

A dependent case analysis of pseudo noun incorporation in Wolof*

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Abstract

Bare nominals in Wolof can occur in the object position and they must be adjacent to the transitive verb that subcategorizes for them. They are, furthermore, narrow scope indefinites. These are properties usually attributed to Pseudo Noun Incorporation. However, there are two circumstances under which the requirement to be adjacent to the verb can be obviated: either a DP is introduced between the subject and the PNI-ed object or the latter is \bar{A} -moved. While the introduction of an additional argument and \bar{A} -movement are disparate phenomena, a dependent case analysis of nominal licensing (Branan, to appear) can account for why they both allow a PNI-ed object to not be adjacent to the verb in Wolof. Branan argues, following Levin (2015), that all nominals must be licensed with case, with case assignment being calculated in terms of dependent case (Marantz, 1991). In the impossibility of assigning case to a nominal, a last resort licensing strategy arises, namely, surface adjacency with the verb. Under the proposal that Branan makes about domains of case assignment and the position of case competitors in the sentential spine, bare nominal objects in Wolof cannot be licensed with case, hence they must be adjacent to the verb. However, the introduction of an additional argument provides a case competitor to a PNI-ed object, allowing it to do away with licensing via verb adjacency. Likewise, \bar{A} -moving a bare nominal object brings it close to the subject, which can transformationally act as a case competitor. I argue thus that a dependent case theory of PNI can provide a uniform analysis of the PNI distribution of bare nominals in Wolof. If correct, this analysis has two implications. Empirically, it provides further evidence that a strict adjacency condition cannot adequately characterize PNI crosslinguistically (Driemel, 2020). Theoretically, it motivates a reappraisal of the claim that dependent case and nominal licensing are necessarily incompatible with each other.

Keywords: Wolof; pseudo noun incorporation; bare nominal; nominal licensing, dependent case.

*[Acknowledgments to be added.] Unless otherwise stated, the Wolof data collected here is due to in-person interviews conducted with a native speaker of the language in [location redacted]. The speaker is a male from Kaolack in his late forties. The speaker was asked to judge sentences in Wolof constructed by the author. He was also asked to translate English prompts. When the semantic properties of a particular sentence were at issue, a context was provided and the speaker was asked whether the given sentence was true or false in that scenario. Additional data was also provided by another consultant when the judgment of some sentences was unclear or when paradigms had to be completed. This consultant is a male in his mid-twenties from Dakar. I first established that the general properties of BNs accepted by the first consultant were accepted by him as well. In addition, the judgments of this consultant was collected via online questionnaires sent to him; the speaker was asked to judge sentences in Wolof constructed by the author. Data from other sources are cited, with modifications in the glosses for uniformity.

1 Introduction

‘Pseudo noun incorporation’ (PNI) designates a construction where an object usually appears adjacent to the verb that subcategorizes for it.¹ Prima facie, PNI seems identical to noun incorporation. However, unlike what happens in the latter, in PNI, the object is not a nominal head, but rather an internally complex nominal phrase. This can be demonstrated, for instance, by the fact that a PNI-ed nominal can be modified by an adjective. On pseudo noun incorporation, see the collection of papers in [Borik & Gehrke \(2015\)](#); see also [Levin \(2015\)](#); [Driemel \(2020\)](#) and references therein.

PNI can be illustrated by Niuean ([Massam, 2001](#)). (1a) is a baseline example, where the subject of the transitive verb is marked with ergative case and the object, absolutive case. In this sentence, the object carries not only case, but also number morphology. Furthermore, it is separated from the sentence-initial verb by the subject and by an adverb (*tūmau* ‘always’). (1b) is a PNI example. In this sentence, the object appears in bare form, lacking both case and number morphology. It is also adjacent to the verb. The agentive subject in turn is marked with absolutive case, which is otherwise reserved for objects or intransitive subjects. In the same example, the adverb *always* no longer intervenes between the verb and the bare object. Finally, (1c), where the case properties are the same as those in (1b), shows that the bare object that is adjacent to the verb can also be modified by an adjective, suggesting that the PNI-ed object is a complex phrase, rather than a simplex nominal head.

(1) *Pseudo noun incorporation in Niuean*

- a. Takafaga tūmau nī e ia e tau ika.
hunt always EMPH ERG he ABS PL fish
‘He is always fishing.’
- b. Takafaga **ika** tūmau nī a ia.
hunt fish always EMPH ABS he
‘He is always fishing.’
- c. Ne inu **kofe kono** a Mele.
PST drink coffee bitter ABS Mele
‘Mary drank bitter coffee.’
([Massam, 2001](#), p. 157ff)

Another property that usually characterizes PNI is the impossibility of the PNI-ed nominal to be a subject (though see [Öztürk 2009](#), who argues that subjects can indeed be incorporated in Turkish). This can be illustrated in Tamil ([Baker, 2014b](#)). (2a) is a baseline example where the object is a full nominal that contains a determiner and also case morphology. In (2b), the theme does not contain this nominal morphology. (2c) indicates that, under these conditions, the object must be adjacent to the verb, even though full nominals can be separated from the same verb by a locative argument (2a). (2d) shows that they PNI-ed nominal can be internally complex, including not only number morphology, but also an adjective. (2e) illustrates the obligatory narrow scope reading of a PNI-ed nominal. Finally, (2f) shows that a subject cannot receive this interpretation – in fact, it must take wide scope with respect to the same operator as that used in (2e) (*again and again*). Scope is relevant in this case due to the fact that subjects in Tamil do not have overt case morphology to begin with.

¹The word ‘usually’ is key here. [Driemel \(2020\)](#) argues in detail that an adjacency requirement is too strong to fully characterize PNI cross-linguistically. As we will see below, PNI in Wolof also does not always conform to this generalization.

(2) *Pseudo noun incorporation in Tamil*

- a. Naan oru pustagatt-e anda pombale-kittē kuḍu-tt-een.
I a book-ACC the woman-LOC give-PAST-1SS
'I gave a book to the woman.'
- b. Naan anda pombale-kittē **pustagam** kuḍu-tt-een.
I the woman-LOC book give-PAST-1SS
'I gave a book to the woman.'
- c. *Naan **pustagam** anda pombale-kittē kuḍu-tt-een.
I book the woman-LOC give-PAST-1SS
Int.: 'I gave a book to the woman.'
- d. Baala **pazeya pustaga-nga** vi-tt-aan.
Bala old book-PL sell-PAST-3MS
'Bala sold old books.'
- e. Naan tirumba tirumba **pustagam** vang-an-een.
I again again book buy-PAST-1SS
'I bought book(s) again and again.' (a different book each time)
- f. # Bala-ve tirumba tirumba **naaji** keḍi-cc-icci.
Bala-ACC again again dog bite-PAST-3NS
'A dog bit Bala again and again.' (only the same dog bit him over and over)
(Baker, 2014b, p. 8ff; 18; 23)

In Wolof (Niger-Congo), bare nominals display some of the properties found in PNI.^{2 3} (3a) is a baseline example, where the object is a full nominal with a determiner and the class marker characteristic of Wolof (on which, see more below). (3b) is a bare nominal (BN) version of that. We see in (3c) that a BN object cannot be separated from the verb with a low adverb, though, as we are going to see, this is possible for a full nominal in the same position. (3d) shows that a BN object must take narrow scope. Finally, (3e) shows that a BN cannot be the subject of a transitive verb in a finite clause.⁴

- (3) a. Xale y-i jënd-na-ñu a-b téere.
child CM.PL-DEF buy-NA-3PL INDEF-CM.SG book
'The children bought a book.'
- b. Xale y-i jënd-na-ñu **téere**.
child CM.PL-DEF buy-NA-3PL book
'The children bought a book.'
- c. Jàngalekat b-i jàng-na { *cikaw } **taalif** { cikaw }.
teacher CM.SG-DEF read-NA.3SG { *loudly } poem { loudly }
'The teacher read a poem loudly.'

²For recent literature on Wolof, see, Tamba *et al.* (2012); Torrence (2013a); Harris (2015); Martinović (2015, 2017, 2019); Jordanoska (2020), a.o.

³The Wolof glosses I use here are as follows: CAUS = causative, CM = class marker, COMP = complementizer, DEF = definite, GEN = genitive, IMPF = imperfective, ITER = iterative, NA = sentential particle for neutral sentences (*na*), NEG = negation, NON.FIN = nonfinite, OBJ = object, OBL = oblique, PL = plural, POSS = possessive, PREP = preposition, PROG = progressive, RECIP = reciprocal, REFL = reflexive, SG = singular.

⁴[redacted] remarks that another traditional PNI property is number neutrality. Dayal (2011), however, questions this generalization, showing that PNI-ed nominals in Hindi are in fact singular and that number neutrality arises as a byproduct of the aspectual properties of a PNI sentence. In [redacted], I argue that BNs in Wolof are singular, though a plural interpretation arises as a consequence of factors other than aspect.

- d. Isaa fàtte-na jënd fowekaay.
 Isaa forget-NA.3SG buy toy
 ‘Isaa forgot to buy a toy.’
- i. # *Isaa is going to a store and I gave him a list of toys that I want him to buy for my dogs. He succeeded in buying all toys, except for one (i.e. there is one toy that Isaa did not buy).*
 - ii. ✓ *Isaa is going to a store and I gave him a list of toys that I want him to buy for my dogs. He ended up not buying any toy at all.*
- e. * **Sasfam** fàtte-na tej palanteer=am.
 nurse forget-NA.3SG close window=POSS.3SG
 Int.: ‘A nurse forgot to close his;her window.’

Massam’s analysis of pseudo noun incorporation has one main component, which has consequences for both the internal and external properties of bare nominals in Niuean. Massam proposes that bare nominals in this language have a defective structure; specifically, they do not contain a DP layer, projecting just an NP, unlike their full nominal counterparts. As a consequence, bare nominals in Niuean lack case and determiner morphology, with the lack of case also having consequences for the case marking of a higher co-argument: (1b) above shows that a PNI sentence displays intransitive case and agreement properties, even though the verb (*takafaga* ‘hunt’) is transitive. Specifically, the subject (*ia*) appears with absolute (and not ergative) case. Nonetheless, the bare nominal is still a complex phrase, capturing why it can be modified (1c). Besides capturing the internal properties of a PNI-ed nominal in Niuean, this analysis also captures a signature property of PNI, namely the adjacency between the bare object and the verb: according to Massam, the lack of a DP layer in Niuean bare nominals is also the reason why they cannot move to a position that is otherwise occupied by full nominal objects in the language. More precisely, objects in Niuean evacuate the verb phrase, so that they escape the predicate fronting that results in the verb-initial order that is characteristic of the language. However, because bare nominals cannot move, they remain inside the fronted VP, so that they end up adjacent to the verb even after predicate fronting. In this analysis of PNI phenomena, the adjacency requirement follows from the inability of a bare nominal object to move from its base-generation position.

Baker (2014b), on the other hand, proposes that there indeed is some type of movement involved in PNI. More precisely, PNI is the result of the head of an NP theme head-moving to V, forming a complex predicate at LF. Baker assumes that movement is a non-primitive operation that involves copying, such that copies must be deleted in order to avoid contradictory linearization statements (see, for instance, Nunes 2004). Because the proposed PNI head movement is not triggered by features nor is it driven by affixal properties of some node, there is no simple criterion that could determine which copy to pronounce and which to delete. As such, Baker contends that the only way to move the PNI-ed nominal and avoid linearization ill-formedness is for the moving N^0 to move vacuously. Specifically, Baker, p. 27 claims that “in this particular situation [*i.e.*, in PNI construction, analyzed as head movement] a single pronunciation of [*a PNI-ed NP*] can count as a realization of both copies of the N movement chain”. If some element comes between the PNI-ed NP and the verb, a linearization contradiction will indeed arise. Hence, in Baker’s analysis, the adjacency requirement follows from a conspiracy between how PNI arises (head movement of N^0 from NP to V^0) and how the resulting derivation can avoid linearization ill-formedness.

