

Regular article

Nominal licensing via dependent case: the view from 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 verb that subcategorizes for them. This is a property usually attributed to Pseudo Noun Incorporation. However, there are two circumstances under which this adjacency requirement is obviated: a DP is introduced between the subject and the PNI-ed object or the latter is \bar{A} -moved. While these are disparate phenomena, a dependent Case analysis of nominal licensing can account for PNI in Wolof. I assume that all nominals must be licensed with case, with case assignment being calculated in terms of dependent case. If this is not possible, a last resort strategy arises, namely, surface adjacency with the verb. This analysis provides a unified analysis of PNI in Wolof.

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 can be dissociated. Following [Branan \(2022\)](#), I argue instead that dependent case and nominal licensing are not inconsistent with each other: dependent case can 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. 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. 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 [Borik & Gehrke \(2015\)](#), [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 (*tumau* ‘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 tumau ni e ia e tau ika.
hunt always EMPH ERG he ABS PL fish
'He is always fishing.'
- b. Takafaga **ika** tumau ni 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 a PNI-ed nominal also 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) (*tirumba tirumba* '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-kie kuu-tt-een.
I a book-ACC the woman-LOC give-PAST-1SS
'I gave a book to the woman.'
- b. Naan anda pombale-kie **pustagam** kuu-tt-een.
I the woman-LOC book give-PAST-1SS
'I gave a book to the woman.'
- c. *Naan **pustagam** anda pombale-kie kuu-tt-een.
I book the woman-LOC give-PAST-1SS
Int.: 'I gave a book to the woman.'
- d. Baala **paeya 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** kei-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.^{1 2} (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. In this example, the indefinite must scope below the verb *fàtte* 'forget'. Finally, (3e) shows that a BN cannot be the subject of a transitive

¹For recent literature on Wolof, see, Tamba et al. (2012), Torrence (2013a), Harris (2015), Martinović (2015, 2017, 2019), Jordanoska (2020), a.o.

²The Wolof glosses I use here are as follows: CAUS = causative, CM = class marker, COMP = complementizer, DEF = definite, LNK = genitive, IMPF = imperfective, ITER = iterative, LNK = linker. NA = sentential particle for neutral sentences (*na*, NEG = negation, NON.FIN = non-finite, OBJ = object, OBL = oblique, PL = plural, POSS = possessive, PREP = preposition, PROG = progressive, RECIP = reciprocal, REFL = reflexive, SG = singular.

verb in a finite clause.³

- (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 fätte-na jënd **fowekaay**.
 Isaa forget-NA.3SG buy toy
 ‘Isaa forgot to buy a toy.’ only forget >> ∃
- e. ***Sasfam** fätte-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. More precisely, the subject (*ia* ‘he’) 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,

³A *Glossa* reviewer 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 [Fong \(2021\)](#), I argue that BNs in Wolof are singular, though a plural interpretation arises as a consequence of factors other than aspect.

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 the 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. For example, in (4b), the causee *Roxaya* intervenes between the verb and the theme bare nominal.

- (4) a. Jënd-ooloo-na-a **téere** Roxaya.
 buy-CAUS-NA-1SG book Roxaya
 ‘I made Roxaya buy a book.’
- b. Jënd-ooloo-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 Branen (2022). As we are going to see below, Branen 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 incorpo-

ration 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 \(2022\)](#) 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 \(2022\)](#) 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 and its 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.

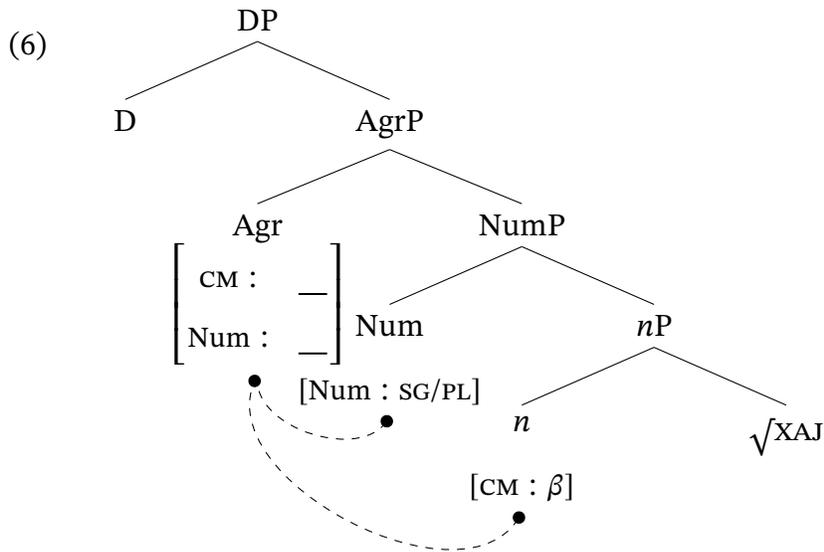
- (5) a. Xadi gis-na **a-b** sàcc.
 Xadi see-NA.3SG INDEF-CM.SG thief

