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Deictic space in Wolof: discourse, syntax and the importance of absence

Stéphane Robert

CNRS-LLACAN, INALCO, Université Paris 7*

Abstract

The role of deictic reference in Wolof is particularly interesting for two reasons. First, it permeates the entire system of the language (in noun determination, predication and subordination). Second, this language has a suffix which indicates the absence of localization in the space of the speaker – which plays a special role in the construction of various relationships of syntactic dependency. Thus, in Wolof reference depends on a dual mechanism of spatial anchoring: (1) in order to become definite, an object must necessarily be situated in the speaker's space (physically near or far); (2) if the object is indicated as not being localized in the speaker's space, it necessarily depends syntactically on another constituent indicating the situation in which it is validated. We propose to describe the various uses of these spatial suffixes as well as the specifically linguistic mechanisms that they bring to light, such as the links between deictic anchoring, predication and syntactical dependency, and more generally the central role played by the speech situation.

Introduction

In his efforts to summarize and renew a long tradition of research on linguistic space, Levinson (2003) has shown that three kinds of frames of reference are used in languages for locating an entity, namely (1) the intrinsic frame of reference – in which the coordinates are determined by the inherent features of the object serving as referent (cf. *He's in front of the house*: the house has an intrinsic orientation defining its front part); (2) the relative or anthropocentric frame of reference, where the coordinate system is based on an external viewer or point of view (*He's to the left of the house*: the left of the house is defined relative to the speaker's position), and (3) the absolute frame of reference using fixed bearings such as the cardinal points (*He's north of the house*). When the point of view used as the frame of reference is the speaker, the relative frame of reference is also called “egocentric” or more commonly “deictic”.

* Centre National de la Recherche Scientifique, Unité “Langage, Langues et Cultures d’Afrique Noire” ; Institut National des Langues et Civilisations Orientales.

More generally, “deixis concerns the way in which languages encode or grammaticalize features of the context of utterance or speech event, and thus also concerns ways in which the interpretation of utterances depends on the analysis of that context of utterance” (Levinson 1983: 54). Whether it is defined as the space of the speaker or as the spatial component of the situation in which the utterance is produced, this deictic space is of particular interest because, through this anchoring of speech in a specific time and place, language is related to the extra-linguistic world: the deictic system is therefore one of the interfaces of language with spatial non-linguistic systems. In fact, since the world is experienced by human beings through the inescapable prism of body and physical perception, certain traditions (from Kant to cognitive grammars) consider that the human body is the source of all our notions of orientation and direction. However, according to Levinson (2003: 24) this could be “a major ethnocentric error”.¹ As a matter of fact, concerning linguistic systems at least, various authors (Adelaar 1997; Ozanne-Rivierre 1999; Levinson 2003) have revealed that surprisingly many languages never use the anthropocentric frame of reference to locate an object, even on a small scale. For instance, in Malagasy (an Austronesian language), instead of saying “the book which is on your right”, one says “the book which is north (or south) of the table” (Ozanne-Rivierre 1999: 74). In this chapter² I would like to present the case of a language where, conversely, reference to deictic space (or deictic anchoring) is omnipresent and spans almost all the categories of the language. Wolof is a Niger-Congo language mainly spoken in Senegal. It is an interesting language in a typological sense because of its pervasive use of three deictic suffixes in various linguistic categories such as noun modifiers, relative pronouns, prepositions, adverbs, verb conjugations, subordinating conjunctions, and negation. Spatial reference therefore plays a central part in the linguistic system of this language. By various means, Wolof uses the different kinds of frames of reference described by Levinson but the deictic system is remarkably grammaticalized in this language. As a result, the anthropocentric or more precisely “egocentric” frame of reference plays a special role.

Through the presentation of this “extreme” case, I also intend to question the nature and role of deictic space in language, and to show how deictic anchoring can become a linguistic tool used at different syntactic levels for specifically linguistic operations, such as subordination and predication. As a counterpart to the obligatory location of an object in the deictic space, one aspect of spatial reference appears then to be particularly important and is the source of various linguistic operations: the construal of the “absence” or non-localization of an entity in deictic space. According to the syntactic scope of the suffix indicating this “absence in the present situation”, the non-localization of the entity in deictic space will display various values, including indefiniteness, negation, future, and hypothesis.

1. Deixis in noun modifiers

Wolof has three spatial suffixes specifying the location of an entity in the speaker’s spatial sphere (Sauvageot 1965: 77-80). Most of the linguistic systems employing deictic spatial

¹ For a discussion of Levinson’s positions, see Dokic and Pacherie, in this volume.

