

SECOND OCCURRENCE FOCUS IN WOLOF: PATTERNS AND CONSEQUENCES*

IZABELA JORDANOSKA
DANIEL BÜRING
MAX PRÜLLER
MURIEL ASSMANN
University of Vienna

1 Introduction

This paper presents the first study of Second Occurrence Focus (SOF) in a language with non-prosodic focus marking, Wolof (Atlantic, Niger-Congo). As would be expected, such a broadening of the empirical basis has various consequences for the general theory of (Second Occurrence) focus, two of which we highlight in this paper. First, we show how the Domain Theory of Second Occurrence Focus can account for the Wolof data, despite initial appearances. We then zoom in on a second, subtle but striking finding: being *interpreted* as focal (i.e., having non-trivial alternatives) is not contingent on being *marked* as focal; rather it is contingent on *not* being marked as non-focal.

The paper is structured as follows: in Section 2 we provide background information, explaining the Domain Theory of Second Occurrence Focus, according to which SOF is merely a ‘regular’ focus whose domain (i.e. focus plus its background) happens to be smaller than the sentence (Büring, 2013/2015, Rooth, 1996); we also present how focus is marked in Wolof. Section 3 provides original Wolof data, which show two seemingly different patterns of how SOF is marked in the language. Section 4 discusses the consequences of the patterns for the general theory of focus. Section 5 provides a summary of our findings.

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2 Background

2.1 Second Occurrence Focus and Focus Sensitive Particles

In prosodically focus marking languages like English and German, the term Second Occurrence Focus (SOF) is applied to elements which, though associates of a Focus Sensitive Element (FSE) like *only*, are realized without the pitch accent generally characteristic of focus in those languages:¹

- (1) (Mary only STEAMS vegetables and)
even JOHN only STEAMS vegetables. (Krifka, 2004)

In 1, *steams* lacks a pitch accent even though it is the associate of *only*. Traditionally, two opposing explanations have been put forward to explain this fact: (i) FSEs like *only* do not (or not necessarily) associate with focus, or (ii), SOFi like *steams* in (1) are, in fact, foci, and that they remain unaccented is to be explained by the details of focus realization, the precise nature of which we will discuss momentarily.

Research into the phonetic realization of SOF (Beaver et al., 2007, Baumann et al., 2010, Féry and Ishihara, 2009, Jaeger, 2004) has corroborated position (ii): While SOFi like *steam* in 1 do lack the characteristic pitch accent that characterizes „regular“ focus, they show prosodic prominence in at least two ways relevant to this paper.²

First, SOFi are (perceptually, but also measurably) stronger than their metrical sisters, even if default prosody would have them weaker. Thus, *steams* in 1 is stronger than *vegetables*, even though the object is metrically stronger than the verb both in out-of-the-blue sentences like 2a and in subject focus sentences like 2b:

- (2) a. John steams VEGETABLES.
b. (Who steams vegetables? –)
JOHN steams vegetables.

Second, SOFi seem to carry some sort of baseline stress, independently of (relational) metrical considerations. As noticed by Susanne Tunstall (and reported by von Stechow, 1994:45), weak pronouns are incapable of being SOFi:

- (3) (Mary's boyfriend only likes HER.)
a. Even her BOSS only likes HER.
b. *Even her BOSS only likes 'er.

This shows that SOFi require, or introduce, some amount of prosodic prominence, just like regular foci.

Assuming, therefore, explanation (ii), we now turn to the relevant details of focus realization. The phonetic properties of SOF, increased stress but no accent, are most elegantly captured by theories that assume that focus primarily impacts the metrical stress of elements (Truckenbrodt, 1995, Ladd, 1996, 2008, Calhoun, 2010, Büring, 2016), rather than directly licensing pitch accent.

¹First Occurrence Focus is marked with upper case and Second Occurrence Focus is marked with small caps in English (also in the translations of the Wolof examples).

²For independent evidence that FSEs in English do obligatorily associate with focus, see e.g. Beaver and Clark (2003, 2008).

In particular, a focused element wants to be the strongest element within the prosodic domain of the focus. The pitch accent customarily associated with focus then follows from the following fact (with iP (intermediate Phrase) usually the size of the sentence, or a clause):

- (4) Highest metrical prominence within an iP is realized by bearing the last pitch accent within iP.