Massam’s and Baker’s approaches thus differ in how each author derives the adjacency requirement. According to Massam, the need of the bare nominal object to be adjacency to the verb is the byproduct of the nominal’s inability to move away from its base-generation position. In Baker’s

account, however, the adjacency requirement is not caused by a property of the PNI-ed nominal. Rather, it follows from a conspiracy between how PNI is derived and how a derivation should proceed in order for linearization statements not to be contradictory. As such, Baker’s analysis does make room for the adjacency requirement to be side-stepped, as long as no linearization issue arises. Nonetheless, despite this higher degree of flexibility, the type of PNI found in Wolof poses a challenge to a linearization-based theory like Baker’s. In particular, while PNI in Wolof also obeys the adjacency requirement (3c), there are circumstances where it can be bypassed, as in (4b), where the causee *Roxaya* intervenes between the verb and the theme bare nominal.

- (4) a. Jënd-oloo-na-a **téere** Roxaya.
 buy-CAUS-NA-1SG book Roxaya
 ‘I made Roxaya buy a book.’
 b. Jënd-oloo-na-a Roxaya **téere**.
 buy-CAUS-NA-1SG Roxaya book
 ‘I made Roxaya buy a book.’

The correlation that holds in the Wolof data to be surveyed is that which holds between the introduction of an additional DP in the sentence (the causee in (4b)) and the loosening of the adjacency requirement. This can be captured in a theory of nominal licensing that is based on dependent case (Marantz, 1991; Baker & Vinokurova, 2010; Baker, 2012, 2014a, a.o.), as that put forth by Branán (to appear). As we are going to see below, Branán proposes that nominals must be licensed with case, with surface adjacency with the verb arising as a last resort licensing option if case assignment is not possible. Under a configurational view of case assignment, whether or not a nominal is assigned case is a function of the presence of other nominals in a given syntactic domain that can act as case competitors. As we are going to see, the adjacency requirement holds in Wolof PNI, unless another nominal is made present in the same sentence, as in (4b). This correlation can be accounted for straightforwardly in a dependent case analysis of PNI.

This paper is structured as follows. In §2, I describe the properties of pseudo noun incorporation in Wolof. We shall see that, while Wolof obeys the adjacency requirement, there are two ways to avoid it: either the BN is \bar{A} -moved or an intermediate nominal is introduced between the subject and the BN theme in the form of e.g. an applied or causee argument. A question that these data motivate is what common property of these two independent phenomena permit the adjacency requirement to be obviated. In §3, I summarize the main relevant properties of Branán’s (to appear) theory of nominal licensing, where nominals must be assigned case, with adjacency with the verb arising as a last resort option when case assignment is not possible. Because Branán’s theory builds on a dependent case framework, a unified analysis can be provided to the question above: what \bar{A} -movement and three-argument constructions have in common is that they both provide a case competitor that allows a BN theme to be assigned case, which does away with verb adjacency. In §4, I apply Branán’s (to appear) nominal licensing to Wolof. In §4.4, I add an independently motivated definition of the EPP that accounts for why BNs in Wolof cannot occur in the subject position. This addition, in combination with the dependent case view of the PNI endorsed here will be shown to give rise to correct predictions about BN subjects that are subsequently \bar{A} -moved. §5 is a summary of the analysis to be put forward in the present paper to account for the distribution of PNI in Wolof. In the same section, I briefly discuss its empirical and theoretical implications.

2 The distribution of BNs in Wolof

2.1 Basics of Wolof syntax

Wolof is predominantly a head-initial language, though some determiners surface post-nominally. Determiners contain a class marker (CM) affixed to them (Babou & Loporcaro, 2016). Besides the class a noun belongs to, the class marker encodes number information (singular or plural). For instance, *sàcc* ‘thief’ remains constant in (5a) and (5b); whether the DP it heads is interpreted as singular or plural is correlated with the class marker used, *b* and *y*, respectively.

- (5) a. Xadi gis-na **a-b** *sàcc*.
Xadi see-NA.3SG INDEF-CM.SG thief
‘Xadi saw a thief.’
- b. Awa jàpp-na **a-y** *sàcc*.
Awa catch-NA.3SG INDEF-CM.PL thief
‘Awa caught some thieves.’
(Tamba *et al.* , 2012, (32a/33b))

This paper is concerned with the syntactic distribution of nominals that lack this morphology, as illustrated in (3) above.⁵

Wolof is well-known for its rich system of sentential particles, i.e., morphemes, which encode, among other things, information structure (Zribi-Hertz & Diagne 2002; Torrence 2013a; a.o.). Specifically, these are morphemes which are sensitive as to whether a constituent to its left is topical or focal, or if the whole sentence is new information, among other things. In (6) – and in most sentences in this paper –, it is the morpheme for neutral sentences, *na*.⁶ To the sentential particle is attached a morpheme that cross-references the φ -features of the subject, e.g. *-ñu* in (6b). This cross-referencing follows a nominative alignment: the subject of both transitive and intransitive verbs is cross-referenced.

- (6) a. Jàngakat b-i lekk-na ceeb-u jën.
student CM.SG-DEF eat-NA.3SG rice-GEN.SG fish
‘The student ate rice and fish.’
- b. Jàngakat y-i lekk-na-ñu ceeb-u jën.
student CM.PL-DEF eat-NA-3PL rice-GEN.SG fish
‘The students ate rice and fish.’
- (7) a. A-b paket agsi-na.
INDEF-CM.SG package arrive-NA.3SG
‘A package arrived.’
- b. A-y paket agsi-na-ñu.
INDEF-CM.SG package arrive-NA-3PL
‘Some packages arrived.’

With this background in place, in the next section, we turn to the properties of PNI in Wolof.

⁵A particular analysis of how the class marker encodes both number and class properties can be found in [redacted].

⁶[redacted] points out that a more complete investigation of PNI in Wolof would include all other sentential particles found in the language. I agree with the observation, but because of time and space constraints, I limit the present paper to neutral *na* clauses. If the observations made here are on the right track, it could pave the way to an extension into PNI in other types of sentences.

2.2 Pseudo Noun Incorporation in Wolof

The data previewed above suggests that BNs in Wolof have the distribution of PNI-ed nominals. However, there are ways to obviate the verb-adjacency requirement in Wolof that are not always found in PNI: if the bare nominal is \bar{A} -moved or if it is embedded in a construction where an additional argument is introduced between the sentence's subject and the theme bare nominal (namely, in applied, ditransitive, and causative constructions), there no longer has to be adjacency between the bare nominal and the verb. My proposal, based on [Branan \(to appear\)](#), is that the distribution of bare nominals in Wolof is at least partially governed by the need to license nominals with case, adjacency with the verb being a last resort means to license a nominal that cannot receive case by other means. More precisely, assuming a dependent case framework, bare nominals in Wolof cannot be assigned case because they belong to a different case domain than the subject, so they have to be rescued by verb-adjacency. According to this analysis, what \bar{A} -movement and three-argument constructions have in common is that they allow for the bare nominal to be visible to a case competitor: \bar{A} -movement displaces the bare nominal into the same case domain as a case competitor, while the intermediate argument of three-argument constructions acts as a case competitor itself.

An analysis-internal challenge is to account for both the distribution of bare nominals in Wolof and their full nominal counterparts: the latter do not obey the verb-adjacency requirement. I rely on scope differences between full and bare nominals, only the latter being obligatorily narrow scope indefinites. I also capitalize on these differences to argue that bare and non-bare nominal occupy different syntactic positions: non-bare nominals occupy a higher position that allows them to be visible to the subject, a case competitor.

A BN in the direct object position must be adjacent to the verb. (8a) illustrates the fact that a low adverb can intervene between the verbal complex and a full nominal object. (8b) in turn shows that the same adverb cannot be placed between the verbal complex and a BN object.

- (8) a. Jàngalekat b-i jàng-na { cikaw } taalif b-i { cikaw }.
 teacher CM.SG-DEF read-NA.3SG { loudly } poem CM.SG-DEF { loudly }
 ‘The teacher read the poem loudly.’
- b. Jàngalekat b-i jàng-na { *cikaw } **taalif** { cikaw }.
 teacher CM.SG-DEF read-NA.3SG { *loudly } poem { loudly }
 ‘The teacher read a poem loudly.’

(9) is another paradigm showcasing the same restriction, though the ungrammaticality is not as

marked.⁷

- (9) a. Roxaya { *bugaaw } jàng-na { bugaaw } xibaar b-i { bugaaw }.
 Roxaya { *quickly } read-NA.3SG { quickly } newspaper CM.SG-DEF { quickly }
 ‘Roxaya read the newspaper quickly.’
- b. Roxaya { *bugaaw } jàng-na { ?bugaaw } **xibaar** { bugaaw }
 Roxaya { *quickly } read-NA.3SG { ?quickly } newspaper { quickly }
 ‘Roxaya a newspaper quickly.’

However, this requirement can be sidestepped in two ways: (i) addition of another argument, which is lower than the (agentive) subject, but higher than the direct object; (ii) \bar{A} -movement of the BN direct object. The latter is achieved by relativizing a BN.

When another intermediate argument is added in clause, it can optionally intervene between the verb and the BN direct object. This description obtains in ditransitive (10), applicative (11), and causative (12) constructions. In the data to follow, the (a) and (b) are baseline examples where the theme is a full nominal. This theme can either precede or follow the intermediate argument (a goal, an applied argument, or a causee, respectively). (c) and (d) are the BN counterparts of these examples, where the same range of possible word orders is available.

- (10) a. Awa netali-na b-enn léeb xale y-i.
 Awa narrate-NA.3SG CM.SG-one story child CM.PL-DEF
 ‘Awa narrated a story to the children.’ FN; theme \gg goal
- b. Awa netali-na xale y-i b-enn léeb.
 Awa narrate-NA.3SG child CM.PL-DEF CM.SG-one story
 ‘Awa narrated a story to the children.’ FN; goal \gg theme
- c. Awa netali-na **léeb** xale y-i.
 Awa narrate-NA.3SG story child CM.PL-DEF
 ‘Awa narrated a story to the children.’ BN; theme \gg goal
- d. Awa netali-na xale y-i **léeb**.
 Awa narrate-NA.3SG child CM.PL-DEF story
 ‘Awa narrated a story to the children.’ BN; goal \gg theme
- (11) a. Awa tabax-al-na kër g-i Faatu.
 Awa build-APPL-NA.3SG house CM.SG-DEF Faatu
 ‘Awa built Faatu the house.’ FN; theme \gg APPL

⁷[redacted] and [redacted] observe that *bugaaw* could be parsed as *b-u gaaw* ‘CM.SG-COMP be.quick’, that is, as a relative clause. However, if this were the case in (8a), in the option where *bugaaw* follows *the newspaper*, we would have a sequence *b-i b-u*, that is, a head-final definite determiner followed by the relative complementizer, which is ungrammatical:

- (i) * Jënd-na-a téere b-i [b-u Mariama Ba jànga]
 buy-NA-1SG book CM.SG-DEF [CM.SG-COMP Mariama Ba write]
 Int.: ‘I bought the book that Mariama Ba wrote.’

Alternatively, this option could be derived by extraposing *b-u gaaw* ‘CM.SG-COMP be.quick’. Extraposition is likewise ungrammatical:

- (ii) Samba jàng-na téere b-i { *déemba } Roxaya binda { ✓déemba }.
 Samba read-NA.3SG book CM.SG-DEF { *tomorrow } Roxaya write { ✓tomorrow }
 ‘Samba read the book that Roxaya wrote.’