² This chapter is largely based on a previous study presented at the 16th International Congress of Linguists in Paris (cf. Robert 1998).

morphemes (Diessel 1999) are either binary, with an opposition between proximal and distal (like *this* and *that*, *here* and *there*) or ternary, with an additional medial term; they may also yield a distance-neutral term like the German pronoun *dies* (“this/that”). The Wolof system, however, is original in that the third term of the set is neither medial nor neutral, but indicates that the designated entity is “not localized” in the space of the speaker:

Table 1

Deictic suffixes in Wolof

-i	proximal
-a	distal
-u	not localized (or absent) in the deictic space

1.1. The article: definiteness and localization

First and foremost, deictic suffixes are used for the formation of noun modifiers, and primarily for the definite article. Wolof is a language based on classes. There are ten classes in all, which can be subdivided into eight classes for singular and two for plural. The class morphemes are found in the form of a consonantal affix *C-* which cannot stand alone: *k-*, *b-*, *g-*, *j-*, *w-*, *m-*, *s-*, or *l-* for singular; *y-* or *ñ-* for plural. The definite form is placed after the noun and constructed by means of the (consonantal) class morpheme, to which is suffixed an indicator of determination in relation to the space of the speaker. Depending on the distance separating the element and the speaker, the result will be either a proximal definite value (formed with the suffix *-i*), or a distal definite value (formed with the help of the suffix *-a*). Thus for *xaj* “dog” (class *b-*) and *nit* “human being” (class *k-*), we will have:

- (1) a. *xaj bi / ba* ‘the dog close to / far away from the speaker’
 b. *xaj yi / ya* ‘the dogs close to / far away from the speaker’
 c. *nit ki / ka* ‘the person close to / far away from the speaker’
 d. *nit ñi / ña* ‘the persons close to / far away from the speaker’

The specification of proximity or distance relative to the speaker is obligatory and it is combined with the indication of definiteness. Wolof is therefore a language where one cannot refer to a specific object without specifying its position in the space of the speaker. Although not systematically present or identical, the uses of such a set of deictic morphemes are also found in other languages of the same Atlantic group, such as Sereer (Faye 1983), Palor (Sauvageot 1992) or Fula (Hilaire 1995), noticeably combining deictic location with definiteness (Sauvageot: *ibid.*).

The importance of deictic space in Wolof is also shown by the fact that the localizing preposition (*ci/ca*) is employed with these affixes and is sensitive to the indication of proximity/distance relative to the speaker:

- (2)a. *ci néeg bi*
 in-PROX room the-PROX³
 ‘in the room (close to me)’
- b. *ca néeg ba*
 in-DIST room the-DIST
 ‘in the room (far away from me)’

When asked about the (spatial) extent of proximity, Wolof speakers indicate that what is considered as being close to the speaker is what is “immediately verifiable”. This interesting remark is a first indication regarding the nature of the deictic *origo*, and allows us to make the claim that the ultimate definition of deictic space is modal.

The deictic affixes are also used in the formation of the demonstratives in Wolof. I shall not go into the details of this extremely rich system (*cf.* Sauvageot 1965; Diouf 2001), but it is worth noticing that the system of demonstratives includes the addressee as a second reference point. Remarkably, the addressee’s proximal form is also the anaphoric demonstrative. There are therefore two variables in the system of demonstratives: (1) proximity/distance and (2) location relative to the speaker or to the addressee – with the former case (the speaker serving as reference point) being the more prevalent:

Table 2
 The basic demonstratives of Wolof

<i>Reference point: the speaker</i>	<i>xaj bii</i> (~ <i>bile</i>) ‘this dog (close to me, wherever you are)’	<i>xaj bale</i> (~ <i>bee</i>) ‘that dog (far away from me, wherever you are)’
<i>Reference point: the addressee</i>	<i>xaj boobu</i> - ‘that dog (close to you and far away from me ≠ <i>bii</i>)’ - ‘the dog in question’ (anaphoric demonstrative)	<i>xaj boobale</i> ‘that dog (far away from both of us, but closer to you than to me)’

These spatial affixes – with the same values – are also at work in the formation of the spatial demonstrative adverbs *fii* (“here”), *fale* (“there”), *foofu* (“the place we mentioned”), *foofale* (“over there”), and the adverbs of manner *nii* (“so, in this manner with a nuance of proximity), *nale* (“in that manner”), *noonu* (“in the manner in question”).

1.2. The morpheme (-u): spatial indeterminacy and syntactic dependency

In addition to this combination of spatial anchoring and definiteness, the originality of the Wolof system lies in the role of the third spatial affix *-u*. This affix indicates that the object

³ A list of abbreviations can be found at the end of the chapter.

referred to is *not localized* in the space of the speaker, but this spatial indeterminacy does not simply correspond to indefiniteness. Nor is it simply neutral with respect to deixis. The combination of the classifier (creating the individuation of the object referred to) with *-u* (specifying its absence in the deictic space) does not result in the indefinite article,⁴ but rather an *incomplete* indefinite phrase: **xaj bu* used alone is impossible because it is incomplete and requires an additional specification. In fact, the noun modifier *C+-u* functions as the indefinite relative pronoun (cf. 1.3.):

- (3) **xaj bu* → *xaj bu...*
 dog the-NOT.LOC dog the-NOT.LOC...
 ‘a dog which...’