This perspective easily extends itself to what is called the Domain Theory of Second Occurrence Focus (Büring, 2013/2015, Rooth, 1996):

- (5) A SOF is a focus in the background of, and therefore in the domain of, another focus. While the SOF still is the most prominent element within its own domain, it has to be weaker than the primary focus.

The term ‘domain’ here refers to the biggest domain containing a focus and excluding its operator (Büring, 2013/2015:78), or equivalently, the constituent c-commanded by the operator. For a free focus (or the main focus of a clause), this is the full clause.

In 6, for example, the only way for *even John* to be the strongest element within its domain is for it to be stronger than *steams*. The word *steams*, on the other hand, may be weaker than *even John*, because *even John* is not part of its domain — it only needs to be the strongest element in *steams vegetables*.

- (6)
$$\underbrace{\underbrace{[\text{Even } [\text{JOHN}]_{F1}]_{F3}}_{D1} \text{ only } [\text{STEAMS}]_{F2} \text{ vegetables.}}_{D3}$$

But 5 not only takes care of making the SOF less prominent than the primary focus, it also explains why the SOF does not bear an accent: Since the primary focus has, by 4, to receive the last pitch accent within iP, all material following it within the same iP must be unaccented, even another focus.

Thus, while SOF at first glance seem to inhabit some sort of intermediary position between foci proper and completely unfocused positions, being accent-less yet somehow strong, the Domain Theory of Second Occurrence Focus derives their properties from general assumptions about focus.

Having explained the properties of SOF in English relevant for our exposition, we now turn to Wolof: a language which marks focus morphosyntactically.

2.2 Focus marking in Wolof

Wolof is an Atlantic (Niger-Congo) language, mostly spoken in Senegal, the Gambia and Mauritania. It has about 4 million speakers (Lewis, 2016). Data for this paper were gathered during a two month stay in Senegal and during several elicitation sessions with a native speaker from Dakar in Vienna.

Wolof is an SVO language in which prosody, crucially, plays no role in focus marking (cf. Riailand and Robert, 2001). Focus is marked morphosyntactically by a combination of movement to the left periphery and what Robert (1989, 2010) has called the clausal conjugations, a form of which is present in every Wolof clause. These conjugations appear pre- or post-verbally and their form changes depending on person and number, aspect, mood, and to which syntactic constituent the focus corresponds to. Only one conjugation can occur per clause. The relevant conjugations

	Subject focus	Complement focus	Verb/VP focus	Clausal focus
1SG	maa	laa	dama	naa
2SG	yaa	nga	danga	nga
3SG	moo	la	dafa	na
1PL	noo	lanu	danu	nanu
2PL	yeena	ngeen	dangeen	ngeen
3PL	ñoo	lañu	dañu	nañu

Table 1: The focus conjugations in perfective aspect and indicative mood. (adapted from: Robert, 2010:238)

for focus, illustrated in Table 1, indicate whether the subject or the complement is fronted and thus focused, or the predicate or whole clause is focused (only perfective aspect is illustrated here).

The conjugations in Table 1 occur whenever a constituent is focused, for example as an answer or a correction, as in 7, which illustrates subject focus with the marker *moo*.³

- (7) A: Who broke the table?
 B: Musaa **moo** ko damm
 M. SFOC.3SG 3SG.O break
 ‘MOUSSA broke it’

Foci associated with *only* are typically marked in this way, too:

- (8) Yax rekk **nga** ma jaay.
 bone only CFOC.2SG 1SG sell
 ‘You only sold me BONE (no meat).’ (Diouf, 2003:238)

In addition to the conjugation taking the complement focus form *nga* in 8, the focused object *yax* ‘bone’ has also been fronted.⁴

Crucially, only marking SOF partly the same way as primary focus, as English does, is ruled out for a language that uses morphosyntactic focus marking, as one cannot only use just a part of a morpheme or move only partly. Thus, the central question of this paper is: Since Wolof does not mark focus prosodically, how is SOF realized in Wolof? There are two possible options:

1. You don’t mark the SOF at all and only mark the primary focus.
2. You mark the two foci, primary focus and SOF, in the same way.

We explore these two options in the following section.