- b. Awa tabax-al-na Faatu kër g-i.
Awa build-APPL-NA.3SG Faatu house CM.SG-DEF
'Awa built Faatu the house.' *FN; APPL >> theme*
- c. Janga-al-na-a taalif sama doom.
read-APPL-NA-1SG poem POSS.1SG child
'I read my child a poem.' *BN; theme >> APPL*
- d. Janga-al-na-a sama doom taalif.
read-APPL-NA-1SG POSS.1SG child poem
'I read my child a poem.' *BN; APPL >> theme*
- (12) a. Bindo-loo-na-a a-b leetar xale y-i.
write-CAUS-NA-1SG INDEF-CM.SG letter child CM.PL-DEG
'I made the children write a letter.' *FN; theme >> causee*
- b. Bindo-loo-na-a xale y-i a-b leetar.
write-CAUS-NA-1SG child CM.PL-DEF INDEF-CM.SG letter
'I made the children write a letter.' *FN; causee >> theme*
- c. Jënd-oloo-na-a téere Roxaya.
buy-CAUS-NA-1SG book Roxaya
'I made Roxaya buy a book.' *BN; theme >> causee*
- d. Jënd-oloo-na-a Roxaya téere.
buy-CAUS-NA-1SG Roxaya book
'I made Roxaya buy a book.' *BN; causee >> theme*

(13) shows additionally that a BN can be separated from a causativized verb not only by the causee argument, but also by an adverb.

- (13) Bindo-loo-na-a xale y-i ndànk ndànk bataaxal.
write-CAUS-NA-1SG child CM.PL-DEF slowly slowly letter
'I patiently (lit.: slowly) made the children write a letter.'

Wolof is not alone in allowing a BN object not to be adjacent to the verb in ditransitive sentences. [Johnson \(2015\)](#) shows that this is possible in Hocak, where a goal argument can be bare and, at the same time, not be adjacent to the verb.⁸

- (14) *Hocak*
Meredith-ga **nijkjak** šuuk-hiža Ø-hok'ų Ø-roogu.
Meredith-PROP child dog-INDEF 3S-give 3S-want
'Meredith wants to give a dog to children.'
([Johnson, 2015](#), (44b))

Likewise, [Driemel \(2020\)](#) shows that, in Turkish, a PNI-ed theme can be separated from the verb by a goal:⁹

⁸[Johnson \(2015\)](#) is, to the best of knowledge, the first to make a case against a linearization-based analysis of PNI ([Baker, 2014b](#)). I comment on the adequateness of this proposal to the Wolof data in [redacted].

⁹There is variation regarding the occurrence of overt determiners in nominals modified by relative clauses in Wolof. In the dialects examined by [Torrence \(2013a\)](#), as well as in those studied in this paper, overt determiners and relative clauses can coexist. In the dialects examined by [Martinović \(2017\)](#), on the other hand, this is not possible. Furthermore, there is variation regarding the form of the relative complementizer. In the Wolof dialects investigated

(15) *Turkish*

Öğretmen { ödev } öğrenci-ler-e { ödev } ver-di-Ø.
teacher.NOM { homework } student-PL-DAT { homework } give-PFV-3
‘The teacher gave homework to the students.’

(Driemel, 2020, (21))

Another way to void the adjacency requirement is by \bar{A} -movement of theme BN. One type of \bar{A} -movement that brings about this effect is clefting (on clefting in Wolof, see Torrence 2013b; Martinović 2017).

- (16) a. Isaa binda-na taalif déemba.
Isaa write-NA.3SG poem yesterday
‘Isaa wrote a poem yesterday.’
b. Taalif la xale y-i binda ____.
poem FOC.OBJ.3SG child CM.PL-DEF wrote
‘It is a poem that the children wrote.’

This is reminiscent of what happens in German NPI, where a PNI-ed object can be topicalized (Frey, 2015; Driemel, 2020):

(17) *German*

- a. Max wird heute **Karten** spielen.
Max will today cards play
‘Max will play cards today.’
b. **Karten** wird Max heute spielen.
cards will Max today play
‘Max will play cards today.’

(Frey, 2015, p. 228)

Likewise, relativizing a BN allows it not to be adjacent to the verb. In (18a), we see that adding a relative to a full nominal does not change the possibility of an adverb intervening between it and the verb (cf. (8a)). However, the addition of a relative clause does increase the possible linear order available to a BN. (18b) demonstrates that a BN under these conditions can be separated from the verb by an adverb (cf. (8b)).

- (18) a. Jàngalekat b-i jàng-na { cikaw } a-b taalif [b-u
teacher CM.SG-DEF read-NA.3SG { loudly } INDEF-CM.SG poem [CM.SG-COMP
Kadeer bind] { cikaw }.
Kadeer write] { loudly }
‘The teacher read loudly a poem that Kadeer wrote.’
b. Jàngalekat b-i jàng-na { cikaw } taalif [b-u Kadeer bind] {
teacher CM.SG-DEF read-NA.3SG { loudly } poem [CM.SG-COMP Kadeer write] {
cikaw }.
loudly }
‘The teacher read loudly a poem that Kadeer wrote.’

by Torrence and Martinović, it is possible for the complementizer to encode definiteness and proximity properties that are otherwise encoded in determiners. In the Wolof dialects examined in the present paper, while this is possible, in the data reproduced and analyzed, the relative complementizer is uniformly *u*, irrespective of definiteness and of the presence or absence of an overt determiner – the latter is what classify as a BN.

Finally, another PNI property found in Wolof is that BNs in this language cannot be the highest argument, namely, the subject. This observation has already been made by [Tamba et al. \(2012, p. 906\)](#), who show the following pair:

- (19) a. A-b / B-enn xale jàng-na téére b-i.
 INDEF-CM.SG / CM.SG-one child steal-NA.3SG book CM.SG-DEF
 ‘A child read the book.’
- b. * **Xale** jàng-na téére b-i.
 child steal-NA.3SG book CM.SG-DEF
 Int.: ‘A child read the book.’
 ([Tamba et al. , 2012, \(36\)](#))

That BNs in Wolof cannot be the subject is a restriction that holds of root (20) and of finite embedded clauses (21).

- (20) a. * **Sasfam** fàtte-na tej palanteer=am.
 nurse forget-NA.3SG close window=POSS.3SG
 Int.: ‘A nurse forgot to close his;her window.’
(Speaker commented that the sentence would only be grammatical if ‘Sasfam’ were a proper name.)
- b. * **Ndonggo.darra** lekk-na maafe.
 student eat-NA.3SG maafe
 Lit.: ‘Student ate maafe.’
- (21) * Kumba wax-na [ne **muus** lekk-na a-b janax].
 Kumba say-NA.3SG [COMP cat eat-NA.3SG INDEF-CM.SG mouse]
 Int.: ‘Kumba said that a cat ate a mouse.’

Having examined these data, the questions we can ask regarding the distribution of PNI in Wolof are therefore as follows:

- (22) i. Why do BNs have to obey the adjacency requirement, while full nominals do not?
 ii. Why does adding an argument between the subject and the BN theme (in the form of an applied argument or causee) allow the latter to bypass the adjacency requirement?
 iii. Why does \bar{A} -moving a BN theme also allow it to bypass the adjacency requirement?
 iv. What is there in common between three-argument constructions and \bar{A} -movement such that they both allow a BN theme in Wolof to escape the adjacency requirement?

As mentioned in the introduction, existing PNI analyses can straightforwardly account for the adjacency requirement (22i). However, they may not readily carry over to the cases where this condition is sidestepped (22ii/22iii). I will argue that a dependent case view of nominal licensing ([Branan, to appear](#)) is able to explain these cases and, furthermore, what they have in common (22iv). As we are going to see, in a dependent case system ([Marantz, 1991](#)), case assignment is calculated based on the c-command relationship between two nominals within a given domain. What (22ii) and (22iii) have in common is that a case competitor is provided to the BN in object position, allowing it to be licensed. While I will not provide an answer to why BNs in Wolof cannot be subjects, I will show how the dependent case framework assumed can help us go about finding an explanation for this impossibility. The analysis to be put forward does not provide a

full answer as to why PNI cannot target subjects, though I will try to show that it does provide some guidance in evaluating possible hypotheses.

In the next section, I will summarize [Branan's](#) theory of nominal licensing.

3 Nominal licensing in [Branan \(to appear\)](#)

The effect that the addition of another intermediate argument has to the behavior of the BN in ditransitive, causative, and applicative structures is strikingly similar to a pattern in Kikuyu that [Branan \(to appear\)](#) analyzes. Nominals in Kikuyu that are in subject position (more generally, in non-direct object position) can come in the order *demonstrative–noun* and *noun–demonstrative*.

(23) *Kikuyu: DEM-N and N-DEM possible in non-direct object*

- a. **mũndũ ũyũ** nĩ-a-rũg-ir-e.
1.man 1.DEM FOC-1S-jump-ASP
'This man jumped.'
 - b. **ũyũ mũndũ** nĩ-a-rũg-ir-e.
1.DEM 1.man FOC-1S-jump-ASP
'This man jumped.'
- ([Branan, to appear](#), (2a/b))

However, this order alternation is no longer available when the nominal is the object of a transitive verb:

(24) *Kikuyu: only N-DEM is possible in direct object*

- a. Mwangi nĩ-a-on-ire **mũndũ ũyũ**.
Mwangi FOC-1S-see-ASP 1.man 1.DEM
'Mwangi saw this man.'
 - b. * Mwangi nĩ-a-on-ire **ũyũ mũndũ**.
Mwangi FOC-1S-see-ASP 1.DEM 1.man
Int.: 'Mwangi saw this man.'
- ([Branan, to appear](#), (1))

An obvious question raised by these data is, what explains the ordering restriction in direct objects in Kikuyu? [Branan's](#) answer to this question has two main components: the proposal that nominals must be licensed ([Levin, 2015](#)) and a particular proposal about case domains in the Kikuyu VP.

Following [Levin \(2015\)](#), [Branan](#) assumes that nominals must be licensed; nominal licensing is achieved either by case assignment or via adjacency with the verb ([Baker, 1985](#)). See also [Imanishi \(2017\)](#) and [Van Urk \(2019\)](#), who apply the same analysis to case dropping in Japanese and Differential Object Marking in Fijian, respectively.

(25) *Nominal licensing*

- a. A nominal must be [*case*]-licensed.
- b. A nominal is [*case*]-licensed iff it:
 - i. It has been assigned case or
 - ii. Its N⁰ is strictly adjacent to V⁰ [*in the resulting surface structure*].

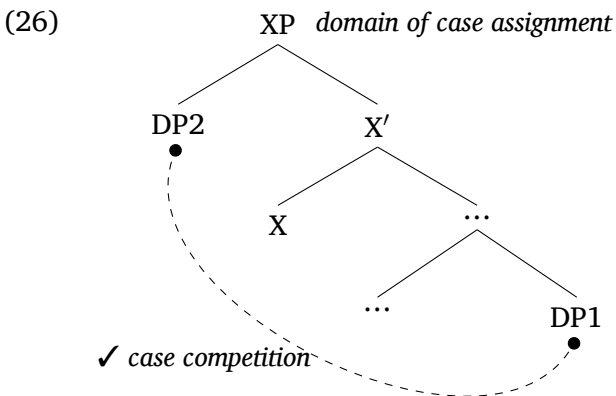
(Branan, to appear, (4, 5))

Importantly, Levin (2015) assumes that the last resort, verb adjacency licensing strategy can be applied late in the derivation, at the morphological component, where post-syntactic operations like Local Dislocation (Embick & Noyer, 2001) can help achieve the desired adjacency. This is going to be relevant when we discuss how adjacency can be obtained in a language with verbal head movement like Wolof.