Thus the absence of localization in the speech situation functions as a lack of specification, creating a syntactic dependency. Surprisingly at first, this affix does belong to the deixis paradigm, as we will demonstrate.

1.3. From connective to relative clause and interrogation

At the level of noun determination, the morpheme indicating spatial indeterminacy has basically the role of a relator. For this reason, it is above all used as a connector when it directly associates two nouns:

- (4) a. *fas-u* *buur*
 horse-CONN(= NOT.LOC) king
 ‘(a) king’s horse’
- b. *mag-u* *Moodu*
 elder.brother-CONN(= NOT.LOC) Moodu
 ‘Moodu’s elder.brother’

When it is suffixed to a classifier, it allows the creation of a qualifying clause, all the while attributing an indefinite status to the noun thus determined:

- (5) *xale bu jigéen*
 child CLASS-NOT.LOC woman
 ‘a child who (is) a girl’ = ‘a girl’

In (5) it is followed by a noun, but it can just as easily introduce a verb and then functions as an indefinite relative pronoun – as can be seen in examples (7) and (8). The classifier carrying a suffix indicating indeterminacy relative to the speaker’s space serves to construct an indefinite relative clause: the proposition introduced by a subordinating relative ending in *-u* is specified as not being localized in relation to the utterance context.

⁴ In addition to the zero form, Wolof has an indefinite article formed with *a*, to which the classifier is suffixed: *ab xaj* ‘a dog’. Nowadays, this indefinite article tends to be replaced by the cardinal ‘one’: *benn xaj* ‘one/a dog’.

(6) Definite article

dama bëgg piis bi / ba
 VB.FOC1SG want piece.of.cloth CLASS-PROX / CLASS-DIST
 ‘I want **the** piece of cloth (nearby)’ / ‘**the** piece of cloth (far away)’

(7) Indefinite relative

dama bëgg piis bu xonq
 VB.FOC1SG want piece.of.cloth CLASS-NOT.LOC be.red
 ‘I want **a** piece of cloth **which** is red’⁵

Moreover, this non-localization of an element in relation to the speaker’s space takes on different referential values depending on the presence or absence of a previous element which can serve as a *situational anchoring point*. Thus, if the main clause precedes the relative clause containing the *-u* morpheme, as in example (8), the relative pronoun refers to an indefinite house, but it has a precise referential value. Its principal characteristic consists in the fact that it is not localized in relation to the utterance context, but attached to the context of the main clause. However, if no context has been previously specified, the pronoun which is associated with an indefinite noun assumes a generic value as in examples (9) and (10). Finally, if there is neither a previous context nor a main clause following the relative clause, the latter corresponds to a question (example 11).

(8) Indefinite relative

Seetiwoon naa kër gu Ablay jënd
 visit-PAST PFT1SG house CLASS-NOT.LOC Ablay (AOR3SG⁶) buy

(9) Generic relative

Ø *Kër gu Ablay jënd, mu tuuti*
 house CLASS-NOT.LOC Ablay buy AOR.3SG be.small
 Ø ‘**Any** house **that** Ablay buys is (always too) small’

⁵ There are no adjectives in Wolof: the terms corresponding to adjectives in the translation are stative verbs.

⁶ The third person Aorist appears here (and in the following examples) in its zero variant form (cf. Robert 1991: 199). We contrast this with example (19) in the second person where the morpheme is readily apparent.

- (10) Generic relative having a gnomic value
 Ø **Ku** *yàgg dox, yàgg gis*
 CLASS.- NOT.LOC last walk, last see
 Ø 'He who (= **any man who**) walks a long time sees many things'
 (Traveling confers experience)
- (11) Interrogation
 Ø **Ku** *jël saabu bi?* Ø
 CLASS.- NOT.LOC take soap the-PROX
 Ø '**Who** took the soap?' Ø

In fact, *wh-* question words are formed by means of the classifiers and the (*-u*) affix of spatial indeterminateness, literally meaning “the one which is not localized in my space”: *ku* “who?”, *lu* “what?”. This is also true for the two adverbial classifiers: the locative classifier (*f*+spatial suffix) and the one indicating manner (*n*+spatial suffix), which are both deictic in nature but which acquire an interrogative value when affixed with *-u*: *fi/fa/fu* (“here”/“there”/“where?”), *ni/na/nu* (“in this manner”/“in that manner”/“how?”).

- (12) *Nu* *mu sant?*
 manner-NOT.LOC (= how) AOR3SG be-named
 ‘What’s his name?’ (lit. ‘how is he named?’)

At this point we suggest the following conclusion concerning constraints on deictic anchoring in Wolof. First, if an argument refers to a definite object, it has to be located in the space of the speaker as close (*-i*) or remote (*-a*). Second, if it is specified as being not located in the space of the speaker, it is both indefinite in the situation of utterance and syntactically dependent on another component. Depending on the presence or absence of a preceding situation that serves to localize the complement (main clause), the clause containing this ‘non-located’ argument is an indefinite relative clause with a referential value, a generic relative clause, or (if there is no main clause) an interrogative clause. In this last case, we can say that the absence of object localization creates a discursive dependency – in the form of an expectation toward the addressee to provide a localization for this object – hence its interrogative value.

