below, grammaticalization of BOPP 'head' has created a prepositional group CI SA BOPP 'inside you'. However, (14b) clearly shows that in synchrony, BP is a locus of events. The preposition CI has a high potential of being combined with a BP.

(14 a) sa xel dem na ci sa bopp metti na
POSS:2SG mind to go PF:3SG LOC POSS:2SG head to be paining PF:3SG

'You thought about it'

(14 b) Ag cofeelam ci xol rekk sax doy na jëf

¹⁶ See Wierzbicka 2002, 1996 for the notion of script.

DET platonic LOC heart only even To be PF:3SG to act
 love.POSS:3SG suffi-
 ent

'His compassion is sufficient to do something'

This construction always encodes the same relation between the BP and its possessor, namely here the spatial one. This spatial relationship is permanent. The general meaning of these bodily events is 'something A happens/something Z is in the BP Y of person X' where A is the event, Z the emotion, Y is the locus of emotion, and X is the possessor of the BP.

The following script represents this meaning:

One can say this about person X:

- (a) BP Y is a part of person X
- (b) Something A can happen in BP Y/Something Z can be in BP Y
- (c) When this thing A or this thing Z is in BP Y, the same thing is in person X

When one thinks of Y one cannot not think of X

Because of this one can say of X:

The thing A/ The thing Z is (sometimes) in person X

Person X feels this thing A/B

4.3. *Emotional state*

BP is the subject of a state verb. These constructions are extremely common. The quality state verb can denote a temperature as in (13a-b), an evaluation as in (13c-d), a quantity as in (13e-f). Many emotions can be expressed: anger (13a-e), contentment (13 b-c), bitterness (13d), frustration (13f). These state events are bodily sensations from which emotions can be captured. It does not seem that a particular verb class triggers a particular emotion. For example, anger can be expressed by a collocation with HEART V_{TEMP} or by a collocation with HEART V_{QUANT}.

(15a) suma xol dafa tàng [anger with a state verb of temperature]
 POSS:1SG heart EV:3SG to be hot
 'I am angry' lit. My heart is hot

(15b) suma xol bi sedd [coolness with a state verb of temperature]
 POSS:1SG heart DET to be cold
 'I feel cool' lit. My heart is cold

(15c) sama xol bi neex [sweetness with a state verb of positive
 evaluation]
 POSS:1SG heart DET to be sweet
 'I feel sweet' lit. My heart is sweet

(15d) sama xol dafa naqari [bitterness with a state verb of negative evaluation]

POSS:1SG heart EV:3SG to be
bitter

'I feel bitter' lit. My heart is unpleasant

(15e) xolam dafa fees [bitterness with a state verb of quantity]

heart.POSS:3SG EV:3SG to be full

'He was angry' lit. his heart is full

(15f) sama xol dafa jeex [frustration with a state verb of quantity]

POSS:1SG heart EV:3SG to be finished

'I get discouraged' lit. my heart is finished

The meaning of these collocations is 'to be in an emotional state' where the meaning of BP is 'a thing X which is in a state A'. The emotional state can be captured by the meaning 'something A happens to the BP'. Note the difference with the previous type of event, namely 'something happens IN the BP'. The BPs do not have the same semantic roles in the emotional events. The 'IN events' assign to the BP the semantic role of locus while the 'TO events' assign that of theme. The relationship between the BP possessed and its possessor is that of ownership. This is encoded by the pronominal construction. The script is the following one:

One can say this about person X:

(a) Person X has something Y

(b) Something A can happen to Y

(c) When this thing A happens to Y, this thing A can happen to person X

When one thinks of Y one can think of X

Because of this one can say of X:

Person X is like this

4.4. *Emotional feeling*

These bodily events are usually related to the previous ones with the causative suffix *-al*, as in (16) and (17). *V_{QUAL}-al* becomes a causative verb and BP is in object position. Since these derivations are very productive, many emotions can be expressed which are the reverse of the examples in 4.3. above. The relationship between the BP possessed and its possessor is the same as the previous one, namely that of ownership encoded by the pronominal construction.