The subject of a finite clause is a position where it can be assigned case, dispensing with the need of its head N^0 to be adjacent to the verb. However, the object of a transitive verb would not be able to receive case in Kikuyu, which is why adjacency between its head N^0 and the verb now becomes necessary. In order to comply with (25), the head N^0 of the object must be adjacent with the verb. As such, the order *demonstrative–noun* becomes unavailable.

At this point, one must ask why it would not be possible for a direct object to be assigned case in Kikuyu. Branan assumes a dependent case framework (Marantz 1991, a.o.), where case is not assigned by particular functional heads (e.g. finite T and transitive v), but rather calculated based on the c-command relationship between two nominals within a given syntactic domain. In (26), DP1 and DP2 belong to the same domain of case assignment XP. In this paper, I assume that domains of case assignment are phases (Baker, 2014a). Within XP, DP2 asymmetrically c-commands DP1. Assume that neither DP has been assigned idiosyncratic lexical case. In a language with ergative case alignment, DP2 is assigned dependent ergative case. In a language with nominal case alignment, DP1 is assigned dependent accusative case. Any remaining DP that has not been assigned lexical nor dependent case is assigned unmarked case (absolutive case in ergative languages or nominative case in accusative case languages).

The dependent case calculus can be diagrammed as in (26).

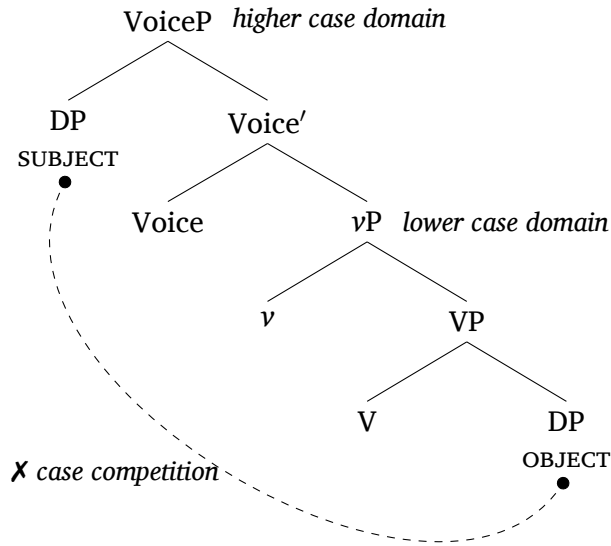


If DP2 and DP1 did not belong to the same domain of case assignment (e.g. if each belonged to a different phase), dependent case could not have been assigned.

Branan contends that, in Kikuyu, the subject and the object of a transitive verb belong to different case assignment domains. Specifically, Branan assumes that the subject of a transitive verb is generated at VoiceP, while the object is embedded inside a vP .¹⁰

(27)

¹⁰This proposal is reminiscent of Richards's (2010) Distinctness-based approach to Differential Case Marking.



(based on [Branan to appear](#))

The subject cannot act as a case competitor for the object, which remains case-less. In order to satisfy (25), the direct object is licensed by having its head adjacent to the verb.¹¹

Two predictions emerge from this proposal: (i) If another nominal is introduced in the lower case domain, the object should be able to be assigned case due to the introduction of a case competitor in the same case domain, and (ii) if the object is displaced to a position where the subject is accessible to it, the latter can allow the former to receive case, even though this was not possible in the base-generation configuration.

First, a strategy to introduce an intermediate argument that is nevertheless above the object is via an applicative construction (see other constructions in [Branan to appear](#)). In this configuration, the object is free to display a *determiner–noun* order.

(28) *Kikuyu: DEM-N possible in direct object applicative*

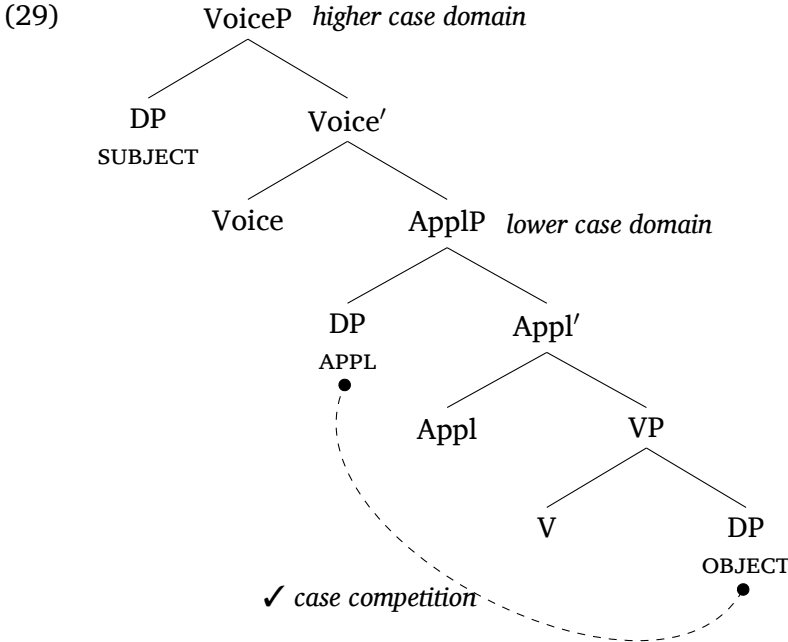
Njine nĩ-a-ra-rĩ-ĩra **ici** **irio** ngaragu.
 Njine FOC-1S-T-eat-APPL 10.DEM 10.food 9.hunger
 ‘Njine is eating this food because of hunger.’

([Branan, to appear](#), (12a))

The lower object (*ici irio* ‘this food’ in (28)) is assigned case via competition with the newly introduced applied argument (*ngaragu* ‘hunger’). The latter argument in turn is at the edge of the lower case domain. [Branan](#) contends that this suffices for this argument to be visible to the higher subject, even if they belong to different case domains.¹² The case assignment in applicative constructions under [Branan’s](#) analysis can be diagrammed as follows:

¹¹One must assume that unmarked case is unavailable in the lower case domain, otherwise both full and bare nominal objects could be licensed by this type of case. (See also [Branan to appear](#), fn. 12.) I thank [redacted] and [redacted] for bringing up this issue.

¹²Indeed, the applied argument can also appear in the order *determiner–noun*. See [Branan \(to appear, \(12c\)\)](#).



(adapted from [Branan to appear](#), (6))

Second, a direct object may be assigned case if a transformation allows this argument to become part of the case assignment where there is a case competitor. A case in point is *Wh*-moving the direct object. [Branan](#) shows that Kikuyu allows its *Wh*-phrases to surface in situ. In that case, a *Wh*-object behaves just like its non-interrogative counterpart (24): the head N^0 of the nominal must be adjacent to the verb (30).

(30) *Kikuyu: in-situ Wh-phrase requires adjacency*

- a. Abdul a-thom-ire [**ivuku rĩriku**].
Abdul 1S-read-ASP [5.book 5.which]
'Which book did Abdul read?'
 - b. * Abdul a-thom-ire [**ĩriku ivuku**].
Abdul 1S-read-ASP [5.which 5.book]
Int.: 'Which book did Abdul read?'
- ([Branan, to appear](#), (41))

However, if the *Wh*-object is overtly moved, this requirement can be obviated:

(31) *Kikuyu: fronted Wh-phrase may have either order of demonstrative*

- a. [Nĩ **ivuku rĩriku**] Abdul a-thom-ire ____.
[FOC 5.book 5.which] Abdul 1S-read-ASP
'Which book did Abdul read?'
 - b. [Nĩ **ĩriku ivuku**] Abdul a-thom-ire ____.
[FOC 5.which 5.book] Abdul 1S-read-ASP
'Which book did Abdul read?'
- ([Branan, to appear](#), (42))

We can interpret the adjacency requirement as a BN’s response to satisfy the Nominal licensing requirement (25). Specifically, a direct object BN must be assigned case, but, as in Kikuyu, the subject belongs to a different, higher case domain. As a result, the only way for a direct object BN to be licensed is via adjacency with the verb. As briefly mentioned above, I follow Levin (2015) in assuming that verb adjacency can be assessed late in derivation, as late as the morphological component. More precisely, Levin argues that verb adjacency can be obtained through a post-syntactic operation like local dislocation (Embick & Noyer, 2001). As such, if BNs stay in situ, at the narrow syntax, the adjacency requirement would not be complied with. If, conversely, this requirement can be verified post-syntactically, BNs can be appropriately licensed.

However, in Kikuyu, there is only one realizational possibility in the object position, namely, the determiner of a nominal in that position must follow a head-final pattern, even though a head-initial pattern is also available. To recall, Branan’s proposal to account for this restriction is that it is caused by the need of a nominal to be licensed, which, in the object position, can only be achieved if the head of the nominal is adjacent to the verbal complex. In Wolof, in contrast, more than one possibility is available for a nominal in the object position: it can be either a bare or a full nominal. The analysis sketched above only accounts for the distribution of BNs. All things equal, however, full nominals in the object position should not be able to be assigned case either. As such, the prediction from the analysis as it stands so far is that a full nominal in the object position should cause the derivation to crash due to a violation of (25). (33a), where the head of the full nominal object is not adjacent to the verb, shows that this prediction is not borne out.

In order to extend Branan’s analysis to Wolof, I propose the following object shift stipulations that concern the position of objects with respect to their interpretive properties (Diesing, 1992):

- (34) i. Full nominals in the object position must exit the vP (the lower case domain).
 ii. BNs are unable to move to the same position.

A suggestion that full nominal and bare nominal objects occupy different position is provided by scope facts. (35) shows that a full indefinite headed by *a-b* can scope above a verb like *fàtte* ‘forget’.¹³

(35) Samba fàtte-na tej a-b palanteer.
 Samba forget-NA.3SG close INDEF-CM.SG window
 ‘Samba forgot to close a window.’

- i. ✓ *Samba lives in a big house, with a lot of windows. He likes to leave them open to let fresh air in. It starts raining, so he rushes to close the windows. There is a window that Samba forgot to close, though he closed all the other ones.*
 ii. # *Samba lives in a big house, with a lot of windows. He likes to leave them open to let fresh air in. It starts raining, but Samba does not close any window at all.*

(36) shows that a different indefinite determiner (*b-enn*) can also be interpreted above a scope-taking verb like *seet* ‘look for’.

(36) Roxaya seet-na b-enn xaj [b-u sokola]. Kumba la tudd.
 Roxaya look.for-NA.3SG CM.SG-one dog [CM.SG-COMP brown] Kumba COP.3SG name
 ‘Roxaya looked for a dog who is brown. Kumba is his name.’

¹³It is remarkable that only a wide scope reading seems to be available in (35). I regrettably do not have an explanation for this. An option one could pursue is that the availability of a BN with an obligatorily narrow scope reading renders the equivalent reading for a full nominal dispreferred. For more on Wolof quantifiers, see Tamba *et al.* (2012).

(37) in turn shows that a BN in the same position takes narrow scope, obligatorily. That PNI-ed nominals have a narrow scope indefinite reading has already been observed by, Dayal (2011), Baker (2014b), among many others.

(37) Isaa fàtte-na jënd fowekaay.