1.4. Relative pronoun: from indefinite to definite

In order to form the definite relative pronoun, one adds the definite modifier (cf. 1.1.), which is normally placed after the rest of the phrase (13 and 14).

- (13) Definite relative (for an object nearby)
dama bëgg piis [bu xonq] bi
 VB.FOC1SG want piece.of.cloth CLASS.-u be.red CLASS-i
 ‘I want **the** piece of cloth (nearby) **that** is red’
- (14) Definite relative (for an object far away)
dama bëgg piis [bu xonq] ba
 VB.FOC1SG want piece.of.cloth CLASS.-u be.red CLASS-a
 ‘I want **the** piece of cloth (far away) **which** is red’

From this point of view, there is an interesting difference in Wolof between dynamic verbs and stative verbs – or more precisely between verbs expressing a quality, on the one hand, and verbs expressing an event-type predication (action verb) or a localization (transitive stative verbs), on the other hand (Robert 1991: 307-308). Finally, when dealing with a definite relative pronoun, the structure of the relative clause is not the same for these two types of verbs. As can be seen in table 3, action verbs require – at the level of the relative pronoun – anchoring in relation to the situation of utterance, so that we find the suffix *-i* or *-a*. This phenomenon can be explained by the semantics of these verbs: action verbs designate an *event* which constitutes a new situation and which therefore implies specific anchoring in time and space. In contrast, stative verbs predicating a quality do not define a new situation with a specific space-time reference: quality has already been posited in the situation defined by the main clause, and thus we find the suffix *-u* corresponding to a situational anaphor.

Table 3
The structure of relative clauses according to verb type

<i>Dynamic verbs (and transitive stative verbs indicating localization)</i>	
Indefinite Relatives =	Classif.- u + action verb (16)
Definite Relatives =	Classif.- i + action verb* (18)
<i>Stative verbs (qualification)</i>	
Indefinite Relatives =	Classif.- u + qualifying verb (15)
Definite Relatives =	Classif.- u + qualifying verb + [Classif.- i] (17)

* Some speakers evoke the possibility of adding the definite (Classifier+i) after a definite relative, by using an action verb. This phenomenon probably indicates a tendency to make the structure of action verb relatives correspond to that of stative verbs.

- (15) Indefinite relative: stative (qualifying) verb
dama bëgg piis bu xonq
 VB.FOC1SG want piece.of.cloth CLASS.-u be.red
 ‘I want **a** piece of cloth that is red’
- (16) Indefinite relative: action verb
xam na xale bu dem Tugël
 know PFT3SG child CLASS-u go France
 ‘He knows **a** child who has gone to France’
- (17) Definite relative: stative (qualifying) verb
dama bëgg piis bu xonq bi
 VB.FOC1SG want piece.of.cloth CLASS.-u be.red CLASS.-i
 ‘I want **the** piece of cloth that is red’
- (18) Definite relative: action verb
xam na xale bi dem Tugël

know PFT3SG child class-i go France
 ‘He knows **the** child who has gone to France’

- (19) Definite relative: transitive stative verb (localisation)
Nanu dem ci dëkk bi nga xam
 OBLIG1PL go to town CLASS-i AOR2SG know
 ‘Let’s go to **the** town that you know’

1.5. From space to time and to discursive space

Like most deictic terms (Diessel 1999; Lenz 2003), the deictic suffixes of Wolof can express at the same time proximity/distance in space (examples 20 and 21), in time (example 22), but also in the space of discursive context (examples 23 and 24).

- (20) Space (nearby)
Kër gi Ablaye jënd
 house CLASS-i Ablaye buy
 ‘The house (nearby) that Ablaye bought’

- (21) Space (distant)
Kër ga Ablaye jënd
 house CLASS-a Ablaye buy
 ‘The house (distant) that Ablaye bought’

- (22) Time (distant)
Kër ga Ablaye jënd-oon
 house CLASS-a Ablaye buy-PAST
 ‘The house (whether distant or not) that Ablaye **had** bought’

The morpheme *-i* is compatible with the past marker (*-oon*): the relative pronoun then refers to an “element in the past that has been mentioned recently”:

- (23) Proximity in the discursive context
Xale bi ma gis-oon, ndekete sa rakk la.
 child CLASS-i AOR1SG see-PAST, in.fact your younger.brother COMP FOC3SG
 ‘The child that I saw (*and have just mentioned*), is in fact your younger brother’

- (24) Distance either in space or in the discursive context
Xale ba ma gis-oon, ndekete sa rakk la.
 child CLASS-a AOR1SG see-PAST, in.fact your younger.brother COMP FOC3SG
 ‘The child (distant) that I had seen *over there*, is in fact your younger brother’
 ‘The child that I had seen (*and had mentioned previously*), is in fact your younger brother’

2. Changing scale: deixis in predication and in temporal subordinate clauses

We have thus far seen the uses of deictic affixes in noun modifiers, pronouns, and adverbs. However, in Wolof reference to deictic space is not limited to nominal reference, but is also at work in different linguistic components and pervades different syntactic levels: first, the deictic

suffixes of Wolof have predicative uses in different conjugations; second, they are used in combining clauses, namely in the formation of temporal and hypothetical subordinating conjunctions.

