

# Nominal licensing via dependent case: the view from pseudo noun incorporation in Wolof<sup>\*</sup>

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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, 2021) 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

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<sup>\*</sup>[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 Cambridge, Massachusetts. 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.

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.

## 1 Introduction

Marantz (1991) argues that case is assigned to an NP due to the c-command relationship with another NP in a given domain and not by a dedicated head. The author contends, furthermore, that case assignment and nominal licensing are dissociated. Following Branen (2021), I argue instead that dependent case and nominal licensing are not necessarily contradictory with each other: dependent case can, in fact, be a licensing strategy for a nominal. The empirical basis is provided by pseudo noun incorporation (PNI) in Wolof, specially with regards to the conditions under which a PNI-ed nominal in this language is not adjacent to the verb, a property which is otherwise usually found in PNI.

‘Pseudo noun incorporation’ (PNI) designates a construction where an object usually appears adjacent to the verb that subcategorizes for it.<sup>1</sup> 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

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<sup>1</sup>The 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.

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 that PNI-ed nominal usually displays. 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.

(2) *Pseudo noun incorporation in Tamil*

- a. Naan oru pustagatt-e anda pombale-kitte kuḍu-tt-een.  
I a book-ACC the woman-LOC give-PAST-1SS  
'I gave a book to the woman.'
- b. Naan anda pombale-kitte **pustagam** kuḍu-tt-een.  
I the woman-LOC book give-PAST-1SS  
'I gave a book to the woman.'
- c. \*Naan **pustagam** anda pombale-kitte 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, Senegal), bare nominals display some of the properties found in PNI.<sup>2</sup> (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.<sup>4</sup>

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

<sup>3</sup>The 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.

<sup>4</sup>A *Glossa* reviewer remarks that another traditional PNI property is number neutrality. Dayal (2011), however,

- (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.’
- d. Isaa fàtte-na jënd **fowekaay**.  
 Isaa forget-NA.3SG buy toy  
 ‘Isaa forgot to buy a toy.’ only forget >> ∃
- 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

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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 Fong (2021), I argue that BNs in Wolof are singular, though a plural interpretation arises as a consequence of factors other than aspect.

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 Branan (2021). As we are going to see below, Branan 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 permits the adjacency requirement to be obviated. In §3, I summarize the main relevant properties of Branan’s (2021) 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 Branan’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 Branan’s (2021) nominal licensing theory 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

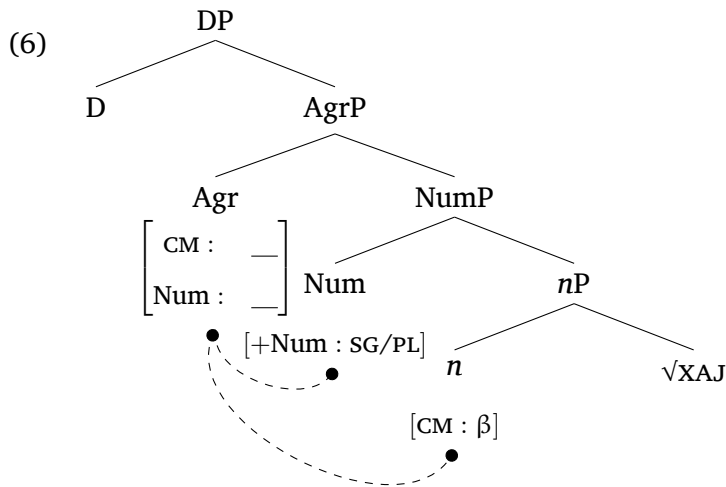
### 2.1 Basics of Wolof syntax

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))

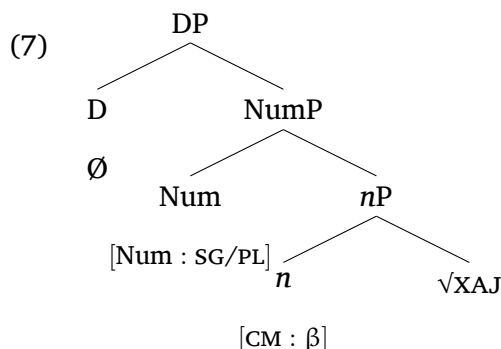
In Fong (2021), I propose the following structure for full nominals in Wolof:





In (6), Agr is the head exponed by the aforementioned class marker. This single head expresses both the class a noun belongs to and number because it probes for both features simultaneously.

This paper is concerned with the syntactic distribution of nominals that lack this morphology, as illustrated in (3) above. In Fong (2021), I propose that bare nominals have the following truncated structure:



As we are going to see later (see §4.4), the motivation behind postulating a null D layer in bare nominals stems from a particular view of the EPP, to be spelled-out. This paper thus indirectly sides with the view that nominals that are bare do contain a determiner, albeit one without phonological realization.

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 (8) – and in most sentences in this paper –, it is the morpheme for neutral sentences, *na*.<sup>5</sup> To the sentential particle is attached a morpheme that cross-references the  $\varphi$ -features of the subject, e.g. *-ñu* in (8b). This cross-referencing follows a nominative alignment: the subject of both transitive and intransitive verbs is cross-referenced.

- (8) 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.’

<sup>5</sup>A *Glossa* reviewer 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.