‘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))

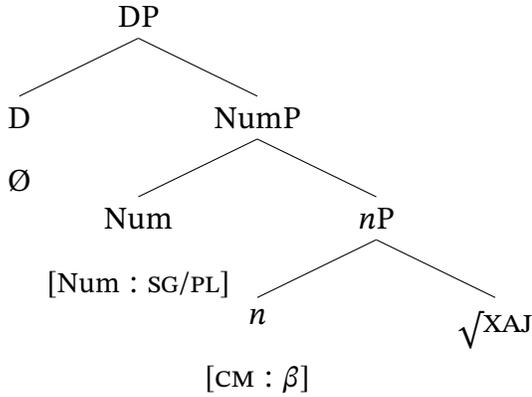
In Fong (2021), I propose the following structure for full nominals in Wolof:



In (6), Agr is the head expounded by the aforementioned class marker. This single head expresses both the class a noun belongs to (represented here as ‘ β ’, encoded in the categorizer n) and number because it probes for both features. CM is the exponence of this probe.

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:

(7)



As we are going to see later (§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 (8b) – and in most sentences in this paper –, it is the morpheme for neutral sentences, *na*.⁴ To the sentential particle is attached a morpheme that cross-references the φ -features of the subject, e.g. *-ñu* in (8b). This cross-referencing follows an accusative 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-LNK.SG fish
 ‘The student ate rice and fish.’

⁴A *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 clauses.

- b. Jàngakat y-i lekk-na-ñu ceeb-u jën.
 student CM.PL-DEF eat-NA-3PL rice-LNK.SG fish
 ‘The students ate rice and fish.’
- (9) a. A-b pake agsi-na.
 INDEF-CM.SG package arrive-NA.3SG
 ‘A package arrived.’
- b. A-y pake 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 presumably 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.’

(11b) is another paradigm showcasing the same restriction, though the ungrammaticality is not as marked.⁵

⁵Izabela Jordanoska 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:

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

However, this adjacency 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, and (ii) \bar{A} -movement of the BN direct object.

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 >> 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 >> theme*

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- (i) *Jënd-na-a téere b-i [b-u Mariama Ba jàng]
 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, however, 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.’

- 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 » 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 » 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 » 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 » 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 Hocçak, 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 or, more precisely, its focalization ([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](#)).

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. \(2012\)](#), who present the following paradigm:

- (17) a. A-b / B-enn xale jàng-na téére b-i.
INDEF-CM.SG / CM.SG-one child read-NA.3SG book CM.SG-DEF
‘A child read the book.’
- b. ***Xale** jàng-na téére b-i.
child read-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 (18) and of finite embedded clauses (19).

- (18) a. ***Sasfam** fàtte-na tej palanteer=am.
 nurse forget-NA.3SG close window=POSS.3SG
 Int.: ‘A nurse forgot to close his/her window.’
 (*A consultant commented that this 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.’
- (19) *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:

- (20) a. Why do BNs have to obey the adjacency requirement, while full nominals do not?
- b. 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?
- c. Why does \bar{A} -moving a BN theme also allow it to bypass the adjacency requirement?
- d. 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 (20a). However, they may not readily carry over to the cases where this condition is sidestepped (20b)/(20c). I will argue that a dependent case view of nominal licensing (Branan 2022) is able to explain these cases and, furthermore, what they have in common (20d). 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 (20b) and (20c) 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 \(2022\)](#)

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 \(2022\)](#) 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*.

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

- a. **mundu uyu** ni-a-rug-ir-e.
1.man 1.DEM FOC-1S-jump-ASP
'This man jumped.'
- b. **uyu mundu** ni-a-rug-ir-e.
1.DEM 1.man FOC-1S-jump-ASP
'This man jumped.'

([Branan 2022](#): (2a/b))

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

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

- a. Mwangi ni-a-on-ire **mundu uyu**.
Mwangi FOC-1S-see-ASP 1.man 1.DEM
'Mwangi saw this man.'
- b. *Mwangi ni-a-on-ire **uyu mundu**.
Mwangi FOC-1S-see-ASP 1.DEM 1.man
Int.: 'Mwangi saw this man.'