2.1. *Deixis and predication: presence and absence, current events and negation*

In their predicative function, (a) the deictic affixes expressing a location in the space of the speaker are used to form a conjugation indicating what the current situation is (current present tense), while (b) the affix indicating non-localization in the space of the speaker is used for negation, both in negative conjugations and in negative affixing. We might also identify (c) the passive-reflexive suffix (-*u*) with the spatial (-*u*) affix, but this explanation is more tentative.

2.1.1. *The “presentative” conjugation*

The endings -*i* and -*a* are in fact also used for the conjugation called the “Presentative” which presents a complex structure with an inflected component followed by the morpheme *ng-*, to which is added a suffix indicating a spatial determination. This conjugation is equivalent to a current present tense and implies that the process is taking place during speech time, either near (-*i*) or far from (-*a*) the speaker (examples 25 and 26).⁷

(25) *mu.ngi* *dëkk ci* *dëkk bi*
 PRES3SG-PROX live in-PROX town CLASS-PROX
 ‘(at present) he is living in the town nearby’

(26) *mu.nga* *dëkk ca* *dëkk ba*
 PRES3SG-DIST live in-DIST town CLASS-DIST
 ‘(at present) he is living in the town far away’

The reader will readily note the coherence of the system, since the morpheme indicating spatial determination is found at the same time in the structure of the verb (*mu ngi/mu nga*), in the preposition (*ci/ca*), and in the noun determiner (*bi/ba*). It can also be seen that the clue to spatial indeterminacy -*u* is not possible with this conjugation,⁸ which specifically indicates a coincidence between the time-space coordinates of the process and those of the utterance (27). One nonetheless finds this -*u* in the anaphoric suffix -*oog(u)*⁹ which can be affixed to the Presentative (28 and 29):

(27) **mu.ng-u*

⁷ For more details on this conjugation, and more generally on the verbal system of Wolof, see Robert 1991.

⁸ My colleague Jean-Léopold Diouf has mentioned to me an interesting archaic form combining the proximal form of the Presentative with a rare form of negative demonstrative *fuu*: *Mu.ngi fuu de* ! ‘He is in fact here (but I don’t know where)’.

⁹ See the anaphoric demonstrative in Table 2.

PRES3SG-NOT.LOC

- (28) **mu.ng-oog** toog
 PRES3SG-ANAPHOR sit
 ‘There he is sitting (the man who I was just speaking of)’

- (29) *Nangu-wul-oon topp waxi waajuram, tey mu.ng-oog*
 accept-NEG-PAST follow word-CONN parent-POSS to.day PRES3SG-ANAPHOR
 ‘He didn’t want to listen to the advice of his father, and now look where he is!’

However, it is interesting to note that *-u* is used in a predicative function to form *negation*.

2.1.2. From absence to negation (*-u*)

The morpheme *-u* is used to form negation (as a suffix for negation and negative conjugations). As expected from our analysis, the verbal process with *-u* (to which is added here the spatial suffix) is interpreted as being *non-localized* in the utterance situation, and is therefore *not true* (*not the case*) at the moment of speech.¹⁰

- (30) *Feccuma* (Negative conjugation, completed action)
 dance.NEGACC1SG
 ‘I am **not** dancing (at present)’
- (31) *Duma naan* (Negative Emphatic conjugation)
 NEGEMPH1SG drink
 ‘I do **not** drink (I never drink)’

- (32) *Maa naan-ul* (Negational suffix *-ul*)
 SUBJ.FOC1SG drink-NEG
 ‘I’m the one who did **not** drink’

2.1.3. The passive-reflexive suffix *-u*

Finally, one might well wonder whether the same morpheme *-u* is found in the formation of the suffix which has a passive/reflexive meaning:

- (33) *sang* ‘to shower’ → *sang-u* ‘to wash oneself, to take a shower’
yar ‘to educate, to raise’ → *yar-u* ‘to be (well) raised, to be polite’

The difference in *scope* of *-u* may explain these two uses as negation and as reflexive:

- in the case of negation, *-u* applies to the verb in its predicative function: the verbal process is not localized at the moment of speech, and is therefore *not true* (*not the case*)
- in the case of a passive-reflexive structure, *-u* is suffixed to the verbal *lexeme*. The spatio-temporal indeterminacy no longer applies to the predication, nor to the modality of assertion. The verbal process is validated (according to the means expressed by the conjugation), but it lacks the syntactic relation between subject and object (there is no localization relating subject and object). The spatial indeterminacy entails in this case an agentive reflexivity, or a kind of

¹⁰ For more details on the complex system of negation in Wolof, see Robert 1990.

reflexive “looping” of the verbal process back onto the situation created by the primary actant, i.e., the subject.