(16 a) dafa **tàng-al** suma xol [to cause to be angry, reverse of (15a)]

EV:3SG to be hot-CAUS POSS:1SG heart

'it **makes** me **angry**' lit. It makes hot my heart

(16 b) dafa féex-al suma xol [to cause to be cool]
 EV:3SG to be fresh-CAUS POSS:1SG heart
 'It refreshes my heart'

Causation can be inherent in the verb's meaning itself, however as in the following example:

(16 c) dafa xett xolam [to cause to be sad]
 EV:3SG to pierce heart.POSS:3SG
 'He/she/it makes him/her sad' lit. it pierced his heart'

The general meaning of this kind of bodily events is 'somebody/someone does something A to the BP', where the BP is the thing affected by the event. In contrast to the previous type of collocations however (subsection 4.3.), the emotional states are more temporary for two reasons: the verbal collocate is a punctual verb activity, and the cause of the emotion is verbalized since the verb is a causative verb. This difference needs to be noted in the semantic representation. The meaning of these collocations is 'to feel a temporary emotion A caused by someone/something Z'. Considering the same variables as for the previous emotional situations, the typical script for these emotional feelings is:

One can say this about person X:

(a) Person X has something Y

(b) Someone/ Something Z can do something A to the thing Y

(c) If someone/something Z can do this thing A to this thing Y, someone/something Z can do the same thing A to person X

When one thinks of Y one can think of X

Because of this one can say of X:

Person X feels this

4.5. Emotional attitude

These collocations are constructed around a BP in subject position plus an activity verb which can be either intransitive (see the first part of the example below) or transitive (see the second part). When it is a transitive verb, the experiencer of the emotional event is in object position.

[BP as SUBJ in emotion: part-whole]

(17 a) bu sa bët xonqee dinaa la jege
 when POSS:2SG eye to be red PRD:1SG 2SG be near

'I will be with you when you feel bad', lit. When **your eyes are** red I will be near you

(17 b) Ba waay ji demee ba
 when guy DET to go:3SG until

xolam **dal** xelam **yedd** ko
 heart.POSS:3SG to land mind.POSS:3SG **to lecture** him/her

'When his anger **subsided**, he **felt** some regrets' lit. When the guy goes until his heart landed, his mind lectured himself

The general meaning of this kinds of events is 'BP is doing something A' and the meaning of the BP is 'co-creator' of the event. I use the term 'co-creator' to emphasize the relation between the BP and its possessor. Note that most of the time, intransitive verbs are verbs of movement or motion (DEM 'to go' ÀGG 'to enter in' among others) and transitive verbs are verbs of transfer (ĒLBATTI 'to knock over') or attitude (BAÑ 'to refuse', BĒGG 'to want' and the like). This difference is significant since causation is more direct with verbs of transfer or attitudes. I propose to call emotions encoded by verbs of motion and verbs of transfer or attitude 'emotional attitudes'. The general meaning of these collocations is 'to have an emotional feeling /attitude'. The typical script of 'BP is doing something' is:

One can say this about person X:

- (a) Person X has something Y
- (b) This thing Y can do something A
- (c) When this thing Y can do something A, person X can do the same thing A

When one thinks of Y one can think of X

Because of this one can say of X:

Person X does this

To summarize the general meanings of MWEs involving BPs in Wolof, we can say that they convey a common deep typical script which is formed of three main parts. The first one marked by (a) represents the relationship between the BP and its possessor encoded by the possessive construction. The second one (b) represents the point of view adopted towards the BP. And finally, (c) represents the emotional situation. All the differences between the meanings of MWEs reside in these paraphrases.

The following section examines the semantic flexibility of BPs. This can be approached by showing that both the meaning of their collocate and the meaning of the grammatical construction in which they are involved contribute to creating a particular point of view on the BP.

5. Semantic flexibility of body part terms involved in Multiword expressions

BPs can be characterized, personified or reified through their assignment by the verbal collocate. If the collocate is a state verb, the BP is characterized. And if the grammatical construction is a compound, the BP is characterized as a kind of person because the compound contains the meanings of inalienability and permanent possession (see subsection 4.1 above). If the BP is an oblique of a verb introduced by the locative preposition, the BP is a locus (see subsection 4.2). If the BP is the subject of the collocate which is a state verb and if it is involved in a pronominal construction, the BP is characterized as the theme of the emotion (see subsection 4.3). If the BP is the object of a causative verb and if it is involved in a pronominal construction, the BP is reified (see subsection 4.4). If the BP is the subject of a motion verb or a verb of transfer, the BP is personified (see subsection 4.5).

5.1. *The set of points of view adopted on BP*

I propose here a set of points of view on BPs to capture the semantic flexibility of BPs when they are involved in MWEs denoting emotions. These points of view can be classified, depending on the perspective adopted on the BPs.

The ontological perspective: 'creator of emotion', 'kind of person/thing as an emotional situation', 'thing affected by emotion', 'place of emotion'.

The relational perspective: 'ownership relation', 'spatial relation', 'part-whole relation'.

The formal perspective: 'size of BP', 'shape of BP', 'dimension of BP', 'colour of BP'.

The functional perspective: 'participant of transfer', 'vector of movement'.

