

## NOUN CLASSIFICATION IN WOLOF: WHEN AFFIXES ARE NOT RENEWED\*

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The Wolof noun class system exhibits a variety of class assignment strategies based on the intersection of semantic, morphological, phonological and sociolinguistic criteria. This study examines and analyzes the many strategies for class assignment that have coalesced in the Wolof noun class system, including the tendency towards a single default class, and an unusual copy process in which phonological material is copied from the stem to the class marker in a process that looks superficially like reduplication. Wolof noun classification is examined within the comparative context of its two closest sister languages, Pulaar and Seereer-Siin, and is shown to contrast with them in that the disappearance of class prefixes did not entail their replacement by suffixes. Finally, an argument is made that noun class systems like that of Wolof which appear to be somewhat incoherent from a semantic point of view are actually typical because noun classification is not only an artifact of the human mind, but also an artifact of human language.

### 1.0 Introduction

Wolof is a member of the North Atlantic sub-group of the Atlantic family of Niger-Congo languages, a sub-group that is characterized by some of the most extensive and morphophonologically elaborate noun class systems found in

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\* This article is based on fieldwork carried out in Senegal between 1989 and 1992, funded in part by the Wenner-Gren Foundation for Anthropological Research. I am grateful to Babacar Mboup, Cherno Njie, Ibou Sarr, and the late Djibril Ndiaye for answering specific questions on noun classes, although the data included here are from a large variety of speakers. I also thank Robert Botne and two anonymous reviewers for helpful comments on earlier versions of this article. Any errors are, of course, my own.

natural language.<sup>1</sup> However, for reasons both internal and external to the language, Wolof noun classification has undergone a series of rapid changes in a relatively short period of time, all of which have contributed to an ongoing realignment of the system and the expansion of a default class. This article examines the realignment of the Wolof noun class system within the North Atlantic perspective, focusing specifically on the emergence and disappearance of various strategies for class assignment, all of which have left their mark on the modern noun class system. Although noticeable in other dialects, the expansion of the default class is most advanced in urban dialects of Wolof, and especially that of Dakar, the capital, where there is large-scale borrowing of lexical items from French and a high concentration of non-native speakers who use the language on an everyday basis.

## 2.0 The Wolof noun class system

There are ten noun classes in Wolof, eight singular and two plural. Of the singular noun classes one serves a second function as a diminutive class. A noun may thus belong to as many as three classes: a singular, a plural, and a diminutive singular class. The most salient aspect of Wolof noun classification, and that which distinguishes it from other North Atlantic languages, is the lack of a class marker on the noun itself, except, unproductively, in a handful of restricted cases that show stem-initial consonant mutation, (e.g., *bët/gët* 'eye/eyes' and *baaraam/waaraam* 'finger/fingers')<sup>2</sup> and more productively in the diminutive form of nouns beginning with certain consonants that undergo mutation.

A noun class marker appears in the form of a single consonant on nominal dependents such as determiners and relative particles. Throughout this article noun classes will be referred to by the consonant that appears on the dependents. The set of Wolof noun classes is listed in (1).

<sup>1</sup> These include Fula and Seereer-Siin. For a description of the former see especially Arnott [1970] and Sylla [1982]; for the latter, see Fal [1980] and Mc Laughlin [1992]. For more general overviews of noun classification in the Atlantic languages see Sapir [1971] and Wilson [1989].

<sup>2</sup> Throughout this article I have followed standard Wolof orthography, as used in Fal, Santos, and Doneux [1990]. Geminate consonants are written as sequences of two identical consonants as in *bëgg* 'like'. Prenasalized stops are written as a stop preceded by *m* [for labials] or *n* [for all others], as in the following examples: *mbaa* interrogative particle, *ndox* 'water', *känja* 'okra'. An acute accent over a vowel, as in *béy* 'goat', stands for [+ATR]. Long vowels are written as a sequence of two identical vowels, as in *buur* 'king', and if the long vowel is [+ATR] the acute accent appears only on the first vowel of the sequence, as in *séex* 'twin'. The symbol *ě* has the value of schwa. The symbol *â* indicates a maximally open vowel [Ka 1990], and appears only before a prenasalized consonant or a geminate. For a description of the phonemic inventory of Wolof see Ka [1994].

(1)	Singular classes	Plural classes
	<i>k-</i>	<i>ñ-</i>
	<i>b-</i>	<i>y-</i>
	<i>g-</i>	
	<i>j-</i>	
	<i>l-</i>	
	<i>m-</i>	
	<i>s-</i>	
	<i>w-</i>	

The *k*-class and its corresponding plural, the *ñ*-class, have a very restricted membership consisting of only a few nouns. The *k*-class has only two members: *nit* ‘person’ and *këf* ‘thing’, while the *ñ*-class includes *nit* and, depending on the speaker, *jigéen* ‘women’, *góor* ‘men’, and *gaa* ‘people’. Other than these four cases, however, plural nouns are always in the *y*-class.

Classes are uniquely either singular or plural, thus a change in number involves a change in class. Given that in general there are no morphological class markers on a noun, singular and plural forms are indistinguishable unless they occur in a noun phrase that also includes a dependent that agrees with the noun. Examples of singular and plural forms of nouns, followed by their definite article, are presented in (2).

(2)	Class	Singular	Plural	Gloss
	<i>k</i>	<i>nit ki</i>	<i>nit ñi</i>	‘the person’ (‘people’)
	<i>b</i>	<i>tëgg bi</i>	<i>tëgg yi</i>	‘the blacksmith(s)’
	<i>g</i>	<i>kër gi</i>	<i>kër yi</i>	‘the house(s)’
	<i>j</i>	<i>jigéen ji</i>	<i>jigéen yi/ñi</i>	‘the woman’ (‘women’)
	<i>l</i>	<i>ngunu li</i>	<i>ngunu yi</i>	‘the chicken coop(s)’
	<i>m</i>	<i>picc mi</i>	<i>picc yi</i>	‘the bird(s)’
	<i>s</i>	<i>ndaw si</i>	<i>ndaw yi</i>	‘the young woman’ (‘women’)
	<i>w</i>	<i>waasintoor wi</i>	<i>waasintoor yi</i>	‘the fish scale(s)’

In addition to surfacing on the definite article, the noun class marker appears on various other dependents, such as anaphora and relative particles, as illustrated in (3) for the nouns *kër* ‘house’ (*g*-class) and *nit* ‘person’ (*k*-class).