- 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.’
- (9) 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.

## 2.2 Pseudo Noun Incorporation in Wolof

A BN in the direct object position must be adjacent to the verb. (10a) illustrates the fact that a low adverb can intervene between the verbal complex and a full nominal object. (10b) in turn shows that the same adverb cannot be placed between the verbal complex and a BN object.

- (10) 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.’

(11) is another paradigm showcasing the same restriction, though the ungrammaticality is not as marked.<sup>6</sup>

<sup>6</sup>Izabela Jordanoska (p.c.) and a *Glossa* reviewer 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 (10a), 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.’

- (11) 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 (12), applicative (13), and causative (14) constructions. In the data to follow, (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.

- (12) a. Awa nettali-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 nettali-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 nettali-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 nettali-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
- (13) 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
- 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  $\gg$  theme
- c. Jàng-al-na-a **taalif** sama doom.  
 read-APPL-NA-1SG poem POSS.1SG child

‘I read my child a poem.’

*BN; theme >> APPL*

- d. Jàng-al-na-a      sama      doom **taalif**.  
read-APPL-NA-1SG POSS.1SG child poem  
‘I read my child a poem.’

*BN; APPL >> theme*

- (14) 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*

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

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

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 PNI, where a PNI-ed object can be topicalized (Frey, 2015; Driemel, 2020).

Likewise, relativizing a BN allows it not to be adjacent to the verb. In (17a), we see that adding a relative clause to a full nominal does not change the possibility of an adverb intervening between it and the verb (cf. (10a)). However, the addition of a relative clause does increase the possible linear order available to a BN. (17b) demonstrates that a BN under these conditions can be separated from the verb by an adverb (cf. (10b)).

- (17) 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.’

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 present the following paradigm:

- (18) 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 (19) and of finite embedded clauses (20).

- (19) 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. \* **Ndongo.dara** lekk-na      maafe.  
      student            eat-NA.3SG maafe  
      Lit.: ‘Student ate maafe.’

- (20) \* 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:

- (21) 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, goal, 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 (21i). However, they may not readily carry over to the cases where this condition is sidestepped (21ii/21iii). I will argue that a dependent case view of nominal licensing (Branan, 2021) is able to explain these cases and, furthermore, what they have in common (21iv). 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 (21ii) and (21iii) have in common is that a case competitor is provided to the BN in object position, allowing it to be licensed.

In the next section, I will summarize Branan’s theory of nominal licensing.

### 3 Nominal licensing in Branan (2021)

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 (2021) 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*.

(22) *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, 2021, (2a/b))

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

(23) *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, 2021, (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 three main components: the proposal that nominals must be licensed (Levin, 2015), dependent case, and a particular proposal about case domains in the Kikuyu verb phrase.

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).<sup>7</sup>

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<sup>7</sup>See also Imanishi (2017) and Van Urk (2019), who apply the same analysis to case dropping in Japanese and

(24) *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  $N^0$  is strictly adjacent to  $V^0$  *[in the resulting surface structure]*.

(Branan, 2021, (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.

This proposal is reminiscent of Neeleman & Weerman's (1999) theory of nominal licensing. According to this theory, case is the realization of the syntactic head K. If such head is null, the nominal must be local to a licensing head, as a consequence of the application of the Empty Category Principle. The ECP is in turn a principle that applies quite late in the derivation, namely, at PF. I leave a comparison between Levin (2015) and Neeleman & Weerman (1999) for future work.

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 (24), the head  $N^0$  of the object must be adjacent with the verb. As such, the order *demonstrative–noun* becomes unavailable.

At this juncture, 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 according to the following algorithm:

(25) *Case realization disjunctive hierarchy*

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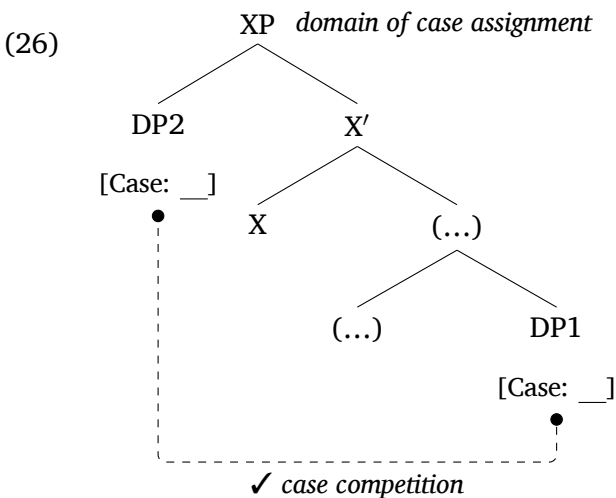
Differential Object Marking in Fijian, respectively. For an overview of how verb adjacency can be employed as a last resort licensing strategy in Austronesian voice system languages, see Erlewine et al. (2020).



- a. Lexically governed case
- b. “dependent” case (accusative and ergative)
- c. unmarked case (environment-sensitive)
- d. default case

(Marantz, 1991, (29))

According to this algorithm, first, all idiosyncratic cases are assigned. Subsequently, a pair of DPs within a given domain participate in case competition, so long as neither of them have been assigned any case yet. These DPs must, furthermore, be in a c-command relationship. This is diagrammed in (26). (Baker, 2014a).