3 Patterns

As shown in example 8 in the previous section, associates of *rekk* ‘only’ are usually focus marked. This is also the case in 9a, where the associate of *rekk*, *garab* ‘plant, tree’, is moved and marked

³The focusing conjugations in Wolof are indicated by boldface.

⁴We make no claims about the precise contributions that the building blocks of the conjugations make. For our purposes here, we are only concerned with the realization of focus. For more information on focus in Wolof and on how these markers can be analyzed, see Robert (1989), Russell (2006), Torrence (2013) and Martinović (2017), among others.

by the focus conjugation *lañu*. In 9b, *garab rekk* now turns into what in English would be a SOF: Both the particle and its associate are repeated within in the background of a primary, contrastive focus, *melantaan yi*, ‘ants’:

- (9) A: Bul tiit, max yi garab rekk **la-ñu-y** lekk.
 IMP.SG.NEG be.afraid termite DET tree only CFOC-3PL-IPFV eat
 ‘Don’t worry, termites only eat PLANTS.’
- B: Déédéét, melantaan yi **ñoo-y** lekk garab rekk.
 no ant DET SFOC.3PL-IPFV eat tree only
 ‘No, ANTS only eat PLANTS.’

While the primary focus *melantaan yi* ‘ants’ is properly marked as such by the subject focus marker *ñoo*, no marking at all is found for the SOF *garab* ‘plants’.⁵

The same pattern is seen *mutatis mutandis* in 10 and 11: While the associate of *rekk*, the verb, is marked as focus by *dañu/dafa* in 10a/11a, it remains unmarked in 10b/11b, where instead the contrastive, primary focus on the subject (*yele*, ‘those’, and *Baboucar*, respectively) is marked as focus.

- (10) A: Rab yii **da-ñu-y** bëgg-a tiit-al nit ñi rekk, waaye
 devil DEM.PROX VFOC-3PL-IPFV want-INF be.afraid-CAUS person DET only but
 du-ñu leen lekk.
 NEG-3PL 3PL.O eat
 ‘These monsters only want to SCARE people, they don’t eat them.’
- B: Déédéét, y-ele **ñoo-y** bëgg-a tiit-al nit ñ-i rekk, waaye
 no DEM.DIST SFOC-3PL-IPFV want-INF be.afraid-CAUS person DET only but
 y-ii **da-ñu-y** leen bëgg-a lekk.
 DEM.PROX VFOC-3PL-IPFV 3PL.O want-INF eat
 ‘No, THOSE only want to SCARE people, but these ones want to EAT them.’

- (11) A: Jean **dafa** woo Astou rekk, waaye dem-ul seet-i ko.
 J. VFOC.3SG call A. only but go-3SG.NEG see-AND 3SG.O
 ‘Jean only CALLED Astou, but he didn’t go and see her.’

⁵A parallel case is found in Dagbani (Mabia, Niger-Congo, spoken in Ghana):

- (i) A: Di che ka di muɣisi a, mɔri ko **ka** tambayinsi di-ra
 Don’t let CONJ it worry you, plants only FOC ants eat-IPFV
 ‘Don’t worry, ants only eat PLANTS.’
- B: Aayi, yɔba **n** di-ri mɔri ko.
 No, termites FOC eat-IPFV plants only
 ‘No, TERMITES only eat PLANTS.’

(Dagbani, S. Issah p.c.)

In i the focus marker *ka* for fronted object focus is used in ia, following *mɔri* ‘plants’, the associate of *ko* ‘only’. In the correction ib *n* for subject focus is used following the contrastive focus *yɔba* ‘termites’, leaving the SOF *mɔri* ‘plants’ unmarked.

B: Déédéét, Baboucar **moo** woo Astou rekk, Jean tamit dem **na** seet-i
 no B. SFOC.3SG call A. only J. also go CLFOC.3SG see-AND
 ko.
 3SG.O
 ‘No BABOUCAR only CALLED her, Jean also went to see her.’

In a way these findings are unsurprising: as has been mentioned in Section 2, the conjugations (and morphological focus markers across languages in general, see Kalinowski (2015) for a survey) can only occur once per clause, so marking both the first and the second occurrence focus morphologically in these examples is expected to be impossible. Yet we should ask why, in turn, the examples are realized in the way they are.