(3)		‘house’	‘person’	<u>Gloss</u>
	Demonstrative	<i>kër gii</i>	<i>nit kii</i>	‘this x’
		<i>kër gale</i>	<i>nit kale</i>	‘that x’
	Anaphor	<i>googu</i>	<i>kooku</i>	‘the aforementioned x’
	Relative	<i>kër gu baax</i>	<i>nit ku baax</i>	‘an x that is good’

As illustrated in (4), diminutive formation in Wolof involves both a transfer to the *s*-class and stem-initial consonant mutation in stems that begin with *b*, *d*, *j*, *g*, *s*, and *x*, and some, although not all, that begin with an epenthesized glottal stop.<sup>3</sup> Otherwise, there is no change in the stem-initial consonant.<sup>4</sup>

(4)	<u>Singular</u>	<u>Class</u>	<u>Diminutive</u> ( <i>s</i> -class)	<u>Gloss</u>
	<i>buur</i>	<i>b-</i>	<i>mbuur</i>	'king'
	<i>béy</i>	<i>w-</i>	<i>mbéy</i>	'goat'
	<i>doj</i>	<i>w-</i>	<i>ndoj</i>	'pebble', 'stone'
	<i>deret</i>	<i>j-</i>	<i>nderet</i>	'blood'
	<i>jigéen</i>	<i>j-</i>	<i>njigéen</i>	'woman'
	<i>jàkka</i>	<i>j-</i>	<i>njàkka</i>	'mosque'
	<i>géwél</i>	<i>b-</i>	<i>ngéwél</i>	'griot'
	<i>guy</i>	<i>g-</i>	<i>nguy</i>	'baobab tree'
	<i>séq</i>	<i>g-</i>	<i>céq</i>	'cock'
	<i>séex</i>	<i>b-</i>	<i>céex</i>	'twin'
	<i>xaj</i>	<i>b-</i>	<i>qaj</i>	'dog'
	<i>xar</i>	<i>m-</i>	<i>qar</i>	'sheep'
	[?]oto	<i>b-</i>	<i>koto</i>	'car' (<Fr.)
	[?]àlluwa	<i>j-</i>	<i>kàlluwa</i>	'Qur'anic board' (<Ar.)

The *s*-class, however, is not uniquely a diminutive class, and many non-diminutive nouns are in that class in their singular form (e.g., *saa* 'moment', *xorom* 'salt', and *asamaan* 'sky'). The diminutive and singular non-diminutive forms of nouns in this category would therefore be indistinguishable unless they

<sup>3</sup> The following chart shows the initial consonant mutations that are operative in the Wolof noun class system. Voiced stops become prenasalized in the diminutive class, and fricatives, which are voiceless, become stops. In some cases the epenthesized glottal stop becomes a voiceless velar stop.

Non-diminutive	<i>b</i>	<i>d</i>	<i>j</i>	<i>g</i>	<i>s</i>	<i>x</i>	ʔ
Diminutive	<i>mb</i>	<i>nd</i>	<i>nj</i>	<i>ng</i>	<i>c</i>	<i>q</i>	<i>k</i>

<sup>4</sup> These data were all elicited in Dakar from Babacar Mboup, a griot from Kaffrine. For many Wolof speakers, especially those from large urban areas, only stop-initial stems undergo consonant mutation in diminutive formation, becoming prenasalized. The fact that Mboup is a griot indicates that his speech may be more elaborate than that of non-griots, and therefore not typical of the 'average' Wolof speaker. However, it is especially for those reasons that I have chosen to include Mboup's forms since they present the full array of synchronic forms and may ultimately prove useful in diachronic studies.

were to appear in context<sup>5</sup> or were to undergo consonant mutation, as in the word for 'salt', illustrated in (5).

- (5) *xorom*    *s*-class non-diminutive    'salt'  
       *qorom*    *s*-class diminutive        'small quantity of salt'<sup>6</sup>

Finally, the class with the largest membership is the default *b*-class, about which more will be said in §4.3.

Wolof nouns may be assigned to a class on the basis of a variety of factors, including semantic and phonological ones. Since every noun is required by the grammar to belong to a class,<sup>7</sup> there are also default strategies of class assignment for nouns that do not immediately fit other classificatory criteria. As we shall see in §4, one of the primary reasons for the current expansion of the *b*-class is its status as a default class for loanwords from French.

### 3.0 Wolof noun class markers in the larger context

Wolof is atypical of Niger-Congo languages, and especially the North Atlantic sub-group, in that it exhibits no class marker on the noun itself other than in the few residual cases of consonant mutation described above. Within the vast Niger-Congo family, noun class markers may surface as prefixes, suffixes, or in some cases both, leading Welmers [1973:209] to conclude that nouns in all classes had both prefixed and suffixed markers in the protolanguage, and were thus doubly marked for class. However, Greenberg [1977, 1978] posits a different situation in which a demonstrative, which either precedes or follows the noun, gradually becomes a class marker via the intermediate stages of definite article and non-generic article. As the affix erodes phonologically, it may be renewed morphologically. Eroding prefixes are replaced by class suffixes, as in Pulaar, and eroding suffixes by prefixes, as Greenberg [1978] claims for Gurma, a Gur language. Childs [1983] shows that a process of noun class affix renewal has gone on in Kisi, a member of the South Atlantic sub-group, moving from an older

<sup>5</sup> There is a marked preference to use diminutives only in conjunction with the preposed 'non-generic' article, *as*. In fact, in working on the diminutive forms with Mboup, I first tried to elicit them in a noun phrase consisting of N plus a postposed definite article, but he preferred to give them to me in the "non-generic" form, saying that it sounded more natural.

<sup>6</sup> As Robert Botne has suggested [personal communication], based on semantic and morphological factors it would certainly be feasible to consider the diminutive *s*-class a separate class from the non-diminutive *s*-class. My reasons for presenting a single *s*-class here are based solely on the informal convention of referring to classes by the initial consonant of the definite article in scholarship on Wolof.

<sup>7</sup> In describing the difference between noun classes and noun classifiers Dixon [1986] defines the former as an obligatory grammatical system, while the latter are optional and discourse sensitive.

system of prefixation to one of suffixation [1983:17]. Williamson [1989:33] suggests that if Proto-Niger-Congo had an SOV word order, then modifiers, including demonstratives, would consistently precede the noun, thereby giving rise to prefixes, and that a system such as that described by Childs in which class suffixes represent an innovation is exactly what we would expect. Williamson goes further than Greenberg, then, in positing that class prefixes are older than suffixes in Niger-Congo, a hypothesis borne out by evidence from the North Atlantic languages.

**3.1 The North Atlantic context.** Greenberg's [1978] schema of the evolution of class markers in Niger-Congo is given in (6), and includes four stages towards the development of a class prefix.

- (6) Stage 0 no class marker on the noun (demonstrative)  
 Stage 1 definite article that shows class  
 Stage 2 non-generic article showing class ('a certain' X)  
 Stage 3 class prefix

Within this perspective, the North Atlantic languages, Wolof, Pulaar, and Seereer, show varying degrees of post-stage 3 development. The original prefix has in some instances become a suffix, and there is also evidence of both prefix and suffix existing or having existed simultaneously. The different kinds of morphological marking are shown in (7-9) via the set of cognates for the word for 'man.'

- (7) Pulaar
- |    | n.             | det.       |                        |          |
|----|----------------|------------|------------------------|----------|
| a. | <i>gor-ko</i>  | <i>oo</i>  | 'the man'              | Class 1  |
| b. | <i>wor-be</i>  | <i>bee</i> | 'the men'              | Class 2  |
| c. | <i>ngor-on</i> | <i>kon</i> | 'the men' (diminutive) | Class 21 |

- (8) Seereer-Siin
- |    | n.                               | det. |                        |          |
|----|----------------------------------|------|------------------------|----------|
| a. | <i>o-koor-oxe</i>                |      | 'the man'              | Class 1  |
| b. | <i>ø-goor-we</i>                 |      | 'the men'              | Class 2  |
| c. | <i>o-ngoor-onge</i> <sup>8</sup> |      | 'the man' (diminutive) | Class 12 |

<sup>8</sup> *ng* represents a voiced prenasalized uvular stop.