2.2. Temporal and hypothetical subordinate clauses

Spatial markers are also used to form temporal and hypothetical subordinate clauses. When suffixed to the subordinating morpheme *b-*,¹¹ the three spatial markers introduce respectively *bi*, a subordinate clause situated in the recent past close to speech time; *ba*, a subordinate clause situated in the remote past, far removed from speech time; and *bu*, a subordinate clause situated in a future moment yet to come or in a hypothetical moment.

The relationship of anteriority or of simultaneity between the main clause and the subordinate is moreover marked by the suffix indicating anteriority (*-ee*) or incompleteness (*-y*) attached to the verb of the subordinate clause (Perrin 2005). What is remarkable in this system is that these spatial affixes directly link the temporal subordinate clause to the speech situation while constructing a link with the main clause (via the subordinating morpheme *b*). As for the verbal suffix *-ee/-y*, it specifies the nature of the relation between the clauses (anteriority or simultaneity).

Table 4
The temporal and hypothetical subordinating conjunctions

<i>bi</i>	“when”	moment of the recent past close to moment of utterance (34)
<i>ba</i>	“when”	moment of the past far removed from moment of utterance (35)
<i>bu</i>	“when”	moment in the future (36)
	“if”	hypothetical moment (37)

- (34) *Def na ko bi mu nów-ee*
do PFT3SG OPR when-PROX AOR3SG come-ANTER
‘He did it when he came (moment close to the “now” of uttering)’

¹¹ The morpheme *b-* is functionally different from the classifier used to form the definite because it never varies morphologically (it always takes the form *b-*) and moreover appears at the head of a syntactic group. If this is still a classifier, its subordinating virtues can be explained by the fact that the classifier marking determination appears here *at the head* of the clause (and not after an element that it determines, as is the case with the definite) and therefore specifies the subsequent main clause with the clause it introduces.

- (35) *Def na ko ba mu nów-ee*
do PFT3SG OPR when-DIST AOR3SG come-ANTER
'He did it when he came (moment far removed from the "now" of uttering)'
- (36) *Bu dem-ee dëkk ba, na jënd ma*
when-NOT.LOC go-ANTER town CLASS-DIST OBLIG3SG buy me
piis-u mailus
piece-CONN blue.cloth
'When he goes to town, have him buy me a piece of blue cloth'
- (37) *Dinaa ko ko wax bu / su¹² ñów-ee*
FUTUR1SG IOPR OPR tell if come-ANTER
'I'll tell him if he comes'

3. The pivotal role of the speech situation in language

3.1. The semantics of the deictic suffixes

Concerning nominal determination, we have seen that spatial indices have two functions which are linked: they help situate an entity in the space of the speaker; moreover, they express the definiteness of the object thus determined. Remarkably, the absence of localization in the speaker's space not only signals indefiniteness, but also creates a syntactic dependency on what follows, because one expects additional determination. When suffixed directly to a noun, *-u* functions as a connector and introduces a noun complement; when suffixed to a classifier, it introduces a noun (as a qualifying phrase), a relative clause, or an interrogative in the absence of a second predicate. Thus, *-u* either introduces a phrase that is dependent on the noun preceding it and that serves to determine it or it serves to construct a kind of discursive dependency (interrogation). In these various uses, the absence of spatial localization marked by the morpheme *-u* constructs a syntactic dependency that will assume different values, according to the nature of the terms it associates.

Table 5
The role of absence at the nominal level

<i>-u</i>	- connector (links two nouns)
	- indefinite relative (links a clause to an antecedent noun)
	- generic relative (1st clause with no antecedent, followed by 2nd clause)
	- interrogative pronoun (no antecedent, no clause following)

At the predicative level, we have seen that affixes indicating proximity or distance in relation to the speaker make it possible to use a morpheme marking 'current' present tense: thus, if it is true that a particular object must be located in the speaker's space in order to be definite, in the

¹² In this hypothetical use, *bu* has a variant form *su*.

same way an event that defines the current situation must be located in the same deictic space. At the syntactic level, however, the absence of localization in the speaker's space defines the negation of the verbal process.

With respect to relations between clauses, spatial indices are used to construct temporal relations, by situating events once again in relation to the temporal space of the speaker. The absence of localization in deictic space-time then gives the subordinate clause a modal sense (possibility, future, hypothesis), which tends to show that possibility and hypothesis are conceived of as situations situated on another plane than that of the speech situation.