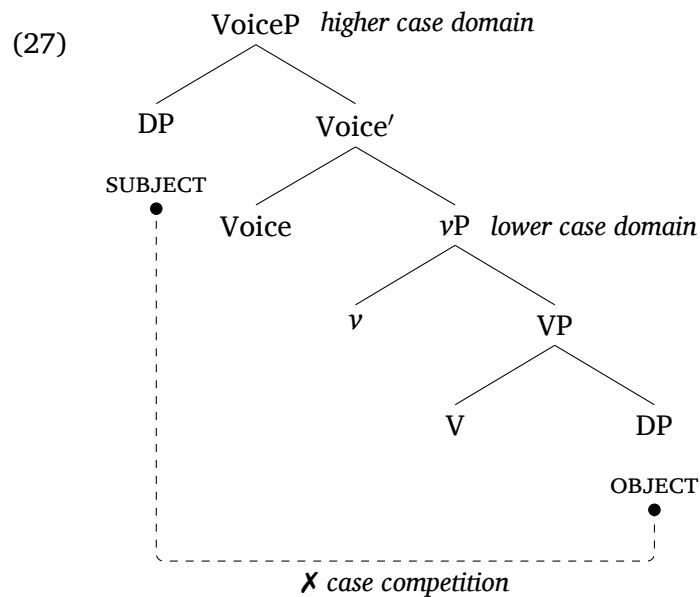


Within XP, DP2 asymmetrically c-commands DP1. Assume that neither DP has been assigned idiosyncratic lexical case. In a language with ergative case alignment, DP2 is assigned dependent ergative case. In a language with nominative case alignment, DP1 is assigned dependent accusative case. If DP2 and DP1 did not belong to the same domain of case assignment, dependent case could not have been assigned.

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). According to Marantz (1991), the assignment of unmarked case is sensitive to the environment where the remaining DP sits. For instance, unmarked nominative case is assigned within finite TPs, while unmarked genitive case is assigned within a nominal. Alternatively, one case assume a

hybrid system like that developed by Baker & Vinokurova (2010), where nominative is assigned by a dedicated head under the operation Agree.

Going back to Kikuyu, Branan contends that, in this language, 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  $\nu$ P:



(based on Branan 2021)

The subject cannot act as a case competitor for the object, which remains case-less. In order to satisfy (24), the direct object is licensed by having its head adjacent to the verb.

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.

As mentioned above, the linear order possibilities in three-argument constructions and  $\bar{A}$ -movement in Wolof (see §2) are quite similar to what Branan describes and examines in Kikuyu. As such, it seems appropriate to extend this analysis to Wolof PNI. This is the task in the next section; auxiliary assumptions will be introduced and justified as needed.

## 4 Applying [Branan \(2021\)](#) to Wolof PNI

### 4.1 Adjacency with the verb

Recall that one of our goals is to explain why a BN object in Wolof must be adjacent to the verb, as shown in [\(28b\)](#), repeated from above.

- (28) 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.’

We can interpret the adjacency requirement as a BN’s response to satisfy the Nominal licensing requirement [\(24\)](#). 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 in the component where a post-syntactic operation like local dislocation ([Embick & Noyer, 2001](#)) applies. 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.

While an operation like local dislocation does not have to be resorted to in Wolof, it is crucial that checking the licensing of a nominal via adjacency with the verb be as late as the stage where linearization occurs. The reason is that the verb in Wolof undergoes movement (cf. [Martinović 2015](#) and references therein), which undoes structural adjacency between V and its complement DP.<sup>8</sup> If the relevant adjacency is of the linear type, however, and if nominal licensing can be verified at this late stage of the derivation, then the analysis proposed goes through. In the present paper, I cannot offer an explanation as to why (or how) nominal licensing can be determined so late in the derivation or why linear adjacency suffices to license a DP or NP. I will leave this important issue for future work, noting here that Wolof provides empirical basis for a theory of

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<sup>8</sup>For simplicity, I do not represent head movement of the verb in the present paper.

nominal licensing that relies on this type of adjacency.<sup>9</sup>

Two questions arise at this point. First, why is unmarked case not available for a BN (or an FN) in situ, within the lower case domain ( $\nu P$ )?<sup>10</sup> Second, why are FNs able to be licensed without the adjacency requirement?

In order to answer the first question, I suggest that unmarked nominative is not available to a BN in situ because, following Marantz's (1991) original formulation, because unmarked case is sensitive to the context where a DP is. Nominative case, for instance, is available within finite TPs. I contend that BNs in Wolof, in contrast, are trapped inside the lower case domain  $\nu P$ , where unmarked nominative case is not available. That the BN stays inside the  $\nu P$  is discussed right below. Alternatively, one could assume, following Baker & Vinokurova's (2010) hybrid system, where dependent case and assignment of case via dedicated functional heads coexist. Specifically, in Baker & Vinokurova's analysis of the case system in Sakha, nominative case is assigned by a functional head under Agree.<sup>11</sup> This option is not available for Wolof. First off, there is no object agreement in the language, so the only other option would be Agree with T. While one could postulate abstract agreement with T, the BN object stays inside the  $\nu P$ . Common assumptions about the Phase Impenetrability Condition (Chomsky, 2000, 2001) prevents T from Agreeing with a BN object. In sum, given two available possibilities for this nominal to be assigned unmarked nominative case fail, leaving adjacency with the verb as the only viable licensing option for a BN.