- (9) Wolof
- |    |             |              |                                |                 |
|----|-------------|--------------|--------------------------------|-----------------|
|    | n.          | det.         |                                |                 |
| a. | <i>góor</i> | <i>gi</i>    | ‘the man’                      | <i>g</i> -class |
| b. | <i>góor</i> | <i>yi</i>    | ‘the men’                      | <i>y</i> -class |
|    | det.        | n.           |                                |                 |
| c. | <i>as</i>   | <i>ngóor</i> | ‘a (certain) man’ (diminutive) | <i>s</i> -class |

In Pulaar, the Senegalese dialect of Fula, which has twenty-one classes, the prefix has been reduced to stem-initial consonant mutation; in addition, there is a class suffix on the stem, so the noun is actually doubly marked for class. The determiner, which strongly resembles the class suffix, is an independent word.

Seereer-Siin is morphologically a little more conservative than Pulaar, since at least some of the older class prefixes (ten of fifteen) are retained [Mc Laughlin 1994: 284-5]. In both cases—overtly prefixing and non-prefixing classes—there is consonant mutation, so in a sense class is again doubly marked on stems with overt prefixes.<sup>9</sup> The determiner behaves as an enclitic in Seereer, rather than standing as an independent word as in Pulaar.

Now we come to Wolof, which differs from the other languages in that other than diminutive formation there is generally no morphological class marking on the noun itself, except in a very few cases, mentioned above, which show what appears to be lexicalized consonant mutation. Although there are just a handful of these examples in the language, their interest lies in the fact that they suggest that Wolof had a productive consonant mutation system, like Seereer-Siin or Pulaar, which served as a class marker at some point in its history. It is within this perspective that the copy process alluded to in the abstract becomes comprehensible, as we shall see in §4.2.

The table in (10) sums up the types of class markers in each of the three languages.

(10) Class markers in the North Atlantic languages

	PREFIX	CONSONANT MUTATION	SUFFIX	CLITIC DETERMINER	INDEPENDENT DETERMINER
Seereer-Siin	✓	✓		✓	
Pulaar		✓	✓		✓
Wolof		(traces)			✓

<sup>9</sup> If we analyze consonant mutation as the result of the association to the left edge of a stem of a floating feature which constitutes part of the prefix itself, stems would not be doubly marked at that level of abstraction.

Class marking surfaces only on independent determiners in Wolof, with a few isolated instances of consonant mutation on the noun being the exception. Thus, there is basically only one kind of class marker in Wolof. On the other hand, Seereer-Siin and Pulaar exhibit three kinds of class markers: either a prefix or suffix, consonant mutation, and a determiner which is either independent or an enclitic. The paucity of class marking in Wolof compared to its sister languages must certainly be taken into account in the realignment of the noun class system.

#### 4.0 The bases of noun classification

As is apparent from the table in (10), Seereer-Siin represents an older system in which class prefixes are present, while Pulaar represents a system in which prefixes have been replaced by suffixes. In Wolof, however, although the prefixes have disappeared, they have not been replaced by suffixes. This singular fact is indirectly responsible for the rise of several alternative bases of noun classification which will be examined in the following discussion.

Wolof is a fairly well documented language with several descriptive grammars and dictionaries that date from the beginning of the nineteenth century.<sup>10</sup> These works provide a wealth of information on the noun class system and the various bases of class assignment over an approximately two hundred year period. When examining these sources and comparing their descriptions to that of modern Wolof, what is striking is how all of the factors involved in class assignment discernible in the earlier accounts of the language are still to be found in modern Wolof although they may no longer be productive, hence the emphasis in this article on the notion of realignment rather than innovation within the noun class system. The main change that has taken place is the continued expansion of the default class, so that many nouns that were in other classes at an earlier stage are now assigned to the *b*-class.

Determining the productivity of the different means of classifying nouns in Wolof is extremely difficult because the output of a productive process is indistinguishable from that of a lexicalized form, but one way of approaching the problem is to consider how loanwords are assigned to a class. Wolof has a great number of borrowings from Arabic and, especially in urban Wolof, from French. In addition, there are some older loanwords from Portuguese, and a few from English.<sup>11</sup> Not all of these loanwords surface in the *b*-class, and in fact

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<sup>10</sup> These include Boilat [1858], Dard [1825 and 1826], Delafosse [1927], Faidherbe [1887], Gamble [1957], Kobès [1855 and 1858], Njie [1982], Rambaud [1898], Roger [1829], Samb [1983], Sauvageot [1963], Senghor [1943], and Ward [1939]. Several of the shorter, older studies are reproduced in Manessy and Sauvageot [1963].

<sup>11</sup> I am speaking here of Senegalese Wolof, where the influence of the former colonial language, French, is very strong in urban areas. Wolof spoken in The Gambia has borrowed from its former colonial language, English, on a much greater scale. Interestingly, however, Gambian Wolof has  
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many of them show evidence of being assigned to a class on other bases, including semantic and phonological ones, that superseded default class assignment at some point. These bases may therefore be interpreted as having been productive in the past; all new loans, however, are assigned to the *b*-class, indicating that the default basis is the only productive one in modern Wolof.

The primary reason for examining the historical sources is to better understand the synchronic situation, but those sources also have their drawbacks. As is the case with most dictionaries, we may assume that the conservative form (i.e., that used by older speakers or the more elaborate and sometimes rarer form) is most likely to be recorded as the sole entry, thus making both variation and realignment in the noun class system more difficult to track.<sup>12</sup> Likewise, the extent of variation currently found among Wolof speakers in my own research is not reflected in either of the two most current dictionaries [Fal, Santos, and Doneux 1990; Munro and Gaye 1991].

Although most of the historical sources make some attempt to explain the bases of noun classification, generally favoring a single criterion (semantic, phonological, etc.) even when faced with many counterexamples, the purpose of the following discussion is not to give a chronology of dominant bases of noun classification. Not only would it be difficult to do so based on the obvious limitations of the available sources, but also, I believe, it would be the wrong approach to understanding noun classification in Wolof. Rather, the following discussion is based on the premise that the eventual erosion and disappearance of class markers on the Wolof noun, as sketched in §3, made class assignment more volatile, and as a result several different bases of classification came into play. At any one point in this period, there was no doubt considerable variation both among the speech community as a whole and within the repertoire of individuals. Given that the only productive means of class assignment in modern Wolof is to place nouns in the *b*-class (witnessed by the assignment of all new loans to this class) the many obvious traces of earlier assignment strategies mentioned in the historical sources can only be attributable to lexicalization.

The bases of noun classification that go to make up the Wolof noun class system, then, may best be seen as a series of discernible patterns, including semantic, morphological, phonological, and sociolinguistic ones, that frequently overlap. In contrast, however, it is important to note that no single basis of noun

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also borrowed many words and expressions indirectly from French via contact with urban Senegalese Wolof.

<sup>12</sup> In my own investigations I have found that Wolof speakers (mostly urban) will often report, for example, that although they use the *b*-class for a noun, there is a different “real” form in “deep” Wolof. In addition, when I have used a noun class marker other than *bi* for certain lexical items, I have found that people frequently comment on it, complimenting me on speaking “pure” or “ancient” Wolof.

classification can account for the entirety of the Wolof noun class system as we shall see in the following discussion.

**4.1 Semantic class assignment.** The point of departure for most studies of noun classification is to determine what semantic categories are encoded in a classifying language. From this perspective noun class systems are, as Haiman [1985:162] has remarked, “notoriously dysfunctional”. According to Corbett [1991:8], strict semantic systems are “not particularly common” and are generally limited to languages with only two or three genders. Other gender systems that are predominantly semantic are still characterized by what Corbett terms “leaks” [1991:13], namely areas in which the semantic coherence of the system as a whole breaks down. Despite these observations on gender in natural language, approaches to noun class systems still grant the semantics of such systems a privileged status. Craig [1986], in her introduction to the proceedings of a symposium on categorization and noun classification, sums up the accepted research agenda on noun classification by stating the following:

If the apriori assumption is that all inclusions of items in a class have (had) some semantic motivation, the challenge consists in reconstructing the linking stages of the expansion of the class [Craig 1986:7].