We can summarize the uses of these three spatial indices as a function of their role as noun determiners, predicative and subordinating markers, as follows:

Table 6
Semantics and uses of deictic affixes in Wolof

<i>Localization (in space, time or discourse) relative to the speaker</i>			
	proximity	distance	absence
	<i>-i</i>	<i>-a</i>	<i>-u</i>
Noun	proximal definite	distal definite	indefinite relative/interrogative
Predicate	proximal present	distal present	negation/passive
Subordination	close past	remote past	future/hypothetical

3.2. *Deixis and the pivotal role of situation of utterance in language*

Among the linguistic categories involving space, deictic space plays a special role in language use as part of the system of deixis. Deixis was defined by Lyons (1977: 637) as “the location and identification of persons, objects, events, processes and activities being talked about or referred to, in relation to the spatio-temporal context created and sustained by the act of utterance and the participation in it”. In other words, the relation of the utterance to its spatio-temporal context is the basis on which its referential value is constructed. The deictic terms, also called ‘shifters’ by Jakobson (1957) or indexicals in the tradition of logic (e.g., Kaplan 1989), have this special property of acquiring their reference in the situation where they are uttered: *now* refers to the precise moment when I say *now*. But, as expressed by Lyons, there is more to it than this: deictics determine the referential value of whole sentences. More generally, deixis in language was well described by Culioli (1990, 1995), whose analysis allows us to give an elegant account of the system found in Wolof.

It is well known that deixis has three components: personal (*I/you*), temporal (*now/then*), and spatial (*here/there*). As described by Culioli, these components make up a system of variables or coordinates in which the speech situation functions as the *origo* from which referential values are computed. Culioli has added another fundamental principle: for any utterance to be complete and well formed, it must be related to the speech situation, i.e., to the parameters which define the personal and spatio-temporal coordinates of the utterance (Culioli 1971, 1978, 1990). The situation in which sentences are validated must be specified in terms of a *site* or

anchoring point. This situation is defined in relation to the cardinal speech situation as being identical (i.e., present) or different (past or future). As we shall see, this principle allows us to explain the connections found in Wolof between deictic space and the space of syntactic dependency. Utterances are always anchored, whether this deictic anchoring is explicit or implicit. By default, an utterance that is unmarked with respect to person and time – as can be found in Chinese (one can respond to a question simply with the verb ‘come’, with no indication of tense or of subject) – can only be interpreted in one of two ways, as indicated by the discursive structure as follows: by anaphoric means (the verb ‘come’ is then anchored in the situation defined in the previous utterance, meaning “he is coming”, “he came”, or “he will come”); by deictic means (the time and the subject are those of the situation of utterance, and ‘come’ means “I’m coming”).

The speech situation that serves as the cardinal referential framework for the utterance can be defined by two parameters (Culioli 1971 and 1990):

(1) the subject-utterer (the entity that is responsible for speech content and that serves as the source of modal values);

(2) the spatio-temporal reference coordinates of utterance (time and place of utterance).

The situational anchoring that is necessary for the construction of an utterance can be defined in terms of the relation between the speech situation (Sit_0) and the denoted situation (Sit_2) defined by particular personal and spatio-temporal coordinates. Culioli has defined three types of relations between (Sit_2) and (Sit_0):

- the space-time of the denoted situation can be **identified** with the space-time of the utterance (identification value); this relation is expressed by the suffix **-i** of Wolof, which situates an object in a space identified with the speaker's space;
- the space-time of the denoted situation can be defined as **different** from the space-time of the utterance (differentiation value); this relation is expressed by the suffix **-a**, which situates an object at a distance from the speaker, i.e., in a space and/or time different that is different from the speaker's;
- the denoted situation and the speech situation can also be related in a third way: in this case there is a **break** between the space-time of the process and the space-time of the utterance (absence of localization: the suffix **-u**). Thus, the process is not validated in the space of the utterance; it is neither past nor present, it does not belong to the speaker's field of experience, it is situated ‘on another plane’ than that of the utterance (e.g., it may be a hypothesis).

Table 7

The different types of situational anchoring

Sit_0 : situation of utterance (deixis: space-time, speaker)	
Sit_2 : situation of the process (space-time and subject of the process)	
(Culioli 1978)	
-i : $Sit_2 = Sit_0$	identification between the two situations
-a : $Sit_2 \neq Sit_0$	differentiation between the two situations
-u : $Sit_2 \omega Sit_0$	break between the two situations (the process is situated on another plane)

This third type of relation includes different cases. From the temporal point of view, they include utterances that have a gnomic value, historical texts, tales (as opposed to narrations for which the utterer-speaker is responsible), but also hypotheses. I claim that the uses of the Wolof suffix *-u* correspond to this third type of case. Furthermore, by virtue of the need for a localization relative to the situation, the suffix *-u* which marks indeterminacy (and therefore also the absence of localization) in the speaker's space entails at the same time a syntactic dependency and a "situational anaphor" (Robert 1996). As a result, the noun or the process that is determined in this way is then attached to the situation in which the term governing it is situated. From the point of view of nominal determination, *-u* marks indefiniteness and syntactic dependency; in other words, indeterminacy relative to the speaker's space simultaneously constructs an indefinite determination and a syntactic link of dependency between the clause (or the noun) introduced in this way and the clause (or the noun) that it determines. From the point of view of situational anchoring, *-u* marks either a situational anaphor, if the element it determines can be attached to the preceding situation, or a generic or interrogative meaning, if no clause precedes the one introduced by *-u*. The absence of localization for the object creates a discursive dependency in the form of an expectation which is directed toward the addressee; the speaker needs to provide a localization for this object, hence its interrogative value.