As regards the second question, 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

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<sup>9</sup>I thank *Syntax* and *Glossa* reviewers for asking for clarification on this issue.

<sup>10</sup>Thank you to Elise Newman, Sabien Iatridou, and two *Syntax* reviewers for bringing this issue to my attention and for encouraging this paper to be more precise in this regard.

<sup>11</sup>Thank you to Peter Grishin (p.c.) and a *Syntax* reviewer for suggesting this alternative.

that a full nominal in the object position should cause the derivation to crash due to a violation of (24). (28a), 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):

- (29) 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. (30) shows that a full indefinite headed by *a-b* can scope above a verb like *fàtte* ‘forget’.<sup>1213</sup>

- (30) 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.*

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

- (31) 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.’

<sup>12</sup>It is remarkable that only a wide scope reading seems to be available in (30). 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).

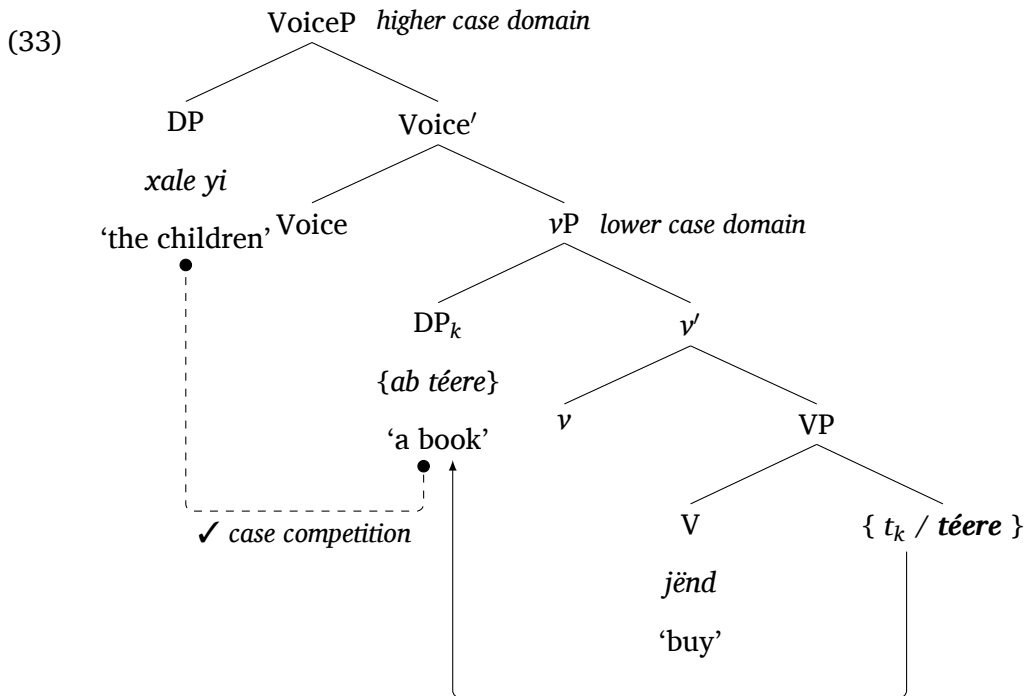
<sup>13</sup>A *Syntax* reviewer remarks that, for an embedded nominal to scope over *forget*, the embedded clause would have to be restructured. Based on e.g. clitic climbing facts, Martinović (2021) argues that restructuring is indeed available in Wolof.

(32) 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.

- (32) Isaa fàtte-na jënd fowekaay.  
 Isaa forget-NA.3SG buy toy  
 ‘Isaa forgot to a 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.*

In order to capture the differences among indefinite nominals in Wolof, I propose the structure and derivation in (33), where full nominal (FN) objects move the edge of the lower case domain, vP, while BNs remain in situ.



For concreteness, I assume that low adverbs like *loudly* (10b) and *quickly* (11b) are base-generated adjoined to VoiceP. The verb undergoes head movement to at least T and a full nominal object shifts to the edge of vP, yielding the order verb-adverb-object. If the object is a BN, the result is

ruled out because the BN is not licensed by case nor by adjacency with the verb. The order verb-object-adverb can be derived by either right dislocation of the adverb to the end of the sentence or by base-generation at the right of VoiceP. Either way, with the adverb no longer in an intervening position, a BN can be licensed via adjacency with the verb.<sup>14</sup>

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 [Branan \(2021\)](#), an unmodified version of this analysis cannot be fully extended to Wolof, since, in Kikuyu, 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 (33), 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 (vP), 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.<sup>15</sup>

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

<sup>14</sup>I thank the *Syntax* reviewers for clarification requests on the position of adverbs.