The outcome of such apriori assumptions has been to proceed in one of two ways. The first, and most obvious, is towards the reconstruction of a more coherently semantic system in the protolanguage, and the second is to reevaluate the notion of semantic categories through cognitive approaches such as Lakoff's [1987] experiential realism where cognitive categories, of which noun classes are a prime example, are regarded as artifacts of how the human mind works rather than artifacts of how the external world is arranged.<sup>13</sup> Such an approach may work for some languages, as Lakoff claims it to do for Dyirbal, an Australian language with a small number of noun classes, but the large noun class systems of the North Atlantic languages remain opaque with regard to a full semantic explanation. We will return to some of these ideas in §5 after examining the various bases of class assignment in Wolof.

Semantic categories encoded to a certain extent in the noun class system of Wolof include liquids (*m*-class), trees (*b*-class), fruits (*g*-class), and family members, especially those of maternal descent (*j*-class). Although the *m*-class contains certain liquids such as *ndox* ‘water’, *meeew* ‘milk’, *saw* ‘urine’ and *soow* ‘curdled milk’, it also contains many words that are not liquids, and there are a great number of liquids that do not fall into that class, such as *deret* (*j*-class)

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<sup>13</sup> Another alternative involves the combination of both approaches, as, for example, Denny and Creider [1986] have attempted for Proto-Bantu.

'blood', *diwlin* (*j*-class) 'vegetable oil', and *kokaa* (*b*-class) 'Coca-Cola'.<sup>14</sup> The last word is, obviously, a relatively recent loan from French; therefore, it falls into the default class.

A more interesting example is *biin* 'wine', an earlier loan from Portuguese *vinho*. Most speakers assign *biin* to the *b*-class, but some more conservative or elaborate speakers will accept it in the *m*-class on the grounds that it is a liquid, although they exclude *kokaa* from the *m*-class even though it is a liquid.<sup>15</sup> The fact that *biin mi* is occasionally deemed grammatical, but that *\*kokaa mi* is not, shows that the principle of assigning liquids to the *m*-class is no longer productive, but could have been at an earlier point when *biin* entered the language. The potential neatness of the diachronic situation, however, is substantially muddled by existing sources on Wolof. One of the earlier, and quite insightful, written sources, Rambaud [1898:14], gives a list of liquids in the *m*-class, but says that there is one exception, *biin*, which he lists as being in the *b*-class, justified by the fact that it is a recent loan.<sup>16</sup> It is impossible to say when the word entered Wolof, but since it was borrowed from Portuguese, it is my guess that it was borrowed at least one hundred and fifty to two hundred years before Rambaud wrote his description. Delafosse [1927:38] uses Rambaud's data for his analysis and specifically mentions the fact that *biin* is in the *b*-class, whereas it would have been "natural" to put it with other liquids in the *m*-class.<sup>17</sup> Delafosse attributes the assignment of the word to the *b*-class because its initial consonant is [b], an issue that will be taken up in the discussion of the copy rule in the next section.

<sup>14</sup> While other semantic factors may well be at work here in assigning these nouns to classes other than the liquid class, with the exception of the recent loan, *kokaa*, the two other North Atlantic languages classify these nouns in their respective liquids classes.

<sup>15</sup> The few speakers who accept *biin* in the *m*-class but not *kokaa* generally justified the former by saying that it was a liquid ["like water and milk"] and the latter by saying something along the lines of "no-one says *kokaa mi*". I suspect, however, that there may be other reasons for the reported grammaticality of *biin* in the *m*-class, especially when one considers the individuals who deemed the form grammatical. One was a griot and two were Wolof language teachers, and in both cases it would not be surprising to see a tendency to avoid the *b*-class. The teachers spoke urban Wolof, characterized by the greatest use of the *b*-class, and were not in full command of "deep Wolof" which would be the prestige dialect for a Wolof teacher. The griot's speech is supposed to be more "elaborate" than that of non-griots, and a prime marker of elaboration is the use of noun classes other than the *b*-class. In both cases, then, the acceptance of the form could be explained by two factors: analogy with other liquids and motivation to avoid the *b*-class.

<sup>16</sup> Rambaud's exact wording is: "Il n'y a qu'une exception: *biin bi* <<le vin>>; mais c'est un mot tout récemment importé dans la langue."

<sup>17</sup> It is also possible that the acceptance of *biin* in the *m*-class by the three speakers described in footnote 15 is an innovation and that the noun never appeared in that class before. It should be noted that I never came across any spontaneous examples of *biin* being assigned to the *m*-class in natural speech. The alleged form is based entirely on grammaticality judgements by those three speakers, and I have always found that urban Wolof speakers tend to hesitate a great deal on grammaticality judgements on noun classes.

A less controversial semantic category in the Wolof noun class system encodes the distinction between trees (*g*-class) and their fruit (*b*-class). In most cases, with the notable exception of the word for 'baobab' which exhibits consonant mutation, the word for a tree and its fruit are the same, as evidenced in (11). The fact that they fall into different noun classes may help to disambiguate them.

(11)	<u><i>g</i>-class</u> (tree)		<u><i>b</i>-class</u> (fruit)	
	<i>garab</i>	'tree'	<i>doom</i>	'fruit'
	<i>guy</i>	'baobab tree'	<i>buy</i>	'baobab fruit'
	<i>tàndarma</i>	'date tree'	<i>tàndarma</i>	'date'
	<i>ditax</i>	<i>Detarium senegalense</i>	<i>ditax</i>	fruit of <i>D. senegalense</i>
	<i>karosool</i>	<i>annona muricata</i>	<i>karosool</i>	fruit of <i>annona muricata</i>
	<i>guyaab</i>	'guava tree'	<i>guyaab</i>	'guava'
	<i>màngo</i>	'mango tree'	<i>màngo</i>	'mango'
	<i>banaana</i>	'banana tree'	<i>banaana</i>	'banana'

Included in these examples are several loanwords from Portuguese, French, or other sources: *guyaab*, probably from Portuguese *goiaba* or French *goyave* 'guava';<sup>18</sup> *karosool* from French, and *màngo* and *banaana* which could be from any of several sources. The fact that the trees are not assigned to the default class supports the idea that a semantic distinction is being maintained.

While there are many other attempts in the literature at assigning Wolof nouns to semantic categories, the last example I will look at is that of the *j*-class, which contains a large number of nouns denoting family members, many maternally linked, as seen in the examples in (12).

(12)	<i>j</i> -class nouns denoting family members	
	<i>yaay</i>	'mother'
	<i>doom</i>	'child'
	<i>nijaay</i>	'maternal uncle'
	<i>yumpaañ</i>	'maternal uncle's wife'
	<i>rakk</i>	'younger sibling'
	<i>mag</i>	'older sibling'
	<i>jabar</i>	'wife'
	<i>jëkkër</i>	'husband'

<sup>18</sup> Fal *et al.* [1990] simply list *guyaab* as a borrowing (*emprunt*) without specifying the language it came from. Since the French voiced labiodental fricative [v] frequently becomes [b] in Wolof [eg: *kubëer* < *couvert*; *saabu* < *savon*] the word could be borrowed from either language.