Isaa forget-NA.3SG buy toy

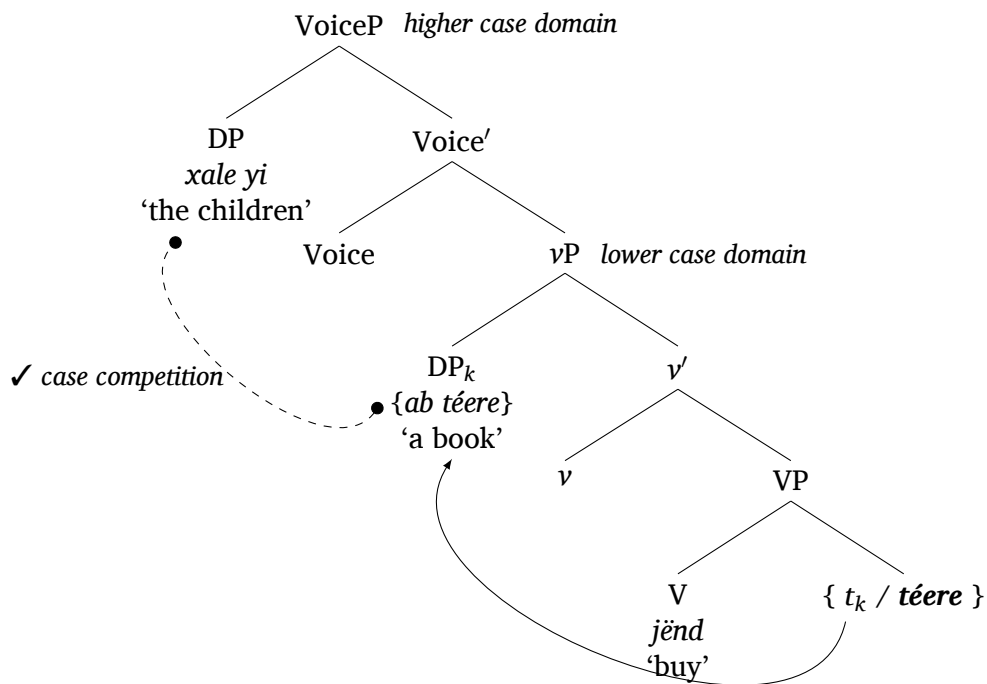
‘Isaa forgot to a buy a toy.’

[= (3d)]

- a. # *Isaa is going to a store and I gave him a list of toys that I want him to buy for my dogs. He succeeded in buying all toys, except for one (i.e. there is one toy that Isaa did not buy).*
- b. ✓ *Isaa is going to a store and I gave him a list of toys that I want him to buy for my dogs. He ended up not buying any toy at all.*

In order to capture properties and differences among indefinites nominals in Wolof, I propose the following structure and derivation, where full nominal (FN) objects move the edge of the lower case domain, ν P. Combined, these proposals and stipulations can model the facts mentioned above. Because a full nominal headed by *a-b* or *b-enn* shifts above the verb, it can scope over it. While FN objects move, they stay inside the ν P.

(38)



This account of the positions occupied by FN and BN objects, afforded by their different scope properties, allows us to solve the analysis-internal issue mentioned above. To recall, while the distribution of BN objects resemble the Kikuyu facts analyzed by Branagan, an unmodified version of this analysis cannot be fully extended to Wolof, since, in Kikuyu, unlike what happens in the data examined here, there is only one possible object configuration (i.e., a nominal with a head-final determiner, where the latter does not break up the adjacency between the head of the nominal and the verb). This proposal does not completely carry over to Wolof because this language also

allows FNs in the object position, which do not have to be adjacent to the verb, unlike their BN counterpart. However, as we can see in (38), these nominals are proposed to occupy different positions and, importantly, only FNs occupy a position where the subject is visible. Specifically, the FN occupies the edge of the lower case domain (ν P), so that the subject can act as a case competitor, allowing the FN object to be assigned downwards dependent case. A BN object, on the other hand, remains inside the lower case domain. As such, in the impossibility of licensing by case, it must resort to the next best licensing strategy. The adjacency requirement emerges as a consequence of a way to satisfy the need of a nominal to be licensed.

More precisely, following Levin (2015), I assume that nominals can be licensed as a last resort via surface, linear adjacency with the verbal complex. As mentioned in §2.1, Wolof is well-known for its rich system of sentential particles, morphemes that encode information structure. These morphemes are sensitive as to whether a constituent to its left is topical or focal, or if the whole sentence is new information, among other things. As also mentioned, in most sentences in this paper, the sentential particle employed is the morpheme for neutral sentences, *na*. By assumption, in *na* clauses, because the lexical verb precedes this affix, it must move away from the verb phrase and into a higher functional projection. This higher functional projection must be at least TP.¹⁴ In that same position, the verb acquires the morphology that cross-references the subject of the sentence. Even though the verb may occupy a higher functional projection (to recall, at least TP, though possibly higher), a BN can be linearly adjacent to it, as long as nothing intervenes between them. A case in point would adverbs, as in (33b) above.

In this section, we applied Branan’s theory to the adjacency requirement that BNs in object position must obey in Wolof. However, this analysis could not be extended to Wolof without qualification, given that the language also allows for FNs to occur in the object position, but without imposing an adjacency requirement on them. In order to solve this issue, I proposed that BNs and FNs occupy different positions in the syntactic structure. I tried to provide empirical support to this proposal based on scope and predicate focus facts. In the next section, we apply Branan’s theory to applicative, ditransitive, and causative constructions. First, their general properties are surveyed.

4.2 Addition of an intermediate argument

Branan’s analysis of nominal licensing in Kikuyu can readily be extended to account for the effect that an additional low argument has in the licensing of BNs. To recall, if a causee, goal, or applied argument is present in the sentence, a BN direct object does not have to be adjacent to the verb. This is schematized in (39), where ‘APPL’ stands for the intermediate argument that is introduced between the subject and the BN object.

- (39) i. SUBJECT – VERB – **THEME_{BN}** – APPL
 ii. SUBJECT – VERB – APPL – **THEME_{BN}**

¹⁴Torrence (2013a) and Martinović (2015), among others, analyze morphemes like *na* as left periphery heads, since they encode information structure properties; the subject is, correspondingly, in a higher left periphery position. It suffices for the present purposes that *na* occupies a higher functional head. The minimum projection above the VP that fulfills this requirement is TP, so, for concreteness, that is where I represent *na* and the remainder of the verbal complex, though what I say here can be restated to a higher head. This translatability is made possible by the fact that the adjacency that acts as last resort option to license is nominal is linear adjacency. As such, whether the verb moves to the left periphery or not is immaterial to the present analysis if nothing intervenes between the position where a BN object is pronounced and the position where the verbal complex is pronounced, T-to-C movement usually being string-vacuous in the circumstances mentioned.

(39i) is the expected linear order, taking the adjacency condition into consideration, as the BN theme is indeed adjacent to the verb. However, (39ii) is also an attested word order, where the BN is separated from the verb by the additional argument. Data like (39ii) thus diverges from the requirement that the a BN theme be the immediately next to the verb.

If the flexible word possibilities in (39) are the result of movement, then we would be hard-pressed to apply Massam’s (2001) analysis to Wolof, since, in this analysis, the adjacency requirement is the result of the BN’s inability to move. I will argue below that the two word orders available in (39) are the result of scrambling. Indeed, Harris (2015) shows that, at least in Wolof applicatives, (39ii) is the underlying order, with (39i) resulting from displacing the object (which, incidentally, ends up adjacent to the verb). Conversely, a dependent case theory like Branan’s is well-equipped to deal with data like those schematized in (39), since the newly introduced argument can act as a case competitor for the BN theme, freeing it from having to resort to verb adjacency to be licensed.

Before we apply this analysis though, we must look into the properties of these three-argument constructions. Specifically, because c-command is relevant in the computing of case marking (under a dependent case theory), we must determine the hierarchical relationships among the arguments in the aforementioned constructions. Harris (2015, ch. 3) provides a detailed description of the structural properties of applicatives and ditransitives in Wolof. Harris’s c-command arguments are based on variable and reflexive binding, as well as on weak crossover effects. For convenience, I reproduce some of the relevant data here. (I have adapted the morphological analysis and glosses for uniformity.)

The first c-command test employed by Harris is variable binding. (40) shows the basics of variable binding in Wolof. The (a) examples in (41) and (42), respectively, show that goals and applied arguments can bind a variable contained in the theme if the former precedes the latter. The (b) examples in turn show that no variable binding obtains if the theme precedes the intermediate argument. The examples (43) and (44) show that the theme can bind the intermediate argument only if it precedes it.¹⁵

(40) *Variable binding baseline*

- a. Góor g-u nekk_i nob-na jabar=am_i.
man CM.SG-COMP exist love-NA.3SG wife=POSS.3SG
‘Every man_i loves his_i wife.’
- b. * Jëkkër=am_i nob-na jabar b-u nekk_i.
husband=POSS.3SG love-NA.3SG wife CM.SG-COMP exist
Int.: ‘Her_i husband loves every wife_i.’
(Harris, 2015, p. 86)

(41) *Variable binding in ditransitive*

- a. Yóonee-na-a góor g-u nekk_i xaalis=am_i.
send-NA-1SG man CM.SG-COMP exist money=POSS.3SG
‘I sent every man_i his_i money.’
- b. Yóonee-na-a xaalis=am_{*i/j} góor g-u nekk_i.
send-NA-1SG money=POSS.3SG man CM.SG-COMP exist
‘I sent his_{j/*i} money to every man_i.’
(Harris, 2015, p. 88ff)

¹⁵Some of the data regrettably reproduce some gender stereotypes.

(42) *Variable binding in applicative construction*

- a. Bind-al-na-a góor g-u nekk_i bataaxal=am_i.
write-APPL-NA-1SG man CM.SG-COMP exist letter=POSS.3SG
'I wrote his_i letter on behalf of every author_i.'
- b. Bind-al-na-a bataaxal=am_{*i/j} góor g-u nekk_i.
write-APPL-NA-1SG letter=POSS.3SG man CM.SG-COMP exist
'I wrote his_j/_{*i} letter on behalf of every author_i.'
- (Harris, 2015, p. 88)

(43) *Variable binding in ditransitive*

- a. Yoonee-na-a téere b-u nekk_i bindekat=am_i.
send-NA-1SG book CM.SG-COMP exist writer=POSS.3SG
'I sent every book_i to its_i author.'
- b. Yoonee-na-a bindekat=am_{*i/j} téere b-u nekk_i.
send-NA-1SG writer=POSS.3SG book CM.SG-COMP exist
'I sent every book_i to its_{*i/j} author.'
- (Harris, 2015, p. 89)

(44) *Variable binding in applicative*

- a. Bind-al-na-a téere b-u nekk_i bindekat=am_i.
write-APPL-NA-1SG book CM.SG-COMP exist author=POSS.3SG
'I wrote every book_i for its_i author.'
- b. Bind-al-na-a bindekat=am_{*i/j} téere b-u nekk_i.
write-APPL-NA-1SG author=POSS.3SG book CM.SG-COMP exist
'I wrote every book_i for its_{*i/j} author.'
- (Harris, 2015, p. 89)

The second c-command diagnostic employed by Harris is reflexive binding. (45) and (46) show that the intermediate argument can be an antecedent binding the theme argument in applicative and ditransitive sentences, respectively. These data also show that, if the reflexive theme precedes the intermediate argument, binding does not go through.

(45) *Reflexive binding in ditransitive*

- a. Wan-na-a Boris_i bopp=am_i.
show-NA-1SG Boris head=POSS.3SG
'I showed Boris_i himself_i.'
- b. *Wan-na-a bopp=am_{*i/j} Boris_i.
show-NA-1SG head=POSS.3SG Boris
Lit.: 'I showed himself_i to Boris_i.'
- (Harris, 2015, p. 92; adapted)

(46) *Reflexive binding in applicative*

- a. Sang-al-nga Boris_i bopp=am_i.
wash-APPL-NA.2SG Boris head=POSS.3SG
'You washed himself_i for Boris_i.'