<sup>15</sup>A *Syntax* reviewer correctly asks whether BNs are simply unable to move to Spec-vP or if they are unable to surface at this position. It is important to ask this question, since I propose later that movement through this position suffices to case-license a BN when undergoes focalization or relativization. While important, it may be difficult to answer this question, since movement for the purposes of case assignment is presumably an instance of A-movement, while focalization and relativization are instances of  $\bar{A}$ -movement. As such, it could either be the case that BNs in Wolof are unable to surface at Spec-vP or that they cannot undergo A-movement. I leave this issue to be settled in future research.

and into a higher functional projection. This higher functional projection must be at least TP.<sup>16</sup> 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 (28b) 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. 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 (34), where ‘APPL’ stands for the intermediate argument that is introduced between the subject and the BN object.

- (34) i. SUBJECT – VERB – **THEME<sub>BN</sub>** – APPL  
 ii. SUBJECT – VERB – APPL – **THEME<sub>BN</sub>**

(34i) is the expected linear order, taking the adjacency condition into consideration, as the BN theme is indeed adjacent to the verb. However, (34ii) is also an attested word order, where the

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<sup>16</sup>Torrence (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.



BN is separated from the verb by the additional argument. Data like (34ii) thus diverges from the requirement that the a BN theme be the immediately next to the verb.

If the flexible word possibilities in (34) 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 (34) are the result of scrambling. Indeed, Harris (2015) shows that, at least in Wolof applicatives, (34ii) is the underlying order, with (34i) resulting from displacing the object (which, incidentally, ends up adjacent to the verb). Conversely, a dependent case theory like Branagan's is well-equipped to deal with data like those schematized in (34), 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.<sup>17</sup>

(35) shows the basics of weak crossover in Wolof. In the (a) examples of (36) and (37), 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.<sup>18</sup>

<sup>17</sup>I have adapted Harris's morphological analysis and glosses for uniformity.

<sup>18</sup>Regrettably, I was not able to reproduce reliably the weak crossover data. Specifically, sentences with the same profile, but only with a difference in word selection were sometimes judged grammatical and sometimes ungrammatical,

(35) *Weak crossover baseline*

- a. B-an yaay<sub>i</sub> moo t nob doom=am<sub>i</sub>?  
CM.SG-which mother FOC.3SG love child=POSS.3SG  
'Which mother<sub>i</sub> loves her<sub>i</sub> child?'
- b. B-an doom<sub>i</sub> yaay=am<sub>\*i/j</sub> moo nob t ?  
CM.SG-which child mother=POSS.3SG FOC.3SG love  
Which child<sub>i</sub> does his<sub>\*i/j</sub> mother love?'

(Harris, 2015, p. 95ff)

(36) *Weak crossover in ditransitive*

- a. G-an góor<sub>i</sub> nga yónnee t<sub>i</sub> bataaxal=am<sub>i</sub>?  
which man 2SG send letter=POSS.3SG  
'Which man<sub>i</sub> did you send his<sub>i</sub> letter?'
- b. Bataaxal-u k-an<sub>i</sub> nga yónnee bindekát=am<sub>\*i/j</sub> t<sub>i</sub>?  
letter-GEN CM.SG-who 2SG send author=POSS.3SG  
'Whose<sub>i</sub> letter did you send to its<sub>\*i/j</sub> author?'

(Harris, 2015, p. 97)

(37) *Weak crossover in applicative construction*

- a. B-an jigéen<sub>i</sub> nga rey-al t<sub>i</sub> xar=am<sub>i</sub>?  
which woman 2SG.OFOC kill-APPL sheep=POSS.3SG  
'For which woman<sub>i</sub> did you kill her<sub>i</sub> sheep?'
- b. Xar-u k-an<sub>i</sub> nga rey-al borom=am<sub>\*i</sub> t?  
sheep-GEN who 2SG kill-APPL owner=POSS.3SG  
'Whose sheep<sub>i</sub> did you kill for his/her<sub>\*i/j</sub> owner?'

(Harris, 2015, p. 98)

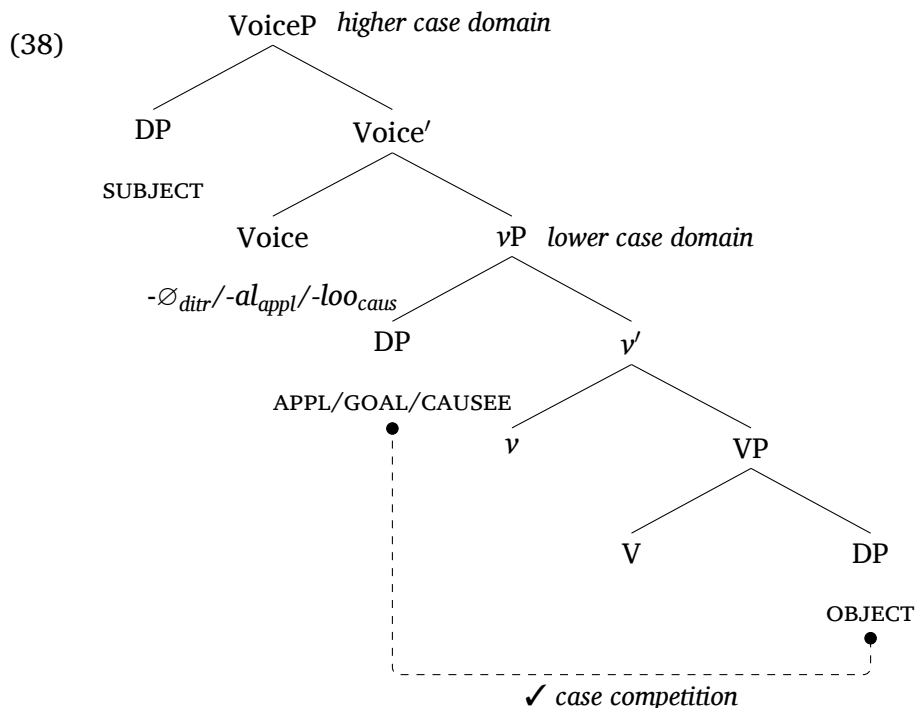
The c-command diagnostics surveyed above suggest that ditransitive goals and applied arguments c-command the theme argument. This structural relationship can be diagrammed as in (38). This structure is basically identical to what Harris (2015) proposes to applicatives and ditransitives in Wolof. Given 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.