As with all the previously mentioned noun classes that have some type of semantic basis, the content of the *j*-class is far from clear cut. The majority of nouns in this class do not fit the semantic category of family members, and there are nouns denoting family members that are not in the *j*-class.

These few examples of partial semantic categories in Wolof, of which there are several more, are typical of noun class systems, leading to a common belief that such systems represent a fall of sorts from a more coherent semantic system. Most noun class systems are, however, like the Wolof one in that they encode a variety of semantic, morphological, and phonological categories. These and related issues will be addressed in §5.

**4.2 Phonological class assignment.** Recent discussions of gender in natural language [Aronoff 1994; Corbett 1991] attest to instances of inflectional systems that are partially determined by phonological form. In such cases the phonological form of a given stem can be correlated with a specific gender. In Hausa, for example, there is an assignment rule by which nouns ending in the string *-aa* are assigned to the feminine gender [Corbett 1991:53], while in Yimas, a language of New Guinea, nouns ending in the string *-mp* are assigned to gender vii [Aronoff 1994:116; Corbett 1991:56]. It has long been noted [Rimbaud 1898; Delafosse 1927; Ward 1939; Senghor 1943] that in Wolof the phonological form of a noun may serve as the basis for determining the noun class to which it is assigned. Moreover, in considering patterns of change in noun class assignment between nineteenth century data and her own data from modern Wolof, Irvine [1978:55] remarks that one type of shift is towards a phonological basis of class assignment so that the class marker ‘harmonizes’ with the initial consonant of the noun.

Unlike those instances described in the literature in which the stem and gender marker, although correlated, retain independent phonological forms, Wolof is, to my knowledge, unique in exhibiting an actual transfer of phonological form from stem to inflectional class marker: the inflectional class marker, revealed in agreement, is an actual copy of the stem-initial consonant, as the examples in (13) show.<sup>19</sup>

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<sup>19</sup> The copy process in Wolof is distinct from the alliterative concord found in many Niger-Congo languages where the noun class marker surfaces on noun, dependents, and sometimes [especially in Bantu languages] verbs. In those cases, the noun class agreement feature percolates to dependents and surfaces as a class morpheme, resulting in an alliterative effect as in the following example from Pulaar which shows the morpheme junctures between stem and class marker: *junngo maw-ngo ngoo*[hand-cl. big-cl. det.] ‘the big hand’. Class markers, for the most part, do not surface on nouns in Wolof, thus in the Wolof copy process it appears that the initial consonant of the *stem* is being copied.

## (13) Noun + determiner (UR: /Ci/)

**g-class**

<i>góor</i>	<i>gi</i>	'the man'
<i>gafaka</i>	<i>gi</i>	'the bag'
<i>gaana</i>	<i>gi</i>	'the leper'
<i>ginaar</i>	<i>gi</i>	'the chicken'
<i>gaynde</i>	<i>gi</i>	'the lion'

**j-class**

<i>jàmm</i>	<i>ji</i>	'the peace'
<i>jigéen</i>	<i>ji</i>	'the woman'
<i>jinax</i>	<i>ji</i>	'the mouse'
<i>jiit</i>	<i>ji</i>	'the scorpion'
<i>jumaa</i>	<i>ji</i>	'the mosque' (<Ar.)

**w-class**

<i>waasintoor</i>	<i>wi</i>	'the fish scale'
<i>warga</i>	<i>wi</i>	'the tea' (<Ar.)
<i>wanag</i>	<i>wi</i>	'the toilet'
<i>waxambaane</i>	<i>wi</i>	'the young man'
<i>waxtu</i>	<i>wi</i>	'the hour'

**s-class**

<i>saa</i>	<i>si</i>	'the moment' (<Ar.)
<i>saxar</i>	<i>si</i>	'the smoke'
<i>sàngara</i>	<i>si</i>	'the alcoholic drink'
<i>seytaane</i>	<i>si</i>	'the devil' (<Ar.)
<i>suukar</i>	<i>si</i>	'the sugar' (Ar./Fr.)

**m-class**

<i>malaaka</i>	<i>mi</i>	'the angel' (<Ar.)
<i>misikin</i>	<i>mi</i>	'the unfortunate one' (<Ar.)
<i>moroom</i>	<i>mi</i>	'the peer'
<i>muus</i>	<i>mi</i>	'the cat'
<i>mala</i>	<i>mi</i>	'the animal'

In order to rule out the possibility of mere coincidence between the initial consonant of the noun and the consonant that surfaces as a class marker in the singular classes, we will take a close look at general patterns of class assignment, paying careful attention to loanwords, to show that the assignment of nouns to a class on a phonological basis merits serious consideration. Of the eight singular noun classes, four of them seem to particularly favor this basis of class assignment, namely the *g*-, *j*-, *m*-, and *w*-classes. Of the other classes, the *s*-class shows a tendency towards phonological assignment, the *l*-class does not, the *k*-class is too restricted to admit this kind of assignment (recall that there are only two nouns in the *k*-class; see §2.0), and the default *b*-class is too vast to contribute in any significant way to supporting the hypothesis of phonological class assignment.<sup>20</sup> In order to illustrate that the correlation is more than a coincidence

<sup>20</sup> Since the majority of Wolof nouns are in the *b*-class, most *b*-initial nouns are in that class, but it is impossible to tell whether they are there on the basis of phonological, default, or other assignment. Recall the case of the noun *biin* 'wine' in the discussion in §4.1 where Rambaud [1898:14] says that it is in the *b*-class because it is a loan (a case of default assignment), while Delafosse  
continued on next page

and that there is a reality to the phonological basis of class assignment, let us consider the data in (14) which consist of a count of the noun class assignment of all *g-*, *j-*, *l-*, *m-*, *s-*, and *w-* initial nouns listed in Fal, Santos, and Doneux's [1990] dictionary, which is the most extensive dictionary of modern Wolof available.

The first column indicates the initial consonant of the noun followed by the total number of tokens that appear in the dictionary in parentheses. The other columns indicate which noun classes those nouns appear in. These are given first by raw score, followed by the rough percentage of nouns for raw scores of over two tokens. The correlation between the initial consonant of the noun and that of the noun class, indicating phonological class assignment, is given in boldface.

(14) Class assignment of relevant consonant initial nouns

Initial C of noun	Classes							
	<i>b-</i>	<i>g-</i>	<i>j-</i>	<i>l-</i>	<i>m-</i>	<i>s-</i>	<i>w-</i>	<i>k-</i>
<i>g</i> (127)	50 39%	<b>68</b> <b>53.5%</b>	1	0	1	1	6 4.5%	0
<i>j</i> (111)	64 57.5%	5 4.5%	<b>40</b> <b>36%</b>	0	0	0	2	0
<i>l</i> (125)	63 50%	20 16%	13 10%	<b>5</b> <b>4%</b>	7 5.5%	0	16 13%	1
<i>m</i> (102)	25 24.5%	19 18.5%	1	0	<b>46</b> <b>45%</b>	0	11 10.5%	0
<i>s</i> (280)	135 48%	41 14.5%	6 2%	2	20 7%	<b>49</b> <b>17.5%</b>	27 9.5%	0
<i>w</i> (134)	26 19%	26 19%	9 6.5%	0	2	1	<b>70</b> <b>52%</b>	0

What we find is that for *g*-initial and *w*-initial nouns, the majority (53.5% and 52%, respectively) fall into the class that corresponds to the initial consonant. For *m*-initial nouns, although the majority do not fall into the *m*-class, those assigned to the *m*-class constitute the largest group by class with a score of 45%. The *j*-initial nouns also do quite well, showing 36% correspondence with the *j*-class, although the largest number of *j*-initial nouns fall into the *b*-class. The *s*-initial and *l*-initial nouns do less well, with scores of only 17.5% and 4%, respectively. Despite these low scores, what can be gleaned from these percentages is that for *g-*, *j-*, *m-*, *s-*, and *w-* initial nouns, either the largest (in the case of *g-*, *m-*, and *w-* initial nouns) or second largest number of nouns (in the case of *j-* and *s-* initial

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[1927:38] claims it is there because of its initial consonant (phonological assignment). These two different criteria may work together to reinforce the class of the noun.

forms) show a correlation between their initial consonant and the consonant of the class to which they are assigned. In addition, for all token sets in which the correlation between initial consonant and noun class does not constitute the largest group of nouns in the respective category, the *b*-class constitutes the largest group. What this tells us is that the vast majority of Wolof nouns are assigned to either the *b*-class, possibly on a default basis, or to the class that corresponds to their initial consonant, that is, on a phonological basis, and that nouns with certain initial consonants appear to favor phonological class assignment more than others.