- b. * Sang-al-nga bopp=am_{*i/j} Boris_i.
 wash-APPL-NA.2SG head=POSS.3SG Boris
 Lit.: ‘You washed himself_{*i/j} for Boris_i.’
 (Harris, 2015, p. 92; adapted)

Due to the word order alternations available in Wolof (see schema in (39)), these data do not in fact allow us to tell unequivocally whether the intermediate argument (goal or applied argument) c-commands the theme argument. It could be the case, for instance, that, in a pair of sentences like (41) the theme (*his money*) is underlyingly c-commanded by the goal (*every man*), so that, if the former scrambles over the latter, the c-command relationship required for binding is disrupted. Alternatively, it could also be the case that the theme underlyingly c-commands the goal, so that binding simply cannot go through.

That is where Harris’s third diagnostic becomes relevant, namely, weak crossover. (47) shows the basics of weak crossover in Wolof. In the (a) examples of (48) and (49), we see that the intermediate argument can be *Wh*-moved and be coindexed with a pronoun contained in the theme without causing a weak crossover violation. This fact can be accounted for straightforwardly if the intermediate argument asymmetrically c-commands the theme, so that the former does not cross the latter on its way to Spec-CP. Corroborating evidence for this analysis is provided by the (b) examples in the same sentences, where the *Wh*-phrase is now the theme and pronoun is contained within the intermediate argument. A weak crossover violation is induced in these sentences. Again, this state of affairs can be straightforwardly accounted for if the intermediate argument c-commands the theme, so that, if the latter *Wh*-moves, a weak crossover violation is incurred.

(47) *Weak crossover baseline*

- a. B-an yaay_i moo t nob doom=am_i?
 which mother FOC.3SG love child=POSS.3SG
 ‘Which mother_i loves her_i child?’
- b. B-an doom_i yaay=am_{*i/j} moo nob t_i?
 which child mother=POSS.3SG FOC.3SG love
 Which child_i does his_{*i/j} mother love?’
 (Harris, 2015, p. 95ff)

(48) *Weak crossover in ditransitive*

- a. G-an góor_i nga yónnee t_i bataaxal=am_i?
 which man 2SG send letter=POSS.3SG
 ‘Which man_i did you send his_i letter?’
- b. Bataaxal-u k-an_i nga yónnee bindekat=am_{*i/j} t_i?
 letter-GEN CM.SG-who 2SG send author=POSS.3SG
 ‘Whose_i letter did you send to its_{*i/j} author?’
 (Harris, 2015, p. 97)

(49) *Weak crossover in applicative construction*

- a. B-an jigéen_i nga rey-al t_i xar=am_i?
 which woman 2SG.OFOC kill-APPL sheep=POSS.3SG
 ‘For which woman_i did you kill her_i sheep?’

- b. Xar-u k-an_i nga rey-al borom=_iam t?
 sheep-GEN who 2SG kill-APPL owner=POSS.3SG
 ‘Whose sheep_i did you kill for his/her_{i/j} owner?’
 (Harris, 2015, p. 98)

We are now in the position to tease apart the potential analyses for the binding data above. We have concluded from the weak crossover data just examined that the intermediate argument c-commands the theme. If this is the underlying structure, we can explain the impossibility of the theme binding the intermediate argument not as a matter of base-generation, but as a consequence of A-scrambling and the subsequent impossibility of A-reconstruction for Condition A.

Some of these c-command diagnostics can be applied to causative constructions as well. (50) shows that the causee argument can be a quantifier that binds a pronoun in the lower theme, though this is not possible if the order of these intermediate arguments is reversed. (51) shows the same, but with reflexive binding. Regrettably, I was not able to reproduce reliably the weak crossover data. By assumption, however, the thematic relations are more appropriately accounted for if the causee is base-generated above the theme.

(50) *Variable binding in causative*

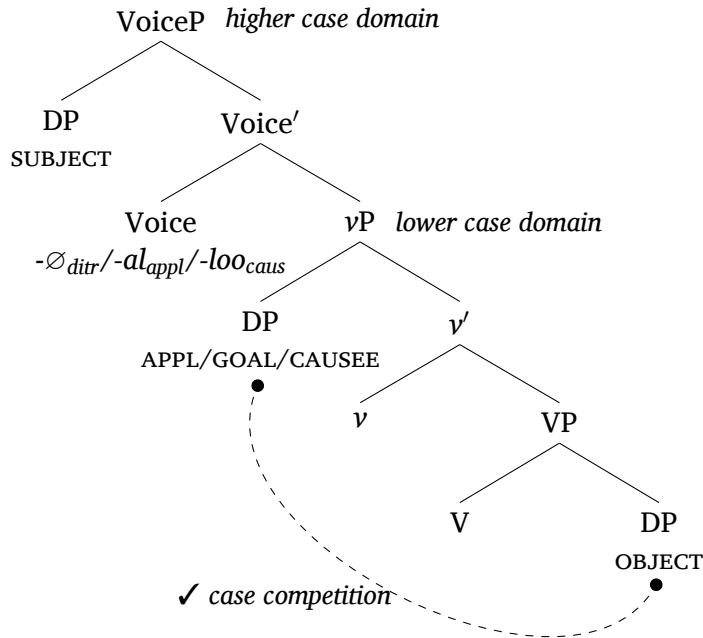
- a. Jàngalekat y-i nataal-loo-na-ñu xale b-u nekk xaj-am.
 teacher CM.PL-DEF draw-CAUS-NA.3SG child CM.SG-COMP exist dog=POSS.3SG
 ‘Awa made every student draw their dog.’
- b. * Jàngalekat y-i nataal-loo-na-ñu xaj=_iam xale b-u
 teacher CM.PL-DEF draw-CAUS-NA.3SG dog=POSS.3SG child CM.SG-COMP
 nekk.
 exist
 Int.: ‘Awa made every student draw their dog.’

(51) *Reflexive binding in causative*

- a. Awa nataal-loo-na xale y-i seen bopp.
 Awa draw-CAUS-NA.3SG child CM.PL-DEF POSS.3PL head
 ‘Awa made the students draw themselves.’
- b. * Awa nataal-loo-na seen bopp xale y-i.
 Awa draw-CAUS-NA.3SG POSS.3PL head child CM.PL-DEF
 Int.: ‘Awa made the students draw themselves.’

The c-command diagnostics surveyed above suggest that ditransitive goals, applied arguments, and causees c-command the theme argument. This structural relationship can be diagrammed as in (52) (cf. Branan’s proposal, reproduced in (29)). This structure is basically identical to what Harris (2015) proposes to applicatives and ditransitives in Wolof. Given the similarities between applicatives and ditransitives, on the one hand, and causatives, on the other, in Wolof, I assume that all these constructions have a similar structure. This implies that causatives in this language have a fairly reduced structure, a possibility argued for, for instance, by Folli & Harley (2007). Needless to say, further investigation may uncover differences amongst ditransitive, applicative, and causative constructions in Wolof; what is relevant for the present purposes is hierarchy displayed by their arguments.

(52)



Following [Branan's](#) analysis, the newly introduced argument in the lower case domain (the goal, applied, or causee argument) allows the BN theme to be assigned case, freeing it from the adjacency requirement. This would be why it is possible not only for a theme BN can surface immediately following the verb (and it is then followed by the other intermediate argument), but also for the other argument to intervene between the verb and the BN theme.

This proposal makes two predictions, both of which can be tested in Wolof. First, in (52), as [Branan](#) emphasizes, the higher object is case-licensed by virtue of occupying an edge position at the lower case domain, so that it is accessible to the subject, even though the latter belongs to a different case domain. A prediction that emerges from this proposal is that the subject should be accessible to the goal, applied, and causee argument for other processes. This can be seen in both reflexive binding (53) and variable binding (54) structures, where the subject binds a goal, applicative, or causee argument.

(53) a. *Ditransitive*

Mareem jox-na bopp=am a-b oto b-u bees.
 Mareem give-NA.3SG head=POSS.3SG CM.SG-INDEF car CM.SG-COMP new
 'Mareem gave herself a new car.'

b. *Applicative*

Xale y-i jàngal-na-ñu seen bopp a-b taalif.
 child CM.PL-DEF read-APPL-NA-3PL POSS.3PL head INDEF-CM.SG poem
 'The children read themselves a poem.'

c. *Causative*

Faatu nataa-loo-na bopp=am a-k garab.
 Faatu draw-CAUS-NA.3SG head=POSS.3SG INDEF-CM.SG tree
 'Faatu made herself draw a tree.'

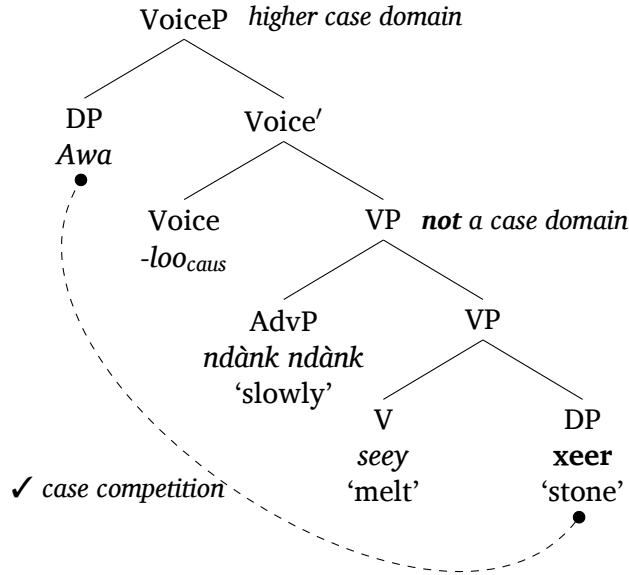
- (54) a. *Ditransitive*
 Bindakat b-u nekk wan-na taalif=am Roxaya.
 writer CM.SG-COMP exist show-NA.3SG poem=POSS.3SG Roxaya
 ‘Every writer_k showed their_k poem to Roxaya.’
- b. *Applicative*
 Jàngalekat b-u nekk jàngal-na taalif=am Roxaya.
 teacher CM.SG-COMP exist read-APPL-NA.3SG poem=POSS.3SG Roxaya
 ‘Every teacher_k read their_k poem to Roxaya.’
- c. *Causative*
 Yaay j-u nekk nataa-loo-na doom=am Kadeer.
 mother CM.SG-COMP exist draw-CAUS-NA.3SG child=POSS.3SG Kadeer
 ‘Every mother_k made Kadeer draw her_k child.’

Second, [Branan](#)’s analysis also implies that a theme in a three-argument structure is not itself incompatible with case licensing via dependent case assignment. Rather, the issue is that there is no case competitor in the case assignment domain the theme belongs to. As a result, if a BN that is interpreted as the theme occupies a position where the subject is accessible, the result should be grammatical even if the adjacency requirement is not obeyed. The reason is that the subject can act as a case competitor to license the theme, freeing it from having to be adjacent to the verb. This prediction can be tested in causativized unaccusatives. (55a) shows that the adverb *ndànk ndànk* ‘slowly’ can occur between the causativized version of a presumably unaccusative verb (*seey* ‘melt’) and a full nominal theme (*xeer yi* ‘the stones’). (55b) in turn shows that the same arrangement is also possible when the theme argument is a BN – recall from (8b) and (9b) that the adjacency requirement is operative in simple (i.e. non-causativized) transitives.

- (55) a. Awa seey-loo-na ndànk ndànk xeer y-i.
 Awa melt-CAUS-NA.3SG slowly slowly stone CM.PL-DEF
 ‘Awa slowly melted the stones.’
- b. Awa seey-loo-na ndànk ndànk **xeer**.
 Awa melt-CAUS-NA.3SG slowly slowly stone
 ‘Awa slowly melted a stone.’