Three comments can be made here. The first is that these perspectives are not independent of each other. Most of the time, three perspectives are combined and the resulting point of view adopted on the BP is a complex one. For example, the ontological and relational perspectives are chosen by selecting a semantic role of the BP and a relationship with its possessor. These first two perspectives concern all MWEs denoting emotions. However, the formal and functional perspectives depend on the meaning of the verbal collocate: these two are mutually exclusive. There are also implications between the perspectives. For example, if the functional perspective selects 'participant of transfer', the ontological perspective will necessarily select 'creator of emotion'. The opposite occurs if the formal perspective selects 'size of BP' and if the relational perspective selects 'part-whole relation': in this case, the ontological perspective will select 'kind of person/thing'.

The second comment concerns the correlation between the emotional situation and the perspective adopted on the BP. The formal perspective is adopted only if the emotion is an emotional disposition or passive state, but not an active state or an emotional attitude. Conversely, the functional perspective is selected only if the emotion is active.

The third comment concerns the particular position of the ontological perspective. This perspective does not select only a point of view on BPs, but also conveys the core meaning of the BP. We argue that the value obtained by the ontological perspective shows the possible multiple meanings of BPs when they are involved in MWEs. A BP can have the four core meanings: 'place (of emotion)', '(psychological) thing (affected by emotion)', 'kind of person/thing (as an emotional situation)', 'being (creator of emotion)'.

5.2. Discussion

The analysis presented here draws on the semantic facets of BPs proposed by Iordanskaia 1986 and 1996 in the MTT framework. In her paper, Iordanskaia 1986 proposed a generalised semantic representation of MWEs, called ES-expressions, namely 'change Z in the body part Y as a symptom of an emotion X'. She gives examples such as '*Dux zaxvatyvaet ot vostorga* (Russian), lit. 'it cuts one's breath from ecstasy' = 'cessation of the functioning [Z] of the breathing mechanism [Y] as a symptom of anger [X]'; *Podžilki trjasutsja ot straxa* (Russian), lit. 'one's hamstrings are shaking from fear' = an excessive functioning [Z] of the legs as a symptom of fear [X]' (Iordanskaia 1986: 255).

Since the present study has also considered compounds as MWEs, we thus contend that not only changes of BP, but also their characteristics belong to the representation of emotion. This is an additional difficulty in analysing and representing the semantic of MWEs in Wolof. We have therefore introduced a significant change in the semantic representation, in which the point of view adopted on BPs plays a key role. The new representation is 'characteristic λ of the BP Y as a symptom of an emotion X'.

However, this representation is not sufficiently precise. Four types of semantic perspectives of BP encoding emotions are distinguished, namely ontological, relational, formal, and functional.

We thus obtain the following general meanings of BPs in MWEs:

'characteristic λ of the BP Y as a symptom of an emotional disposition X'

'characteristic λ of the BP Y as a symptom of an emotional place X'

'characteristic λ of the BP Y as a symptom of an emotional state X'

'characteristic λ of the BP Y as a symptom of an emotional feeling X'

'characteristic λ of the BP Y as a symptom of an emotional attitude X'

As already noted, the difference between this representation and the general representation of MWEs proposed by Iordanskaia 1986 stems from the fact that we have also considered compounds involving BPs as belonging to MWEs and denoting emotional situations. The advantage of proposing such general meanings is that this is an economic way representing the meaning of MWEs.

6. Concluding remarks

We demonstrated that the body and its parts are used in Wolof, not only to locate a person in his/her environment, but more broadly to describe the person's life, in particular his/her inner life where emotions and other mental states are prevalent. In Wolof, emotions and mental are closely connected.

We have also demonstrated that this linguistic phenomenon is a phraseology process in which collocations and compounds are clearly distinguished, both in their forms and meanings. Firstly, they do not have the same lexical use. Collocations have a clausal use while compound have a verbal or a nominal use. Secondly, they have neither the same degree of free-combination, nor the same degree of internal modification, nor the same structural analogy with other word combinations. The degree of free-combination is greater in collocations, which accept many internal modifications and have a structural analogy with other noun-verb combinations, while compounds have a structural analogy with construct forms. Lastly, they do not denote the same emotional situations: collocations tend to encode emotional and other mental actualized events, while compounds encode emotional dispositions.

These different formal properties and the different grammatical constructions have formed the basis for the analysis of the general meanings of MWEs involving BPs and denoting emotions. We have proposed typical scripts based on Natural Semantic Metalanguage to represent these emotional situations. We have defined five general emotional situations encoded by MWEs, namely 'emotional disposition', 'emotional place', 'emotional state', 'emotional feeling', 'emotional attitude.'

Finally, we have explored the semantic flexibility of BPs afforded by MEWs. A set of semantic points of views on BPs has been introduced, selected by the perspectives conveyed by the meaning of MWEs. The theoretical status of these points of views and perspectives remains to be established. We have proposed a new representation of the meaning of MWEs involving BPs and denoting emotions.

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