While the patterns of class assignment that emerge from these rather straightforward quantitative data strongly support the reality of phonological class assignment, there are also many other considerations that enhance the hypothesis. First is the class assignment of loanwords on a phonological basis, of which there are some striking examples, a few of which are given in (15).

- (15) *galaas gi* 'the ice' < Fr.      *jinne ji* 'the djinn' < Ar.  
       *garees gi* 'the fat' < Fr.        *jinjéer ji* 'the ginger' < Engl.?
- mecce mi* 'the trade' < Fr.        *siro si* 'the syrup' < Fr.  
       *miskit<sup>21</sup> mi* 'the biscuit' < Engl.?    *soble si* 'the onion' < Port.
- wago wi* 'the wagon' < Fr.  
       *waliis wi* 'the suitcase' < Fr.

Unfortunately, we cannot tell whether these are recent loans or not, other than guessing that the Portuguese and Arabic loans are probably among the older ones. There are many, many more loanwords assigned to the *b*-class, and as mentioned above, all new loans are assigned to the default class. But most significant is that other than on a phonological basis, there is no apparent reason why these nouns should be assigned to the class they are in, with the one possible exception of the Arabic loans assigned to the *j*-class, a case that is discussed in §4.5.<sup>22</sup>

The copy process is by far the most puzzling aspect of Wolof noun classification and one which has received a great deal of attention in the descriptive

<sup>21</sup> Fal, Santos, and Doneux [1990] list this form as a variant of *mbiskit* which begins with a prenasalized bilabial stop, making it phonetically closer to the English [b].

<sup>22</sup> Two other cases of possible phonological class assignment are worth mentioning here. First is the word for 'gold' which alternates between the forms [wurus] and [ʔurus] and which falls into the *w*-class. The underlying form of this word is vowel-initial, but since Wolof requires syllable onsets, either the labiovelar glide or the glottal stop is epenthesisized before back vowels. It would appear, then, that class assignment is based in this case on the epenthetic consonant. Second is the compound *jëm si yàlla* 'deceased person' (literally 'heading to God') which falls into the *j*-class even though the first morpheme in the compound is a verbal one. These two examples are based on surface phenomena, which is exactly what we would expect for a phonological basis of agreement.

literature. The fundamental formal problem posed by the copy process, if indeed it is such, is that the syntactic process of agreement appears to be carried out in the morphophonology in a process akin to reduplication, except that the copying takes place across a word boundary. Elsewhere [Mc Laughlin 1996] I have provided an account of the copy process within the framework of Autolexical syntax [Sadock 1991, Woodbury 1996] in which an expression is not required to have isomorphic or matching representations in each component of the grammar in order to be well formed. In the analysis, stem-initial consonants in Wolof nouns may be viewed as “not quite prefixes”. The morphophonological component of the grammar interprets them as class prefixes, while the morphological component interprets the noun as a simplex form without a prefix.

The analysis is historically well-motivated when we consider the North Atlantic context and the evolution of noun class markers within the sub-group. Noun class markers originally developed at the left edge of the stem in the form of overt prefixes, still partially retained in Seereer-Siin. These prefixes conditioned stem-initial consonant mutation, which is still completely productive in Seereer-Siin and Pulaar, and remnants of which are retained in Wolof. With the complete disappearance of prefixes, as in Pulaar, class markers then surfaced at the right edge of the stem in the form of suffixes. For some reason, Wolof never underwent this renewal process, leaving the burden of class marking at the left edge of the stem, on the initial consonant and its various mutations. As a productive mutation system began to disappear, the locus of class marking, i.e., the left edge of the stem, was retained. The stem-initial consonant, then, became a type of vacuous class marker, based on phonological form alone, thus giving rise to the copy process.

There are many constraints on the copy process which make it a less than fully productive means of assigning class. First, the set of possible initial consonants is obviously larger than the set of possible noun classes. There is, for example, no *f*-class for nouns like *fas* ‘horse’ to be assigned to on the basis of the copy process.<sup>23</sup> In addition, the *k*-class and the *ñ*-class do not admit new words on any basis, and the *y*-class admits only plurals. Thus, hypothetical forms like *\*fas fi* ‘the horse’, *\*yax yi* ‘the bone’<sup>24</sup>, and *\*kër ki* ‘the house’ are ruled out.

If all the features of a stem-initial consonant cannot be copied because the resulting consonant yields an illicit class assignment, there is some evidence that the place of articulation is still copied, so that the class marker approximates the stem-initial consonant. Examples include *f* → *w*, where both consonants are labial, as in *fas wi* ‘the horse’ and *fel wi* ‘the flea’, and the velar set, *k* → *g*, as in

<sup>23</sup> There is some evidence that there may have been a locative *f*-class at some point in the history of Wolof. I base this suggestion on the striking similarity of form between nominal determiners and *f*-initial locative forms such as *fii* ‘here’, *fale* ‘there’, *foofu* ‘the aforementioned place’, *fu* ‘where [relative]’ and *fan* ‘where’.

<sup>24</sup> The form *yax yi* is, of course, a grammatical plural form, meaning ‘the bones’.

*kànja gi* ‘the okra’ and the French loanwords *kubeer gi* ‘lid’ and *kulóor gi* ‘the color’. Cases such as these tend to support the historical reality of the copy process which interprets the initial consonant of the stem as something akin to, but not exactly, a prefix.

Considering the stem-initial consonant to be “not quite a prefix” has two main advantages. First, it builds upon earlier analyses of Wolof nouns as consisting of prefix + stem, by maintaining the prefix hypothesis, but in a more plausible way. The main problem with analyses like that of Delafosse [1927] in which the initial consonant or the first syllable of Wolof nouns are considered to be class prefixes is that the resulting stem, devoid of its prefix, is at odds with the comparative data. By way of example, Delafosse cites the word for ‘griot’ (*géwél*) as being composed of a prefix /*ge-*/ and a stem /*-wel*/. When we examine the comparative data in (16) it seems much more likely that the three languages share a velar-initial stem.

(16) Comparison of the forms for ‘griot’ in the North Atlantic languages

	Singular	Plural
Wolof	<i>géwél</i>	<i>géwél</i>
Seereer-Siin	<i>o-kawul</i>	<i>gawul</i>
Pulaar	<i>gawlo</i>	<i>awlube</i>

The second main advantage of this account of the copy process is that it fits well with autosegmental analyses of consonant mutation which view mutation as the prefixation of a floating feature, in other words, a covert prefix.