(Branan 2022: (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 (Marantz 1991), 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).⁶

(23) *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 2022: (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,

⁶See also Imanishi (2017) and Van Urk (2019), who apply the same analysis to case dropping in Japanese and 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).

namely, at PF.⁷

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

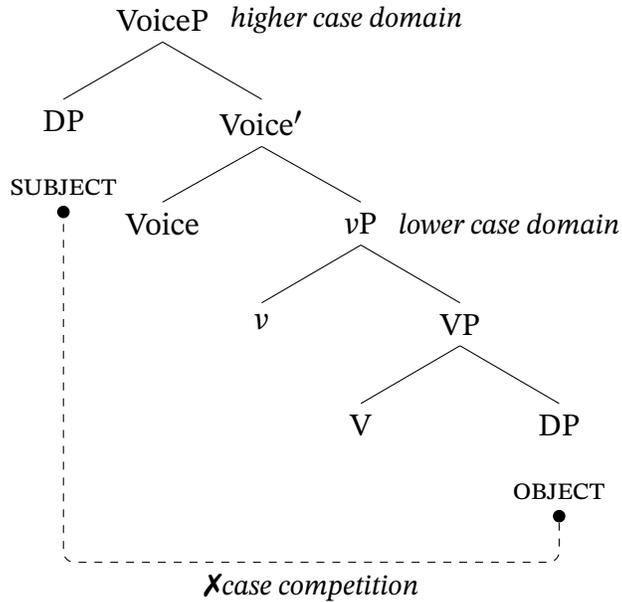
At this juncture, one must ask why it would not be possible for a direct object to be assigned case in Kikuyu. Branan assumes a dependent case framework (Marantz 1991, a.o.), where case is not assigned by particular functional heads (e.g. finite T and transitive v , but rather according to the following algorithm:

- (24) *Case realization disjunctive hierarchy*
- 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 (25).

(25)

⁷I leave a thorough comparison between Levin (2015) and Neeleman & Weerman (1999) for future work.



(based on [Branan 2022](#))

The subject cannot act as a case competitor for the object, which remains case-less. In order to satisfy (23), the direct object is licensed by having its head adjacent to the verb.

Two predictions emerge from this proposal. First, 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. Second, 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.

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 is 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 \(2022\)](#) to Wolof PNI

4.1 The adjacency requirement

Recall that one of our goals is to explain why a BN object in Wolof must be adjacent to the verb, as shown in [\(27b\)](#), repeated from above.

- (27) 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 [\(23\)](#). 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.

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 (vP)? 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 ν P, where unmarked nominative case is not available. That the BN stays inside the ν 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. This option is not available for Wolof. First, 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 ν P. Common assumptions about the Phase Impenetrability Condition (Chomsky 2000, 2001) prevents T from Agreeing with a BN object. In sum, these two alternatives for a BN to be assigned unmarked nominative case are unsuccessful. The adjacency analysis advocated for here does not face these issues.

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 that a full nominal in the object position should cause the derivation to crash due to a violation of (23). (27a), 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 statements that concern the position of objects with respect to their interpretive properties (Diesing 1992):⁸

⁸A *Syntax* reviewer notes that a wide scope reading for indefinites can also be obtained

- (28) a. Full nominals in the object position must covertly A-move to the edge of the lower case domain, Spec-*v*P.
 b. 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. (29) shows that a full indefinite headed by *a-b* can scope above a verb like *fàtte* ‘forget’.

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

- a. ✓ *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.*
 b. # *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.*

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

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

(31) in turn shows that a BN in the same position takes narrow scope, obligatorily. That PNI-ed

without any movement, a theoretical possibility that is globally assumed. While I acknowledge the correctness of the reviewer’s objection, I maintain a movement-based analysis of indefinites in Wolof because it provides a unified analysis of different properties of bare nominals in this language, namely, their interpretation and linear order and, additionally, how they contrast with their non-bare counterparts.

nominals have a narrow scope indefinite reading has already been observed by, [Dayal \(2011\)](#), [Baker \(2014b\)](#), among many others.