3.3. *The role and syntax of absence (and the syntactic scope of -u)*

Reasonably, the various semantic values of the morpheme *-u* can be explained by the variable syntactic scope of spatial indeterminacy and therefore by the morphosyntax of this morpheme. Here we are dealing with a morpheme which presents what I have termed a *fractal functioning* (Robert 2004): this morpheme functions on different syntactic scales (or levels), and at the same time as it undergoes a 'stretching' of its syntactic scope, it presents a similar semantic structure through its various uses.

Thus, when indeterminacy applies to an argument, it functions as a connector, a relative or an interrogative pronoun (depending on the nature of what follows it, noun or clause). When the indeterminacy is temporal, it functions as a subordinating marker with a possible, future or hypothetical meaning. Finally, when indeterminacy applies to the verb, we have a passive-reflexive if the scope of *-u* is the verbal lexeme, and a negation if the scope of *-u* is the predication.

Table 8
The scope and uses of *-u*

<i>-u</i> : absence of localization in the space-time of the utterance	
Scope	Function
Dependence	- connector (of noun complement) - indefinite relative - interrogative pronoun - subordinating marker indicating future - subordinating marker indicating hypothesis
Predication	- negation - passive-reflexive suffix

on an argument	- connector, relative, interrogative marker
on the temporal anchoring	- future or hypothetical subordinating marker
on the verb	
- as a verbal lexeme	- passive-reflexive (for an object not localized in Sit ₂)
- as a predicate	- negation (for a process not localized in Sit ₀)

Conclusion

Spatial markers in Wolof are of great typological interest, since this language is permeated throughout its nominal and verbal system by the indication of spatial determination relative to the speaker. This system is also of great interest from a cognitive point of view, as it gives us an example of a language in which syntactic relations are largely defined by the anchoring (or the absence anchoring) in deictic space. This deictic anchoring is used over and over again at various syntactic levels where it assumes each time properties that are specific to each level (nominal determination, predication, or subordination). The functioning of spatial indicators in Wolof reflects the existence of organic links between location in space and the organization of syntactic relations within the utterance.

Thus the example of Wolof reveals the central role of the speech situation in the construction of referential values for the utterance. The category of deixis in language, far from being limited to a simple indexing of the physical environment, is organized around a subject-utterer (created by the point of view of the speaker) that functions as an abstract reference point serving as a point of origin in a sophisticated system of localizations. It is by means of this point of origin that representations shared by the utterer (speaker) and co-utterer (addressee) can be constructed. The absence of localization in the space of the speaker is a fundamental corollary to this system of localization, conferring to it a certain referential strength by allowing speakers to talk about what is absent in the deictic space. As pointed out by Cabrejo-Parra (1992), the emergence of deixis *in absentia* is the condition for the emergence of syntax. Deixis is seen as the first level of linguistic abstraction, which makes it possible to go beyond the stage of pointing and also allows language to detach itself from physical reality. “Deixis does not limit itself to situating discursive objects in a supposedly external, intangible and real situation; its essential role is to structure this situation by allowing it to function linguistically, that is to say, formally”¹³ (Achard 1992: 592).

Abbreviations

ANAPH	anaphoric suffix
ANTER	anterior suffix <i>-ee</i>
AOR	aorist conjugation

¹³ “La deixis ne se borne pas à situer des objets de discours dans une situation supposée externe, intangible et réelle, elle a pour rôle essentiel de structurer celle-ci en lui permettant de fonctionner linguistiquement, c’est-à-dire formellement.”

CLASS	noun classifier (a consonant C-)
COMP.FOC	complement focusing conjugation
CONJ	conjunctive verb affix <i>-a</i>
CONN	connective suffix (singular <i>-u</i> / plural <i>-i</i>)
<i>di / d</i>	imperfective predicative nexus marker
DIST	distal suffix (<i>-a</i>)
FUTUR	future conjugation formed with <i>di</i> + Perfect inflection
IMPER	imperative conjugation
IMPERF	imperfective suffix <i>-y</i>
IOPR	indirect object pronoun
NEG	negative suffix
NEGACC	negative conjugation, completed action
NEGEMPH	negative emphatic conjugation
NOT.LOC	spatial suffix (<i>-u</i>) indicating the absence in the deictic space
OBLIG	obligative (injunctive conjugation)
OPR	object pronoun
PAST	past suffix (<i>w</i>)- <i>oon</i>
PFT	perfect conjugation
POSS	possessive
PRED	imperfective predicative auxiliary (<i>cf. di</i>)
PRES	presentative conjugation (discontinuous inflection: inflectional morphemes + <i>ngi/a</i>)
PROX	proximal suffix (<i>-i</i>)
SUBJ.FOC	subject focusing conjugation
SUFF	derivational verb suffix
VB.FOC	verb focusing conjugation

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