Recall the discussion of the Domain Theory of SOF as proposed for English in Section 2.1. The reason why the primary focus gets the full focus marking (stress *and* accent), while the SOF only gets the ‘basic’ marking (stress) lies in their respective domains. The primary focus is the new element in the clause, which means it is a contrastive focus with the complete clause as its domain. That background, crucially, contains the repeated focus; that is what leads to the new focus being realized as the primary focus.

The same could plausibly be claimed for the Wolof examples we discussed: The background of the new, contrastive focus *melantaan yi*, ‘ants’, in 9b is the rest of the clause, including *garab rekk*, ‘only plants’, and *its* background; analogously in 10 and 11. This should pave the way for explaining why it is impossible to leave the primary focus unmarked and use morphological markers to mark, instead, the associate foci *garab* ‘plants’, *tiital* ‘scare’ and *woo* ‘call’ respectively.

However, according to the domain theories, the second occurrence focus does not in any way ‘lose’ to the primary focus when competing for full focus marking. Rather, it is perfectly and 100% regularly marked as focus within its domain (by the highest stress within that domain); as far as its domain is concerned, it is a fully and regularly marked focus. The fact that it does not bear the nuclear pitch accent merely results from the higher stress outside its domain. Under such an analysis, there is no unmarked, and in fact, not even a ‘lesser marked’ focus in English.

So a reasonable alternative expectation for a language like Wolof would be that SOF sentences are simply ineffable: lacking the means to mark a focus within a domain smaller than the clause, it has to find a different way of expressing what 9b, 10b and 11b do. The fact that it doesn’t and that these sentences are instead fully acceptable begs the question of what licenses unmarked foci in Wolof. Evidently the domain theory of focus cannot help here, since no such thing as an unmarked focus exists in English.

One possibility that comes to mind is that *rekk* and similar particles in Wolof simply are not focus sensitive —contrary to appearances. Under such an analysis, the focal markings in 9a and 10a/11a mark object and predicate, respectively, because those are new, or contrastive (within the clause), or otherwise in need of emphasizing, not because they are the associate of *rekk*. Interestingly, this would parallel early attempts to account for SOF such as that in Rooth (1992) a.o. where apparent association of focus is seen as a pragmatic conspiracy, whereby particles like *only* are really *context* sensitive, while the contrastive, but free focus on their apparent associates merely reflects properties of the context that are responsible for picking *only*’s restriction.

We will now argue that this is not the correct analysis for Wolof: *rekk*, like its English counterpart *only*, grammatically associates with focus; it is not just context sensitive.

3.1 SOF in Biclausal Structures

When we turn to examples in which first and second occurrence foci sit in different clauses of the same sentence, we find a very different pattern from the one observed above. Consider the example in 12:

- (12) A: Jean nee **na** [moom rekk **la** bëgg.]
 Jean say CLFOC.3SG 3SG.EMPH only 3SG.CFOC love
 ‘John said that he only loves HER.’
- B: Déédéét, Baboucar **moo** wax ne [moom rekk **la** bëgg.]
 no B. 3SG.SFOC say COMP 3SG.EMPH only 3SG.CFOC love.
 ‘No, BABOUCAR said that he only loves HER.’

In 12a, the domain of *rekk* ‘only’ is the embedded clause, in which it is focus marked by *la*, as expected. This focus marking is repeated in 12b, while the new, contrastive focus *Baboucar* is marked within the matrix clause by the equally expected *moo*. So both foci in 12a and 12b are equally marked, each in its respective clause.

This, we argue, clearly shows that in Wolof, just like in the parallel English examples, *moom*, ‘her’, is focus marked because it is associated with *rekk*, ‘only’, not just because it is new, or contrastive. While the latter position would explain the focus marking of *moom* in 12a, it would wrongly predict that no parallel marking should occur in 12b, where both *moom* and *rekk* are repeated, and hence non-new.

By parity of reasoning, the same should hold for object and verb, respectively, in 9b and 10b above: these are grammatical foci, qua being the associate of *rekk*, regardless of their status as new or given (contrastive or not).

3.2 SOF on Pronouns

Our second argument for *rekk* associating with focus, and hence for there being a SOF in the first place, involves a second kind of morphological reflex of focusing in Wolof, namely the choice of weak vs. strong pronoun forms. First, consider 13.