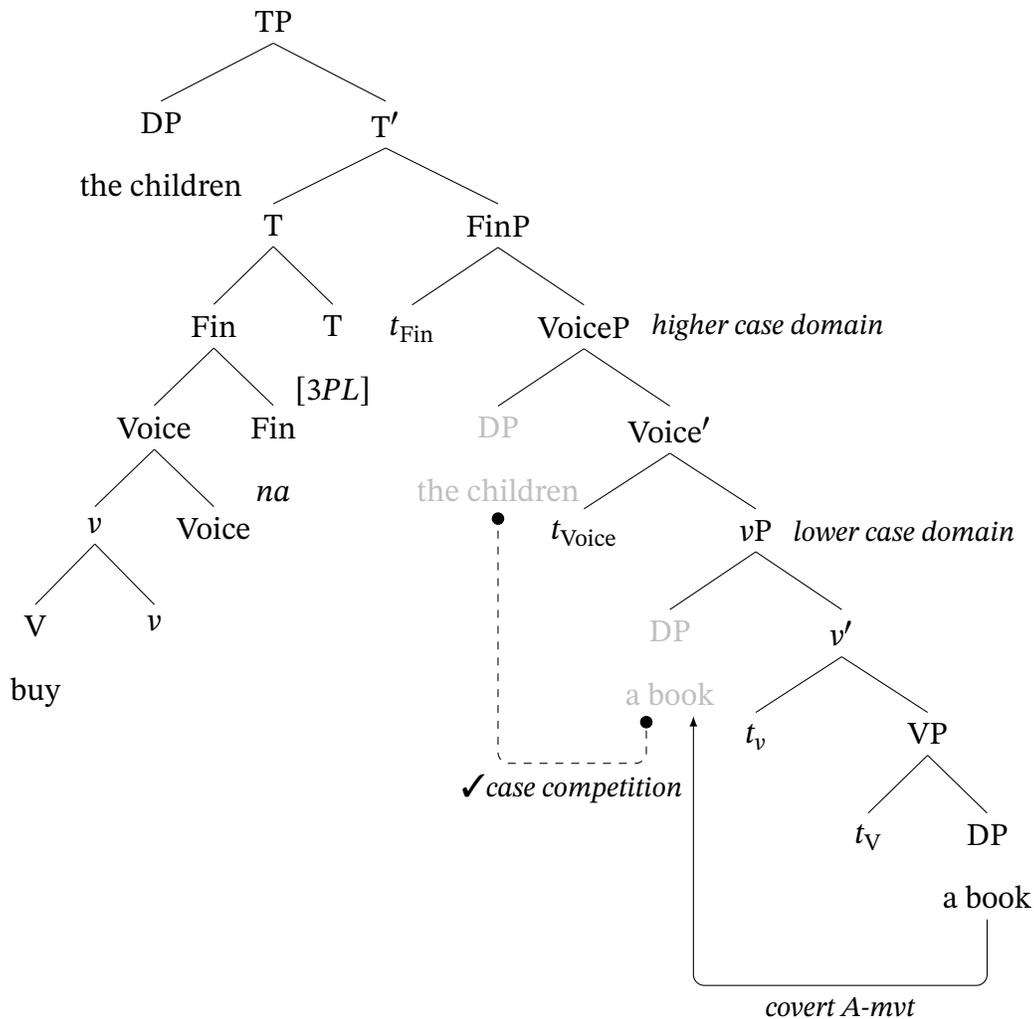
(31) Isaa fätte-na jënd **fowekaay**.
 Isaa forget-NA.3SG buy toy
 ‘Isaa forgot to a buy a toy.’

- 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 the differences among indefinite nominals in Wolof, I propose the structure and derivation in (32), where full nominal (FN) objects move the edge of the lower case domain, vP , while BNs remain in situ. (32) represents the sentence (3a), repeated below for convenience. For concreteness, I assume that the particle *na* is the realization of a the head of a FinP, located between TP and the verbal projections.⁹ Additionally, I assume that agreement with the subject is in T. Head movement puts together the different pieces of the verb (i.e., the root, the verbal projection heads, Fin, and T). For conspicuousness, light gray denotes copies of movement that are not pronounced. Other copies that are not relevant for the discussion at hand are represented as traces (*t*).

(32) 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.’

⁹*Na* and other particles have received much attention in the Wolof literature (cf. [Torrence 2005](#), [Martinović 2015](#) and references therein). I abstract away from this discussion, as it is not relevant to the present paper, since *na* has been analyzed as the head of a \bar{A} -projection, which can then lead to questions about the nature of the position of the subject.