**4.3 Default class assignment.** The most noticeable trend in Wolof noun classification, namely the expansion of the *b*-class, is already noted in much of the earlier literature on the language. For example, Rambaud makes two observations: “On remarque que la consonne *b* [in the context of noun classification] est beaucoup plus fréquente que les autres” [1898:12], and “La plupart des substantifs désignant des objets importés par les Européens—par suite, récemment introduits dans la langue—prennent la particule de détermination *bi*.” [1898:15]. The influx of loanwords has frequently been cited as a possible cause for such an expansion, a hypothesis that undoubtedly has some validity, although, as we have already seen, loanwords in Wolof have been assigned to a variety of classes on the basis of other criteria.

Irvine [1978] offers another perspective on the expansion of the *b*-class by appealing to the sociolinguistic notion of appropriate error. In Wolof society, as in many other societies of the western Sahel, verbal behavior is a prime indicator of social status, and virtuosity in speech is associated with the casted status of griot. In order to distinguish their speech from that of the griot, upwardly

mobile, middle-aged non-casted men may use the wrong noun class as an indicator of high status, since fluency in speaking is an attribute of low social status [Irvine 1978:40].<sup>25</sup> In these cases, the preferred direction of appropriate error is towards the *b*-class which is the class with largest membership and also the default class. This notion of appropriate error could thus account in part for the expansion of the *b*-class since, as Irvine puts it [1978:45], ‘the spread of the BI class represents a move toward the norms of high-status speaking.’<sup>26</sup>

While Irvine’s study was conducted in a rural setting, there is no doubt that the phenomenon of Wolofization, or the spread of urban Wolof as a Senegalese lingua franca, has also contributed greatly to the expansion of the *b*-class. Urban Wolof, especially the variety spoken in Dakar, the Senegalese capital, is characterized by extensive borrowing from French, a feature that distinguishes it from “deep Wolof” (*olof bu xóot*), or the variety spoken in the Wolof heartland where Irvine’s study was conducted. Urban Wolof is also spoken by many people as a second language, a factor that may also contribute to a simplification of the noun class system. The proliferation of the *b*-class is, in fact, one of the prime indicators of an urban variety of Wolof. Not only are the many nouns borrowed from French assigned to the *b*-class, but other very common nouns such as *góor* ‘man’ and *jigéen* ‘woman’ are assigned to the *b*-class in urban Wolof, instead of the *g*-class and the *j*-class, respectively. A native Wolof speaker from a rural area even reported that when he came to Dakar he put all his nouns in the *b*-class, whereas he would use the “correct” form at home. Urban attitudes towards the two varieties of Wolof probably do not play a significant role either in encouraging the spread of the *b*-class or in quelling its spread since those attitudes are ambivalent. Those who speak “deep Wolof” are considered to be *kow-kow* or “hicks”, thereby having lower social prestige than urbanites, but their speech is generally admired, especially when contrasted with what urbanites generally consider to be the lamentable state of their own Wolof.

The expansion of the *b*-class is certainly not a new phenomenon which can be uniquely correlated with recent trends in the language, and it is important to note that some of the tendencies documented by Irvine for rural Wolof, and more especially those apparent in urban Wolof, merely take advantage, so to speak, of a

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<sup>25</sup> The notion of caste and its relationship to social status in the societies of the western Sahel has undergone much reconsideration in recent scholarship. The topic is, of course, well beyond the scope of this paper, but the interested reader is referred to the collection of essays in Conrad and Frank [1995] which deal primarily with Mande society.

<sup>26</sup> It should also be noted that Irvine’s study deals with two opposing trends: while those who are striving for what Irvine terms higher status show a preference for appropriate error in the direction of the *b*-class, those who wish to embellish their speech may make appropriate errors in the opposite direction. In many cases, she notes, nouns assigned to the *b*-class in a large corpus of nineteenth century data, are assigned to other classes on the basis of consonant harmony, i.e., the copy process. This observation further increases the validity of the copy process as a real historical trend, rather than coincidence.

pre-existing trend, and expand it to a greater degree. In both cases, considerable variation occurs both within the speech community and within the repertoires of individual speakers. In such cases, one of the variants is almost always the *b*-class.

One important question remains, to which I have at present no answer: namely, why is the *b*-class, rather than any other, the default class? Irvine [1978:61] speculates that it may originally have had some type of semantically neutral connotation. It may also have to do with the nature of the original consonant mutation system and its progression towards the copy process, but the formulation of this hypothesis will have to await more comparative and historical work on Wolof in particular and on the North Atlantic languages in general.

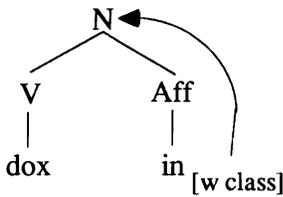
**4.4 Morphological class assignment.** Up to this point noun classification has been discussed only in terms of underived nouns. Derived nouns in Wolof merit some attention because they are much less likely to fall into the default class than other nouns. There are three formal productive means of noun-to-noun and verb-to-noun derivation in Wolof: stem-initial consonant mutation, suffixation, and reduplication. Examples of all three are given in (17).<sup>27</sup>

(17)	V		N	
a. Mutation	<i>baax</i>	‘be good’	<i>mbaax</i>	‘goodness’
	<i>dof</i>	‘be mad’	<i>ndof</i>	‘madness’
	<i>sàcc</i>	‘rob’	<i>càcc</i>	‘robbery’
b. Reduplication	<i>gis</i>	‘see’	<i>gisgis</i>	‘way of seeing’
	<i>xam</i>	‘know’	<i>xamxam</i>	‘knowledge’
	<i>bëgg</i>	‘want, love’	<i>bëggbëgg</i>	‘desire’
c. Suffixation	<i>bind</i>	‘write’	<i>bindukaay</i>	‘pen/pencil’
	<i>tàng</i>	‘be hot’	<i>tàngaay</i>	‘heat’
	<i>dox</i>	‘walk’	<i>doxin</i>	‘manner of walking’

These derivational processes entail the assignment of the nouns to a specific noun class. For example, the manner suffix, */-in/*, assigns a noun to the *w*-class, and those involving consonant mutation are generally assigned to the *g*-class. In such cases, the derivational affix, which is the morphological head of the noun, is lexically specified for class and assigns that class to the noun, as illustrated in (18) for the example *doxin* in (17c).

<sup>27</sup> These processes may also be combined in verb to noun and verb to verb derivation. See Ka [1994:132-3] for some examples.

(18)



Such nouns are much more resistant to being assigned to the *b*-class on a default basis than are non-derived nouns, and much less variation occurs in their noun class assignment. These factors may ultimately constrain the spread of the *b*-class, at least to certain areas of the lexicon.

**4.5 Some problems with Arabic loans.** As a final note to the discussion of class assignment, the case of Arabic loanwords, of which there are many in Wolof, merits some assessment. Two different trends in the assignment of Arabic loanwords to a class can be discerned in the written sources and in the speech of contemporary Wolof speakers. First is the assignment of such loans to the *j*-class, and second is their assignment to a class based on the copy process.