Common assumptions about argument structure also support this structure. This analysis implies

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even though the relevant properties, specially those regarding the WCO configuration, remained intact. I have no explanation for these facts, so I leave any WCO I elicited out of this paper. I thank a *Syntax* reviewer, who asked for clarifications on this issue.

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.



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 to 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.<sup>19</sup>

In this section, we took a closer look at some three-argument constructions in Wolof (specifically, ditransitive, applicatives, and causatives) and extended [Branan’s](#) case licensing analysis based on Kikuyu to Wolof BNs. This analysis provided an explanation as to why BN themes do

<sup>19</sup>A *Syntax* reviewer asks why a DP in Spec-*vP* may participate in more than one case competition. In (38), the DP in the aforementioned position acts as a case competitor for the object, assigning downwards accusative to it. In (33) above, in turn, a DP moved to Spec-*vP* is itself assigned downwards accusative case by the subject. Why does this position seem to be “multi-functional”? The reason is that this is a phase edge position, so that it belongs to the lower case domain (*vP*), but it is also visible to the higher case domain (*VoiceP*). Despite this variability, the possibility of a DP to participate in more than one iteration of case competition is restricted by whether or not it has itself already been assigned case. If it has, then it is removed from the case assignment algorithm, irrespective of occupying a multi-functional position.

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 (12)–(14), where, the internal arguments are full nominals that can appear in either order.

- (39) 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.’
- (40) a. \* Ndongo.dara 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. \* Ndongo.dara 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.’
- (41) a. \* Jàngalekat b-i             janga-loo-na             **ndongo.dara** 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             **ndongo.dara**.  
           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.

- (42) a. \* Góór g-i             jox-në             **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-në            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 (42) reduces to the ungrammaticality of (39b), (41), and (40), 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 (38)).

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 independent 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:

- (43) 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 (44), where the ill-formedness is correlated with the fact that the applied argument (*conference*) is not [+HUMAN].

- (44) ? We sent the conference the abstract.

(Adger & Harbour, 2007, (62))

The reason sentences like (39) and (40) are ungrammatical would be that the BN cannot satisfy a requirement akin to that in (44). In order to account for why a BN cannot be a causee (41), we would have to extend the [PERSON] condition in (43) to causative sentences in Wolof, though it is not clear to me why this should be the case.

A prediction that arises from this suggestion is that, if this additional requirement is eliminated, a BN can be licensed as an intermediate argument in a construction with two other DPs. This prediction is borne out by a type of perceptual construction in Wolof. Much like English and Romance languages (see [Felser 1998](#); [Pires 2006](#), a.o.; see also [Moulton & Grillo 2015](#)), Wolof allows for the verb that follows perceptual verbs like *gis* ‘see’ and *déeg* ‘hear’ to occur in bare form (i.e. without any inflectional morphology). Importantly, the DP that is interpreted as the subject of the bare embedded verb can be a BN ([45b](#)).

- (45) a. *Gis-na-a Kumba ak Roxaya woy déemba.*  
 see-NA-1SG Kumba with Roxaya sing yesterday  
 ‘I saw Kumba and Roxaya sing yesterday.’  
 b. *Déeg-na-a xale woy sama woy.*  
 hear-NA-1SG child sing POSS.1SG song  
 ‘I heard a child sing my song.’

But what is the structure of ([45](#))? There are two possibilities: the perceptual verb *gis* ‘see’ or *déeg* ‘hear’ takes a clausal complement and the subsequent DP (*Kumba ak Roxaya* ‘Kumba and Roxaya and *xale* ‘child’, respectively) is the subject of that clause ([46i](#)). Alternatively, the just mentioned DPs are in fact objects of the perceptual verb and the remainder of the sentence is a clausal adverb of sorts whose subject is null, but coindexed with the perceptual verb object ([46ii](#)).

(46) *Two analyses for (45), illustrated with (45b)*

- i. *Déeg-na-a [ xale woy sama woy ].*  
 hear-NA-1SG [ child sing POSS.1SG song ]  
 ii. *Déeg-na-a xale<sub>k</sub> [ ec<sub>k</sub> woy sama woy ].*  
 hear-NA-1SG child [ sing POSS.1SG song ]

There are two arguments in favor of the claim that this DP is the subject of a perceptual clausal complement, as diagrammed in ([46i](#)). The first argument is provided by island sensitivity and the second, by a constituency test. First, the string following the perceptual verb allows for *Wh*-extraction. This would not be possible if this string were a clausal modifier, which is presumably an adjunct.