In order to account for the lack of adjacency effects in (55b), we can assume the structure in (56), where the causative *-loo* (modeled here as the head of VoiceP) merges with an unaccusative VP. This VP is presumably not a phase nor a domain of case assignment, so the subject (the causer in Spec-VoiceP) can assign dependent case to the theme. The BN theme can thus be licensed, regardless of the intervention of *ndànk ndànk*. Here, I assume that an unaccusative VP is not a phase. If we equate domains of case assignment with phases ([Baker, 2014a](#)), this VP is not going to be a domain of case assignment.

(56)



In this section, we took a closer look at some three-argument constructions in Wolof (specifically, ditransitive, applicatives, and causatives) and extended Branagan’s case licensing analysis based on Kikuyu to Wolof BNs. This analysis provided an explanation as to why BN themes do not have to comply with the adjacency requirement once a goal, applied, or causee argument is added into the sentence.

4.2.1 BNs as the intermediate argument

In the ditransitive, applicative, and causative data just examined in §4.2, the BN was the theme argument. Another aspect of the distribution of BNs in Wolof is that they cannot be the higher of the two internal arguments; this description obtains irrespective of word order. These data should be contrasted with the baseline examples in (10)–(12), where, the internal arguments are full nominals that can appear in either order.

- (57) a. * Jox-na-a **xaj** bal b-i.
 give-NA-1SG dog ball CM.SG-DEF
 Int.: ‘I gave a dog the ball.’
- b. * Jox-na-a bal b-i **xaj**.
 give-NA-1SG ball CM.SG-DEF dog
 Int.: ‘I gave a dog the ball.’
- (58) a. * Ndonggo.darra y-i desin-al-na-ñu **jàngalekat** flër b-i.
 student CM.PL-DEF draw-NA-3PL teacher flower CM.SG-DEF
 Int.: ‘The students drew a teacher the flower.’
- b. * Ndonggo.darra y-i desin-al-na-ñu flër b-i **jàngalekat**.
 student CM.PL-DEF draw-NA-3PL flower CM.SG-DEF teacher
 Int.: ‘The students drew a teacher the flower.’

- (59) a. * Jàngalekat b-i janga-loo-na **ndonggo.darra** taalif b-i.
 teacher CM.SG-DEF read-CAUS-NA.3SG student poem CM.SG-DEF
 ‘The teacher made a student read the poem.’
- b. ?? Jàngalekat b-i janga-loo-na taalif b-i **ndonggo.darra**.
 teacher CM.SG-DEF read-CAUS-NA.3SG poem CM.SG-DEF student
 ‘The teacher made a student read the poem.’

Additionally, it cannot be the case that both objects are BNs, at least in applicative constructions. Regrettably, I do not have equivalent ditransitive and causative data.¹⁶

- (60) a. * Góór g-i jox-ně **muus xale**.
 man CM.SG-DEF give-NA.3SG cat child
 Int.: ‘The man gave a child to a cat.’
- b. * Góór g-i jox-ně **xale muus**.
 man CM.SG-DEF give-NA.3SG child cat
 Int.: ‘The man gave a cat to a child.’
 (Harris, 2015, p. 118)

Because BNs can be themes, it seems reasonable to hypothesize that the ungrammaticality of (60) reduces to the ungrammaticality of (57b), (59), and (58), where only the higher of the two internal arguments is a BN.

Following the logic of Branan’s nominal licensing framework, the ill-formedness of these sentences thus cannot be caused by case, as the intermediate argument, being at the edge of a case assignment domain, can not only act as a case competitor for the BN theme, but it is also visible to the subject to be case licensed by that c-command relationship (see diagram in (52)).

While I will not be able to provide a fully fledged analysis for these data, I suggest that the impossibility of a BN to be the intermediate argument has to do with the nature of that position, at least as far as applicative and ditransitive constructions are concerned. Specifically, I adopt Adger & Harbour’s (2007) proposal that an applied argument must have a [PARTICIPANT] feature:

- (61) The specifier of Appl must be instantiated with the [PARTICIPANT : __] feature.
 (Adger & Harbour, 2007, p. 21)

The empirical motivation for this restriction imposed on the applied arguments is ill-formed sentences like (62), where the ill-formedness is correlated with the fact that the applied argument (*conference*) is not [+HUMAN].

- (62) ? We sent the conference the abstract.
 (Adger & Harbour, 2007, (62))

The reason sentences like (57) and (58) are ungrammatical would be that the BN cannot satisfy the requirement stated in (62). In order to account for why a BN cannot be a causee (59), we would have to extend the [PERSON] condition in (61) to causative sentences in Wolof, though it is not clear to me why this should be the case.

¹⁶Thank you to [redacted] for bringing my attention to this logical possibility.

4.3 \bar{A} -movement

Another way for a BN to be freed from the adjacency requirement is for it to be \bar{A} -moved. \bar{A} -movement, furthermore, can be achieved in two ways: clefting or relativization. We start with clefting, an example of which is repeated below.

- (63) **Taalif** la xale y-i binda ____.
 poem FOC.OBJ.3SG child CM.PL-DEF wrote
 ‘It is a poem that the children wrote.’ [= (16)]

That clefting is derived by movement is indicated on the basis of its island-sensitivity. (64) and (65) show, respectively, that a phrase cannot be clefted out of a relative or *Wh*-island.

(64) *Relative clause island*

- a. Gis-na-a a-b téere [b-u Roxaya jox **xale y-i**].
 see-NA-1SG INDEF-CM.SG book [CM.SG-COMP Roxaya give child CM.PL-DEF]
 ‘I saw a book that Roxaya gave the children.’
- b. * **Xale y-i** la gis a-b téere [b-u Roxaya jox ____].
 child CM.PL-DEF COP.3SG see INDEF-CM.SG book [CM.SG-COMP Roxaya give ____]
 Lit.: ‘It was the children who I saw a book that Roxaya gave.’

(65) *Wh-island*

- a. Mangi xalat [k-an moo jox Kadeer **téere b-i**].
 PROG.1SG think [CM.SG-WH MOO give Kadeer book CM.SG-DEF]
 ‘I wonder who gave Kadeer this book.’
- b. * **Téere b-i** la mangi xalat [k-an moo jox Kadeer ____].
 book CM.SG-DEF COP.3SG PROG.1SG think [CM.SG-WH MOO give Kadeer ____]
 Lit.: ‘It is the book that I wonder who gave Kadeer.’

Once again, we can readily extend Branan’s analysis of Kikuyu to Wolof. Under conservative assumptions, clefting is a type of \bar{A} -movement that requires a stop-over position at phase edges like Spec- ν P. This intermediate position allows the subject in Spec-Voice to act as a case competitor for the BN at Spec- ν P. The BN can thus be licensed by case assignment, dispensing with adjacency with the verb.

In the same vein, if a BN subcategorized by a transitive verb is modified by a relative clause, then there can be an adverb intervening between the BN and the verb.

- (66) Jàngalekat b-i jàng-na { cikaw } **taalif** [b-u Kadeer bind ____] {
 teacher CM.SG-DEF read-NA.3SG { loudly } poem [CM.SG-COMP Kadeer write ____] {
 cikaw }.
 loudly }
 ‘The teacher read loudly a poem that Kadeer wrote.’ [= (18b)]

It is important to note that, when a BN is modified by a relative clause, it retains its narrow scope indefinite interpretation. In (67), the full nominal indefinite modified by a relative clause can scope above or below the intensional predicate *bëgg* ‘want’.

- (67) a. Sama doom bëgg-na jàng a-b téere [b-u Mariama Ba
 POSS.3SG child want-NA.3SG read INDEF-CM.SG book [CM.SG-COMP Mariama Ba
 bind ____], *Une si longue lettre* la tudd.
 write ____] *Une si longue lettre* COP-3SG name

‘My child wants to read a book that Mariama Ba wrote. Its title is *So long a letter*.’

∃ > *want*

- b. Sama doom bëgg-na jàng a-b téere [b-u Mariama Ba
 POSS.1SG child want-NA.3SG read INDEF-CM.SG book [CM.SG-COMP Mariama Ba
 bind __], waaye bu mu am baax-na.
 write __] but BU 3SG have good-NA.3SG

‘My child wants to read a book that Mariama Ba wrote, but it does not matter which.’

want > ∃

Conversely, in (68), what the relative clause modifies is a BN. In that case, only a narrow scope reading is available (68b).

- (68) a. Roxaya bëgg-na gisee **woykat** [b-u __ dëkk Senegal]. # Wally
 Roxaya want-NA.3SG meet singer [CM.SG-COMP be.from Senegal] # Wally
 Seck la tudd.
 Seck COP.3SG name

‘Roxaya wants to meet a singer who is from Senegal. # His name is Wally Seck.’

∃ > *want*

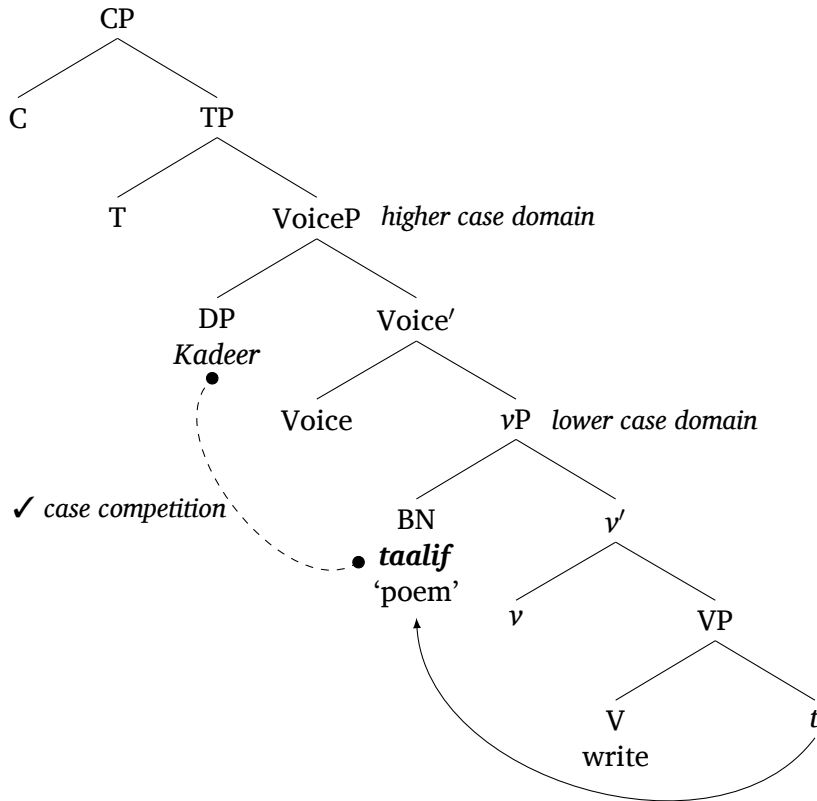
- b. Mary bëgg-na gisee **woykat** [b-u __ dëkk Senegal], waaye bu
 Mary want-NA.3SG meet singer [CM.SG-COMP be.from Senegal] but BU
 mu am baax-na.
 3SG meet good-NA.3SG

‘Mary wants to meet a singer who is from Senegal, and any will be good.’

want > ∃

I assume Torrence’s (2013a) raising analysis of relative clauses in Wolof (see overview of a raising analysis of relative clauses in Bhatt 2002). Torrence bases his claim on reconstruction effects and Wolof-specific diagnostics. Before the raising of the head of the relative, the relative clause CP in a sentence like (66) looks as follows:

(69)



In order to raise out of the relative clause, the BN must first move through the edge of the phase that contains, Spec-*vP*. According to [Branan](#)'s proposal, this suffices to bring the direct object close enough for the subject to case-license it. As such, a BN modified by a relative clause does not have to obey the adjacency condition because it is assigned case inside the relative clause before moving out of it.