- (13) Jean moom rekk **la** bëgg
 J. 3SG.EMPH only CFOC.3SG love
 ‘John only loves HER.’

As expected, the associate of *rekk*, ‘only’, is morphologically marked as focus using the complement focus marker *la*. Strikingly, it appears impossible to turn this example into a SOF case:

- (14) a. *Déédéét Baboucar **moo** moom rekk bëgg.
 no B. 3SG.SFOC 3SG.EMPH only love
 Intended: ‘BABOUCAR only loves HER.’
- b. #Déédéét, Baboucar **moo** ko bëgg rekk.
 no B. 3SG.SFOC 3SG.O love only
 ‘No, only BABOUCAR loves her.’
 This *doesn’t* mean: ‘BABOUCAR only loves HER.’

14a, where we simply replaced the complement focus marker *la* by the subject focus marker *moo* is rejected as plainly ungrammatical. Note that this is in stark contrast with our earlier examples, in particular 9b.

In line with Zribi-Hertz and Diagne (2002) and Russell (2006), this happens because the strong pronoun form *moom* can only be used in object position when it is at the same time morphosyntactically marked as focus, as in 13.⁶ This brings us to the second variant, 14b, where instead of *moom* the weak clitic pronoun form *ko* is used. While generally acceptable, this sentence is not felicitous in the context of 13; it can only be interpreted as ‘only Baboucar loves her’ —i.e. *rekk* associating with the morphosyntactically marked focal subject— which in turn is not a good correction of ‘Jean loves only her’.

This, too can be explained if the weak pronoun form is inherently non-focal, just like weak pronouns in English. This seems plausible given that weak pronouns cannot be focused, as shown in 15.

- (15) *Baboucar ko **la** bëgg rekk.
 B. 3SG.SFOC 3SG.O love only
 Intended: ‘BABOUCAR only loves HER.’

But crucially, in order to explain the infelicity of 14b, we also must assume that *rekk* needs to associate with a *grammatical* focus. Simply assuming that apparent SOF aren’t bona fide foci at all and therefore may remain unmarked in the general case, would leave the data in 14b unexplained (the sentence should be interpretable as ‘BABOUCAR loves only her’).

3.3 Non-Focus Sensitive Elements

An additional piece of evidence that *rekk* ‘only’ is a focus sensitive element comes from the comparison of *rekk* ‘only’ with *sax* ‘even’. It has been convincingly argued in Beaver and Clark (2003) that, in English, both *even* and *only* are FSEs. The Wolof equivalent of *even*, *sax*, doesn’t seem to associate systematically with the focus, however. Consider 16:

- (16) a. Jean, tuuti ceeb-u yàpp rekk **la** lekk.
 J. little rice-REL meat only CFOC.3SG eat
 ‘John only ate A BIT OF THE RICE WITH MEAT.’
 b. Xale yi sax, tuuti ceeb-u yàpp rekk **la-ñu-y** lekk.
 child DET even little rice-REL meat only CFOC-3PL-IPFV eat
 ‘Even the children are only eating A BIT OF THE RICE WITH MEAT.’

In 16b, the associate of *sax* ‘even’, *xale yi* ‘the children’, is not focus marked. The focus marking goes with the associate of *rekk*, the object *tuuti ceebu yàpp* ‘a bit of rice with meat’.

The two following examples corroborate that focus marking an associate of *sax* is optional. In 17a, *Bubakar*, the associate of *sax* ‘even’, is focus marked. In 17b, on the other hand, the whole clause is focus marked, rather than the associate of *sax*, *Bintë*. So while 17a behaves as English,

⁶Strong pronouns like *moom* may in general also be licensed by topichood, parenthesis or when following a preposition (cf. strong pronouns in French), but neither of these is the case here. These are the only environments in which strong pronouns are licensed. Otherwise, the weak clitic pronouns, in this case *ko* for a third singular object, must be used (Zribi-Hertz and Diagne, 2002, Russell, 2006).

- (18) a. Bul tiit, max yi garab rekk **la-ñu-y** lekk.
 IMP.SG.NEG be.afraid termite DET tree only CFOC-3PL-IPFV eat
 ‘Don’t worry, termites only eat PLANTS.’
- b. Déédéét, melantaan yi **ñoo-y** lekk garab rekk.
 no ant DET SFOC.3PL-IPFV eat tree only
 ‘No, ANTS only eat PLANTS.’