- (47) *B-an jën la Isaa gis a-y xale lekk \_\_\_\_?*  
 CM.SG-what fish FOC.OBJ.3SG Isaa see INDEF-CM.PL child eat  
 ‘Which fish did Isaa see some children eat?’

Second, the whole string following the perceptual verb can be pseudo-clefted, which demonstrates that it forms a constituent. If the BN were not part of the embedded clause, but a direct object of the perceptual verb, this constituency would be unexpected. (48) establishes pseudo-clefting and (49) is its bare perceptual complement counterpart.

(48) *Pseudo-clefting finite embedded complement*

- a. Awa wax-na [ ne xaj b-i lekk-na ceeb ].  
 Awa say-NA.3SG [ COMP dog CM.SG-DEF eat-NA.3SG rice ]  
 ‘Awa said that the dog ate rice.’
- b. Awa l-imu wax mo-y [ xaj lekk-na ceeb ].  
 Awa CM.SG-what say 3SG-IMPF [ dog eat-NA.3SG rice ]  
 ‘What Awa said is that the dog ate rice.’

(49) *Pseudo-clefting in bare perceptual complement*

- a. Roxaya déeg-na [ **xale** woy sama woy ].  
 Roxaya hear-NA.3SG [ child sing POSS.1SG song ]  
 ‘Roxaya heard a child sing my song.’
- b. Roxaya l-imu déeg mo-y [ **xale** woy sama woy ].  
 Roxaya CM.SG-what hear 3SG-IMPF [ child sing POSS.1SG song ]  
 ‘What Roxaya heard was a child sing my song.’

The island and pseudo-cleft data suggest thus that the bracketing in (45b) is on the right track and that the BN there (*xale*) can be the subject of the clausal complement to the perceptual verb. In what follows, I call these structures ‘bare perceptual complements’, in view of the lack of morphology in the embedded verb.

Why can the subject of a bare perceptual complement be a BN, while it is not possible for the same type of nominal to be an intermediate argument in ditransitive, causative, and applicative constructions? I tentatively hypothesized above that the latter restriction has to do with some featural restriction imposed on the intermediate argument, a restriction that a BN cannot fulfill due to its assumed defectiveness. I suggest in this section that this requirement is absent in perceptual constructions. Because the DP that follows the perceptual verb is not its argument – being the subject of the subcategorized clause instead –, it cannot be imposed any similar requirement. The present analysis predicts that intermediate arguments (i.e. nominals that are c-commanded by another DP and in turn c-command a lower DP) can be BNs, given that they can be licensed with

case by the highest DP. The prediction is borne out by facts in perceptual constructions, which lack any additional requirement, unlike ditransitives, applicatives, and, speculatively, causatives.

### 4.3 $\bar{A}$ -movement

Going back to the main question addressed in this paper, 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.

- (50) **Taalif** la xale y-i binda \_\_\_\_.  
 poem FOC.OBJ.3SG child CM.PL-DEF wrote  
 ‘It is a poem that the children wrote.’

That clefting is derived by movement is indicated on the basis of its island-sensitivity. (51) shows that a phrase cannot be clefted out of a relative clause island.

- (51) 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.’

Once again, we can readily extend Branagan’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- $\nu$ P. This intermediate position allows the subject in Spec-Voice to act as a case competitor for the BN at Spec- $\nu$ 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.

- (52) 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.’



It is important to note that, when a BN is modified by a relative clause, it retains its narrow scope indefinite interpretation. In (53), the full nominal indefinite modified by a relative clause can scope above or below the intensional predicate *bëgg* ‘want’.

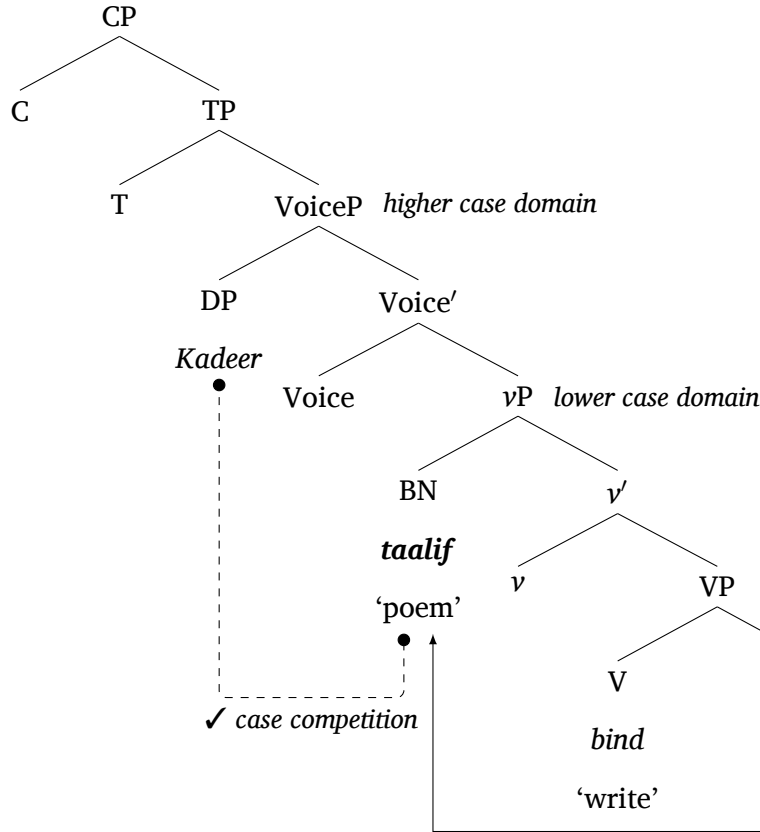
- (53) a. Sama doom bëgg-na jàng a-b téere [ b-u Mariama Ba  
 POSS.3SG child want-NA.3SG read INDEF-CM.SG book [ CM.SG-COMP Mariama Ba  
 bind \_\_ ], *Une si longue lettre* la tudd.  
 write \_\_ ] *Une si longue lettre* COP-3SG name  
 ‘My child wants to read a book that Mariama Ba wrote. Its title 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 (54), what the relative clause modifies is a BN. In that case, only a narrow scope reading is available (54b).