4.4 BNs in the subject position

Recall that BNs in Wolof cannot be the subject of a finite clause:

- (70) a. * **Sasfam** fàtte-na tej palanteer=am.
 nurse forget-NA.3SG close window=POSS.3SG
 Int.: 'A nurse forgot to close his;her window.' [= (20a)]
- b. * Kumba wax-na [ne **muus** lekk-na a-b janax].
 Kumba say-NA.3SG [COMP cat eat-NA.3SG INDEF-CM.SG mouse]
 Int.: 'Kumba said that a cat ate a mouse.' [= (21)]

In a case-licensing analysis, the prediction is that these sentences should be grammatical, since the highest nominal in a given domain of case assignment can be assigned unmarked case (in Wolof, nominative case). This should suffice to allow the BN to be licensed with case. Why then are the sentences in (70) ungrammatical?

While it does not provide us with a particular analysis of (70)'s ill-formedness, the logic of a dependent case theory of PNI does allow us to identify what *cannot* be the culprit. More precisely,

case assignment cannot be the problem, since, as just mentioned, the subject of a finite clause is indeed a position where a nominal can be assigned unmarked case. In §4.3, I argued that relativization was one of the strategies a BN could employ to be assigned case, allowing it to do away with the adjacency requirement. The prediction that falls out from this analysis is thus that the addition of a relative clause will still not allow a BN to be a subject if its licensing does not have anything to do with case. This prediction is correct.

(71) shows that a FN modified by a relative clause can be the subject of a finite clause, while (72) shows that this is not possible for a BN under the same conditions.¹⁷

- (71) a. A-b muus [_{RC} b-u Isaa bëgg] lekk-na ginaar g-i.
 INDEF-CM.SG cat [CM.SG-COMP Isaa like] eat-NA.3SG chicken CM.SG-DEF
 ‘A cat that Isaa likes ate the chicken.’
- b. Xadi xalaat-na [ne a-y ndonggo.darra [_{RC} y-u Samba
 Xadi think-NA.3SG [COMP INDEF-CM.PL student [CM.PL-COMP Samba
 xam] daw-na-ñu ci baayal b-i].
 know] run-NA-3PL PREP park CM.SG-DEF]
 ‘Xadi thinks that some students who Samba knows run in the park.’
- (72) a. * **Muus** [_{RC} b-u Isaa bëgg] lekk-na ginaar g-i.
 cat [CM.SG-COMP Isaa like] eat-NA.3SG chicken CM.SG-DEF
 Int.: ‘A cat that Isaa likes ate the chicken.’
- b. * Isaa wax-na [ne féckkat [_{RC} b-u ma xam] fécc-na
 Isaa say-NA.3SG [COMP dancer [CM.SG-COMP OBJ.1SG know] dance-NA.3SG
 ci xeel b-i].
 PREP party CM.SG-DEF]
 Int.: ‘Isaa said that a dancer that knows me danced in the party.’

Nonetheless, a BN in Wolof can indeed occur in the subject position if it is embedded within coordination:

- (73) a. **Xale** ak jàngalekat woy-na-ñu ci daara j-i.
 child with teacher sing-NA-3PL PREP school CM.SG-DEF
 ‘A child and a teacher sang in the school.’
- b. **Xale** ak a-b jàngalekat woy-na-ñu ci daara j-i.
 child with INDEF-CM.SG teacher sing-NA-3PL PREP school CM.SG-DEF
 ‘A child and a teacher sang in the school.’

This pattern resembles what Landau (2007) observes in the distribution of BNs in Romance languages like Italian:¹⁸

¹⁷However, it must be noted that Tamba *et al.* (2012, p. 907) show that this type of example is in fact grammatical in the Wolof dialects they investigate:

- (i) A-b xale / B-enn xale / **Xale** [b-u njool] dem-na.
 INDEF-CM.SG child / CM.SG-one child / child [CM.SG-COMP tall] leave-NA.3SG
 ‘A tall child left.’
 (Tamba *et al.* , 2012, (38))

It could be the case that, for these dialects, case licensing does suffice to license the BN.

¹⁸Landau’s original coordination example was replaced with a sentence that differed more minimally from the other sentences in the paradigm.

(74) *Italian*

- a. * In questo ufficio **marocchini** telefonano sempre.
in this office Moroccans call.up always
'In this office Moroccans always call up.'
- b. In questo ufficio dei marocchini telefonano sempre.
in this office of.the Moroccans call.up always
'In this office some Moroccans always call up.'
- c. In questo ufficio **marocchini e brasiliani** telefonano sempre.
in this office Moroccans and Brazilians call.up always
'In this office Moroccans and Brazilians always call up.'

[Landau 2007, (10); (c): redacted, p.c.]

The author's solution is based on a particular view of the EPP, which requires that the head of the phrase that satisfies this feature be phonologically overt:

(75) *EPP*

In [_{HP} ZP [_{H'} H_{EPP} ...]], Z must be pronounced.

[Landau 2007, (6)]

Under this view, what coordination does is provide a head with this property (*ak* in (73) and *e* in (74c)). This analysis of the EPP is also consistent with the fact that adding a relative clause to the BN in subject position does not yield rescuing effect: presumably, the relative clause does not change the phonological status of the head of the BN.

Consistent with the dependent case analysis pursued in this paper, in combination of this view of the EPP is the fact that BNs can be the subject in relative clauses and in clefts. To recall, the reason proposed for why BNs in Wolof cannot be subjects is that, even though they can receive case (i.e unmarked nominative), they violate the EPP requirement that the head that of the phrase that occupies Spec-TP be overt (75). A prediction that follows from this analysis is that, if the EPP violation can be removed, the resulting sentence with a BN in the subject position will be grammatical. The prediction can be shown be borne out in clefts and relative clauses where the gap is in the subject position.

As we can see in (66)/(67) and (68), respectively, the gap inside the relative clause the pivot of which is a BN can be in the object or in the subject position. The lack of contrast between these syntactic positions diverges from what happens to unmodified BNs. As we saw earlier, BNs can be objects, though not subjects.

- (76) Jàngalekat b-i jàng-na { cikaw } taalif [b-u Kadeer bind ___] {
teacher CM.SG-DEF read-NA.3SG { loudly } poem [CM.SG-COMP Kadeer write ___] {
cikaw }.
loudly }

'The teacher read loudly a poem that Kadeer wrote.' [= (18b)]

- (77) Mary bëgg-na gisee woykat [b-u ___ dëkk Senegal], waaye bu mu
Mary want-NA.3SG meet singer [CM.SG-COMP be.from Senegal] but BU 3SG
am baax-na.
meet good-NA.3SG

'Mary wants to meet a singer who is from Senegal, and any will be good.'
want> ∃; [= (68b)]

Additionally, if a BN is clefted, the gap can also be in the subject position, even though, as we have discussed in this section, BNs cannot occur in the subject position.

- (78) a. **Jàngalekat** a __ lekk ginaar g-i.
 teacher FOC.SUBJ eat chicken CM.SG-DEF
 ‘It was a teacher who ate the chicken.’
- b. **Woykat** a __ ñëw.
 singer FOC.SUBJ arrive
 ‘It is a teacher who arrived.’
- c. **Woykat** a __ féey.
 singer FOC.SUBJ swim
 ‘It is a teacher who swam.’

These facts are consistent with the definition of the EPP assumed here. The EPP (75) requires that the head of that occupies this position be pronounced. However, this requirement is presumably vacuously satisfied if Spec-TP is not a final landing site, that is, if this position is left empty because of a subsequent step of movement. What the relative clause (77) and cleft (78) data have in common is exactly that the BN that occupies the subject position further \bar{A} -moves, leaving this position unpronounced. The EPP is thus vacuously satisfied. Furthermore, even though the BN subject does not end the derivation at Spec-TP, it presumably passes through this position before \bar{A} -moving to its final landing site. At that point of the derivation, it will be in the appropriate configuration to be assigned nominative case. Thus, the sentences in (77) and (78) do not violate either the EPP nor the need for nominals to be licensed with case and are correctly predicted to be grammatical.

5 Concluding remarks

This paper aimed at answering the questions in (22). According to the analysis proposed here, PNI-ed nominals in Wolof have to obey the adjacency requirement when they are the object of a transitive verb because there is no other way for it to be case licensed. Following [Branan \(to appear\)](#), I assume that objects and subjects belong to different case domains, so that, in the absence of another DP to act as a case competitor, a BN object has to be licensed via adjacency with the verb. Full nominal objects, on the other hand, must move to the edge of the lower case domain, where the subject is visible and thus can act as a case competitor. The adjacency requirement is this case is absent

The adjacency requirement can also be sidestepped by BN objects themselves, as long as another intermediate argument is introduced in the sentence. This is the case of ditransitive, applicative, and causative constructions. This is exactly what is expected in [Branan’s](#) analysis, as the newly introduced argument acts a case competitor for the BN theme. This analysis is also helpful in explaining why \bar{A} -movement, as effected by relativization, is helpful in licensing a BN object in spite of the adjacency requirement. The reason is that \bar{A} -movement is successive-cyclic. Assuming that domains of case assignment are also phases ([Baker, 2014a](#)), there is an intermediate step in the \bar{A} -movement the PNI-ed object is undergoing that brings it to the same domain of case assignment as the subject, thereby allowing it to be licensed by case.

Most importantly, the view of nominal assumed here is also successful in explaining not only the individual effects of the introduction of an intermediate argument and of \bar{A} -movement, but also why these two independent phenomena pattern together in allowing a BN to escape the adjacency

requirement. Branan's nominal licensing framework based on dependent case, provides a unified answer: both operations furnish a case competitor to the PNI theme, either by the introduction of a new nominal in the lower case domain or by the successive cyclic movement of the PNI theme itself to the higher case domain, where the subject resides. Consequently, this nominal can be licensed with case, instead of having to resort to adjacency with the verb.

If correct, the data investigated here expands the empirical basis of Driemel's (2020; also see references therein) observation that the adjacency requirement is not entirely correct to characterize PNI crosslinguistically. Driemel lists a few cases of PNI-ed nominals can move, but remarks that this is possible only under particular circumstances. Specifically, as alluded earlier, the author observes that the PNI languages that allow for movement are those where VP movement is also independently attested. Crucially, VP and PNI movement in these language observe the same restrictions regarding where they can move to. Likewise, if a PNI language does not allow for VP movement, a PNI-ed nominal is expected not to move either, in which case it will obey the adjacency requirement more closely. It can be said that the present paper is a continuation of this trend: the adjacency requirement is not always observed in Wolof PNI, but movement obeys a particular set of restrictions. What I proposed here is that these restrictions are governed by nominal licensing. It must be said however that it is also possible that Wolof allows for its VP to be moved (Torrence, 2013a). I leave it for future research to determine whether the limitations of VP movement in Wolof also govern PNI movement, as expected from Driemel's analysis.

Finally, a few questions remain open regarding the framework assumed. In its original form (Marantz, 1991), a dependent case theory eschews case assignment as a means of nominal licensing. A notable example is the occurrence of nominative objects in Icelandic, which are possible, in the presence of a subject bearing lexical case, even in ECM sentences, where no finite T is available to assign nominative case.¹⁹ Branan's proposal turns this assumption about the dissociation between dependent case and nominal licensing on its head and argues that dependent case can indeed be the reason why a nominal is legitimate in a given derivation. If on the right track, the present analysis of PNI in Wolof provides additional empirical support to a return of Vergnaud's (2008) Case Filter, albeit under a configurational case assignment reformulation.

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¹⁹See however Pesetsky (2021) for an alternative analysis where there indeed is a point of the derivation where a finite T can assign nominative case to the said object. In nonfinite clauses like those found in ECM constructions, a subsequent operation gets rid of clausal layers, including a finite TP.

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