In the next section we will outline a way out of this dilemma.

4.1 Towards an Explanation

Suppose we enrich the dichotomy ‘focal’/‘non-focal’ by a third category, ‘focus neutral’. Focal categories, as one would expect, are those morphosyntactically marked as focus. What are non-focal constituents? First, those that are lexically marked as non-focal, in particular weak pronouns. Second, constituents that are *the* background of a focus. All other categories are focus neutral.

A focus sensitive operator such as *rekk*, ‘only’, can, by assumption, associate with any element within its scope that is *not non-focal*. Crucially, this includes elements *within* the background of a focus, since those are focus neutral (unlike the category that corresponds to the background as a whole, which is non-focal): they may (but need not) be the associate of *rekk*.

In our initial examples like 9b/10b, the subject is marked as focal, and, accordingly, the VP as non-focal. Elements *within* the VP, are neutral, and since *rekk*, too, sits within, or adjoined to, the VP, it can freely associate with these elements. A weak object pronoun as in 14b, on the other hand, is inherently non-focal (unlike the lexical object in 9 or the verb in 11) and hence cannot be the associate of *rekk*.

The only thing unaccounted for, then, is why focus would ever be morphosyntactically marked in the first place, be it in simple clauses with *rekk*, or in the embedded clause in 12b. Given the newly created category of ‘focus neutral’ constituents, why does *rekk* not ‘normally’ associate with an unmarked constituent; why only when the morphosyntactic marking is, as it were, otherwise occupied?

Although the precise answer to that question is at present unclear to us, we believe that it must be related to the fact that simple clauses in Wolof always include a focal marking. In other words, having *rekk* in a completely focus-less clause is simply not an option. Marking something other than *rekk*’s associate as focus would in turn mark the complement of that as non-focal.

It is possible that this is indeed all that needs to be said. This would entail that other focus markers such as *moo* or *na* (see Table 1) are in principle possible in 12b, provided the free focus they express were contextually appropriate. It would also entail that a SOF does not need to have a previous first occurrence, as long as the primary focus in its clause is independently pragmatically licensed. We do not have enough data at present to investigate this further.

In the alternative, we would need to assume that there is a preference for explicit focal marking (by morphosyntax), with focus neutral encoding being merely a ‘second choice’ where the first is unavailable. Note that this is still a stronger statement than saying that the associate of *rekk* is not a focus, or that SOF does not need to be marked at all, because it still accounts for the weak pronoun data as well as the bi-clausal data.

5 Summary

This paper provided the first discussion of SOF in a language that marks focus non-prosodically. Descriptively, it appears that focus in these cases is still grammatically active: It has to be morphosyntactically realized if possible (as shown with the biclausal examples in 12), and elements lexically marked as non-focal may not be the associate of focus sensitive *rekk*, ‘only’. Yet in case SOF and primary focus occur in the same clause, marking of the SOF is not necessary, nor in fact possible.

Overall, the picture jibes well with domain theories of SOF such as Büring (2013/2015) in that the primary focus seems to be selected by the same principles as in English (larger domain). Furthermore, the fact that first and second occurrence focus are marked the same where possible, as in example 12, provides further evidence that the marking of SOF, also in English, is not categorically reduced vis-à-vis that of ‘ordinary foci’ (but merely the ordinary marking of a focus in a smaller domain).

Theoretically this entails that a grammatical (i.e. semantic) focus may indeed be grammatically unmarked under specific circumstances. This, we argued, suggests a richer taxonomy of ‘focushood’, one which allows for focus-neutral constituents alongside focal and non-focal ones. The exact implementation of such an analysis, however, hinges on additional data not currently available to us and is therefore left for a future occasion.

Glosses

1, 2, 3	first, second, third person	INDF	indefinite
AND	andative	IPFV	imperfective
CAUS	causative	O	object
COMP	complementizer	NC	noun class
CFOC	complement focus	NEG	negation
CLFOC	clausal focus	PL	plural
DEM	demonstrative	PROX	proximal
DET	determiner	REL	relative
EMPH	emphatic pronoun	SFOC	subject focus
INF	infinitive	SG	singular
IMP	imperative	VFOC	verb/VP focus

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