- (54) 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. 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 (52) looks as follows:

(55)



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.

A note is in order regarding the timing of case assignment inside relative clauses.<sup>20</sup> According to the analysis put forward here, case assignment in Wolof relative clauses happens internally to the relative clause itself. This would constitute an instance of inverse case attraction. This phenomenon is crosslinguistically rare, but nevertheless attested. For a survey and a particular analysis, see [Abramovitz \(2021\)](#) and references therein. I must say, however, that classifying Wolof as a inverse case attraction language is an analysis-internal consequence.

<sup>20</sup>Thank you to David Pesetsky and to *Syntax* reviewers for bringing this issue to my attention.

#### 4.4 BNs in the subject position

Finally, we turn to the subject position. Recall that BNs in Wolof cannot be the subject of a finite clause:

- (56) a. \* **Sasfam** fàtte-na        tej    palanteer=am.  
           nurse   forget-NA.3SG close window=POSS.3SG  
           Int.: ‘A nurse forgot to close his;her window.’
- 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.’

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 (56) ungrammatical?

While it does not provide us with a particular analysis of (56)’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.

(57) shows that a FN modified by a relative clause can be the subject of a finite clause, while (58) shows that this is not possible for a BN under the same conditions.<sup>21</sup>

- (57) 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

<sup>21</sup>However, 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.

‘A cat that Isaa likes ate the chicken.’

- b. Xadi xalaat-na [ ne a-y ndongo.dara [RC y-u Samba xam  
Xadi think-NA.3SG [ COMP INDEF-CM.PL student [ CM.PL-COMP Samba know  
] daw-na-ñu ci baayal b-i ].  
] run-NA-3PL PREP park CM.SG-DEF ]  
‘Xadi thinks that some students who Samba knows run in the park.’

- (58) 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 **fécckat** [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:

- (59) 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:<sup>22</sup>

(60) *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

<sup>22</sup>[Landau](#)’s original coordination example was replaced with a sentence that differed more minimally from the other sentences in the paradigm.

‘In this office Moroccans and Brazilians always call up.’

(Landau 2007, (10); (c): Stan Zompì, 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:

(61) *EPP*

In [<sub>HP</sub> ZP [<sub>H'</sub> H<sub>EPP</sub> ...]], Z must be pronounced.

(Landau 2007, (6))

Under this view, what coordination does is provide a head with this property (*ak* in (59) and *e* in (60c)). This analysis of the EPP also predicts 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 Tn clefts, thus,. 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 (61). 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 (52)/(53) and (54), 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.

(62) 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.’

(63) 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* > ∃

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.

- (64) 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 singer who arrived.’
- c. **Woykat** a \_\_\_\_\_ féey.  
       singer      FOC.SUBJ      swim  
       ‘It is a singer who swam.’

These facts are consistent with the definition of the EPP assumed here. The EPP (61) 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 (63) and cleft (64) 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 (63) and (64) do not violate either the EPP nor the need for nominals to be licensed with case and are correctly predicted to be grammatical.<sup>23</sup>

<sup>23</sup>A *Syntax* reviewer observes that Wolof may be classified as a pro-drop language. If this is true, then how could the EPP be satisfied in sentences where the subject is dropped? I maintain Landau’s (2007) account of pro-drop languages: according to Alexiadou & Anagnostopoulou (1998), in some pro-drop languages, specially those with rich agreement, V-to-T movement suffices to satisfy the EPP. As mentioned earlier, the verb in Wolof undergoes head movement.

## 5 Concluding remarks

This paper aimed at answering the questions in (21). 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 Branana (2021), 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 Branana'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. There is, thus, 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. Branana'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 au-

thor 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, the findings motivate a reappraisal of the claim that dependent case and nominal licensing are necessarily incompatible with each other (Marantz, 1991). The properties of Wolof PNI can be restated in terms of nominal licensing. The accessibility to another nominal (either by the introduction of another NP or by moving the BN through a higher case domain) leads to the licensing of the BN via competition. The need for adjacency with the verb only arises when dependent case cannot be assigned. This is predicted in a theory of nominal licensing where it is regulated by dependent case, where case competition plays a defining role.

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