Ndiaye [1949], in a short article on Arabic loans,<sup>28</sup> remarks on the fact that a large percentage of them are assigned to the *j*-class and offers an interesting explanation for the fact. She says that their assignment builds on the semantic content of the *j*-class which, as we have seen in §4.1, includes family members of maternal descent. Ndiaye, a native speaker of Wolof, expands this semantic field to include the notion of fecundity or the ability to produce (hence the maternal link), which she in turn extends to the notion of mystical fecundity in the following explanation:

De <<faculté de produire>> on est passé, entre autres, au sens <<fécondité mystique>>: sous cette rubrique se classent les noms arabes (ou culturels), car je suis persuadée que l'arabe est encore, mais fut surtout à l'origine pour les Wolofs, une langue magique: tous les premiers emprunts qui lui furent faits le furent pour les besoins de l'incantation, du cérémonial ou de l'enseignement sacré. [Ndiaye 1949:113ft]

Ndiaye's reasoning, whether verifiable or not, is a good example of what Lakoff [1987] terms the 'myth-and-belief principle' in noun classification, given below:

<sup>28</sup> Ndiaye's list of Arabic loans was intended as a supplement of sorts to Mouradian [1940], and is thus quite limited in scope. Unfortunately, even though he gives quite an extensive list of Arabic loans, Mouradian does not supply their noun class.

If some noun has characteristic X (on the basis of which its class membership is to be decided) but is, through belief or myth, connected with characteristic Y, then generally it will belong to the class corresponding to Y and not that corresponding to X. [Lakoff 1987:94]

For nouns borrowed from Arabic, then, the shape, size, or other intangible attributes of the objects or concepts they denote would be secondary to the fact that they have a magical or religious association by mere virtue of the fact that they are from Arabic.

Another possibility for the tendency of Arabic loans to fall into the *j*-class is that many of them entered Wolof through Pulaar, via extensive Islamic proselytizing on the part of the Tukuloor people or Haalpulaar'en of northern Senegal, and are thus secondhand loans. The singular default class in Pulaar requires no class suffix, but the plural default class, into which most Arabic loans fall, requires a class suffix of the shape /-ji/, as the following examples show.

(19) Pulaar loanwords from Arabic and Wolof cognates

<u>Pulaar</u>			<u>Wolof</u>	
Singular	Plural	Gloss		Class
<i>aljanna</i>	<i>aljannaaji</i>	'paradise'	<i>àjjana</i>	<i>ji</i>
<i>alla</i>	<i>allaaji</i>	'god'	<i>yàlla</i>	<i>ji</i>
<i>ataaya</i>	<i>ataayaaji</i>	'tea'	<i>attaaya</i>	<i>ji</i>
<i>jamaanu</i>	<i>jamanuuji</i>	'epoch'	<i>jamano</i>	<i>ji</i>
<i>jumaa</i>	<i>jumaaaji</i>	'mosque'	<i>jumaa</i>	<i>ji</i>

Whether this peculiarity of Pulaar morphology had any influence on Wolof class assignment is debatable, but the examples are worth mentioning. As with all the other cases of class assignment that we have seen, this explanation would only account for a subset of nouns assigned to the *j*-class, since there are many exceptions, including Arabic loans in Pulaar which do not take the /-ji/ suffix, but which are nonetheless assigned to the *j*-class in Wolof.

Rambaud [1898:16] lists the Arabic loans in (20) as being assigned to their respective classes on the basis of the copy process, and those in (21) as being in the *b*-class.

	Rimbaud's orthography	Standard Wolof orthography	Gloss
(20)	<i>kélifa gi</i>	<i>kélifa</i>	'leader'
	<i>gélèm gi</i>	<i>gëléem</i>	'camel'
	<i>sèïtané si</i>	<i>seytaane</i>	'devil'
	<i>sokhla si</i>	<i>soxla</i>	'need'
	<i>saha si</i>	<i>saa</i>	'moment'
	<i>malaka mi</i>	<i>malaaka</i>	'angel'
(21)	<i>dérèm bi</i>	<i>dërëm</i>	'five franc piece'
	<i>sarakha bi</i>	<i>sarax</i>	'alms'
	<i>alkoranu bi</i>	<i>alxuraan</i>	'the Qur'an'
	<i>khaftân bi</i>	<i>xaftaan</i>	'caftan'

When we consider this small sample of Rimbaud's loans, what we find in modern Wolof is that those assigned to a class on the basis of the copy process are still grammatical, although individual speakers may show variation between those forms and *b*-class forms. When we compare those examples in (21) to modern Wolof, we find that two of the four nouns are more commonly assigned to other classes, although they can still alternate with the *b*-class, especially in urban Wolof. The examples are the words for 'alms', *sarax si*, which Rimbaud lists as being in the *b*-class, but is now found in the *s*-class, an illustration of the copy process at work; and the word for the 'Qur'an' *alxuraan ji*, now in the *j*-class as opposed to Rimbaud's listing of the *b*-class. These two examples show the competing trends that Irvine discerned, towards and away from the *b*-class. They also show that three processes of class assignment, namely the copy process, the semantic assignment of words associated with Islam to the *j*-class, and the tendency towards a default *b*-class, have all been productive at least in the past hundred year period.

## 5.0 Conclusion

The aims of this article have been to examine Wolof noun classification in the comparative context of its two closest sister languages, Seereer-Siin and Pulaar, to see if some conclusion might be reached about why the noun class system is tending towards a default, and also to see if noun classification in Wolof can tell us anything about noun classification in general.

With regard to the first aim, and to recapitulate, Wolof differs from its sister languages in that the disappearance of a class prefix did not entail its replacement by suffixation. This single but extremely important factor gave rise to a lack of class marking on the noun, other than in vestigial cases of consonant mutation, thereby making agreement much more difficult than in languages like Pulaar or

Seereer-Siin where nouns are doubly marked for class. Certain strategies in addition to semantic ones were developed in order to assign nouns to a class, namely the copy process and the expansion of the default class.

What, to address the second aim, does the Wolof noun class system tell us about noun classification in general? On the surface, it tells us that there is more than one way to classify a noun, and that classification systems may well incorporate a variety of different and intersecting parameters, namely semantic, morphological, and even phonological and sociolinguistic parameters. The Wolof noun classification system, rather than being the result (in both a diachronic and a synchronic sense) of a single means of classification, shows evidence of several, sometimes competing, means of classification. When two classification strategies compete or overlap, they may be rank-ordered, or variation may occur.

This hybrid system raises some serious questions about how linguists have approached noun classification. To assume that current systems of noun classification are merely imperfect remnants of once perfect, or at least more perfect, systems, seems to me to be an untenable position. The first question that comes to mind is "Why have all the perfect noun class systems disappeared?" As mentioned in §4.1, one aim at a solution is Lakoff's approach of experiential realism<sup>29</sup> which seeks to rethink the nature of cognitive categories to show that human categories are an artifact of the human mind rather than the external world. But where would a phenomenon like the Wolof copy process fit into such a schema? By way of an answer, I would like to offer the suggestion that noun class systems are not only an artifact of human cognition, but they are also an artifact of human language. As we have seen, morphological change has played an enormous role in the shape of the Wolof noun class system, leading ultimately to a phonological basis of categorization which has nothing to do with semantic categorization.

The Wolof case offers a somewhat bewildering array of classification parameters, all of which intersect in a viable system. The fact that the Wolof noun class system, and other equally hybrid systems, are viable ones, points to the possibility that earlier noun class systems did not have to be qualitatively different from extant ones, but that they, too, involved a multiplicity of overlapping classification strategies based not only on semantic categories or artifacts of the human mind, but on linguistic categories or artifacts of human language.

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<sup>29</sup> Several studies in a similar vein are to be found in Craig [1986].

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[Received December 14, 1995;  
provisional acceptance July 30, 1996;  
final version accepted January 26, 1997]