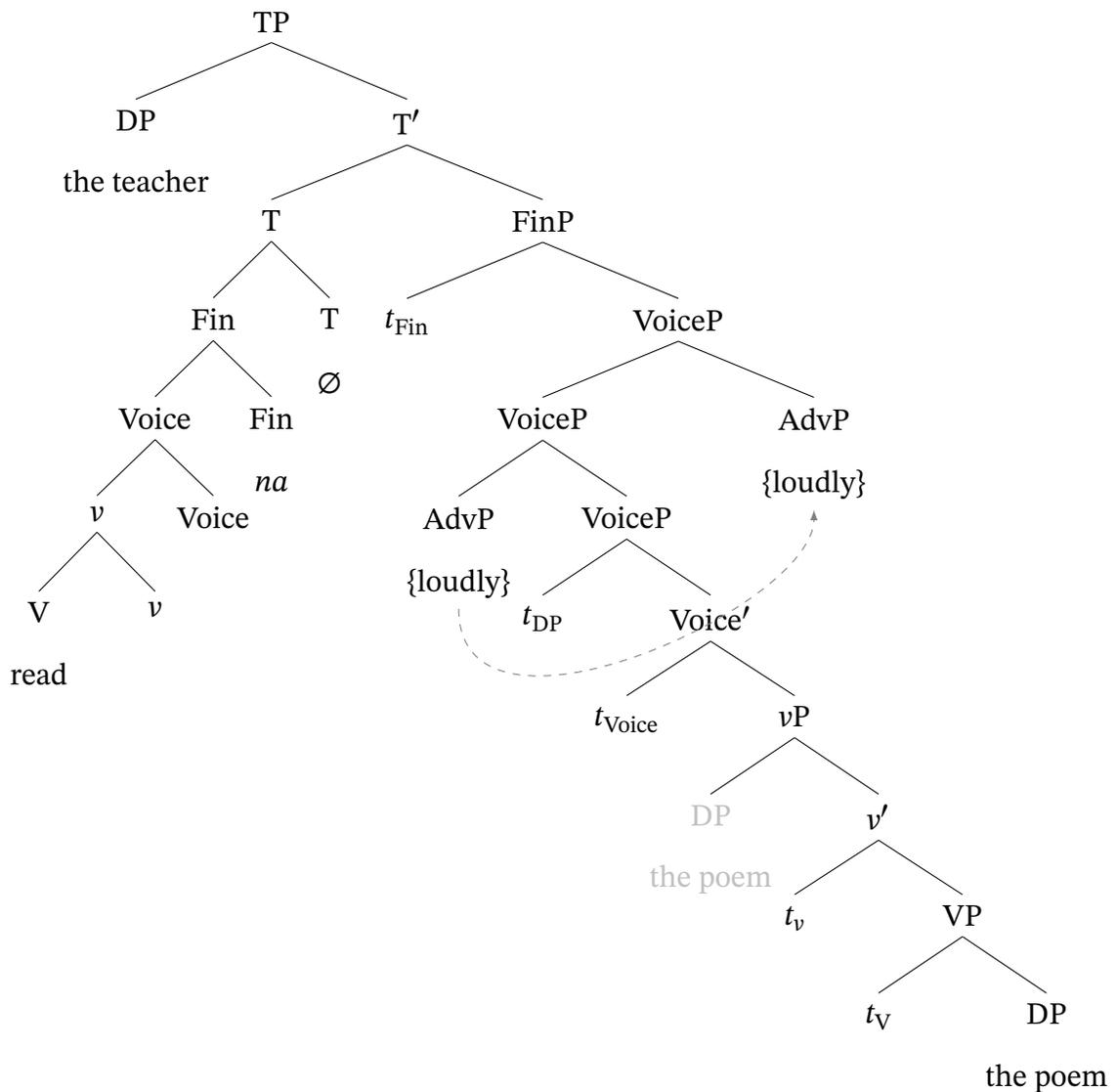
In (26), the subject *xale yi* ‘the children’ acts as a case competitor at the point of the derivation when it occupies its base-generation, Spec-VoiceP. The object *ab téere* ‘a book’ is accessible because it has moved to the edge of the lower case domain.

The object *ab téere* ‘a book’ undergoes covert A-movement to the edge of the lower domain of case assignment, according to (28a). As is well-known, A-movement resists reconstruction (cf. Chomsky 1995, Lasnik 1999), which accounts for the fact that only a wide scope reading is available for sentences like (29) and (30). The covertness of this movement is a stipulation that will be discussed momentarily.

For concreteness, I assume that low adverbs like *cikaw* ‘loudly’ (10b) and *bugaaw* ‘quickly’ (11b) are base-generated adjoined to VoiceP, 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 (represented in (33) with a dashed gray line) 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.

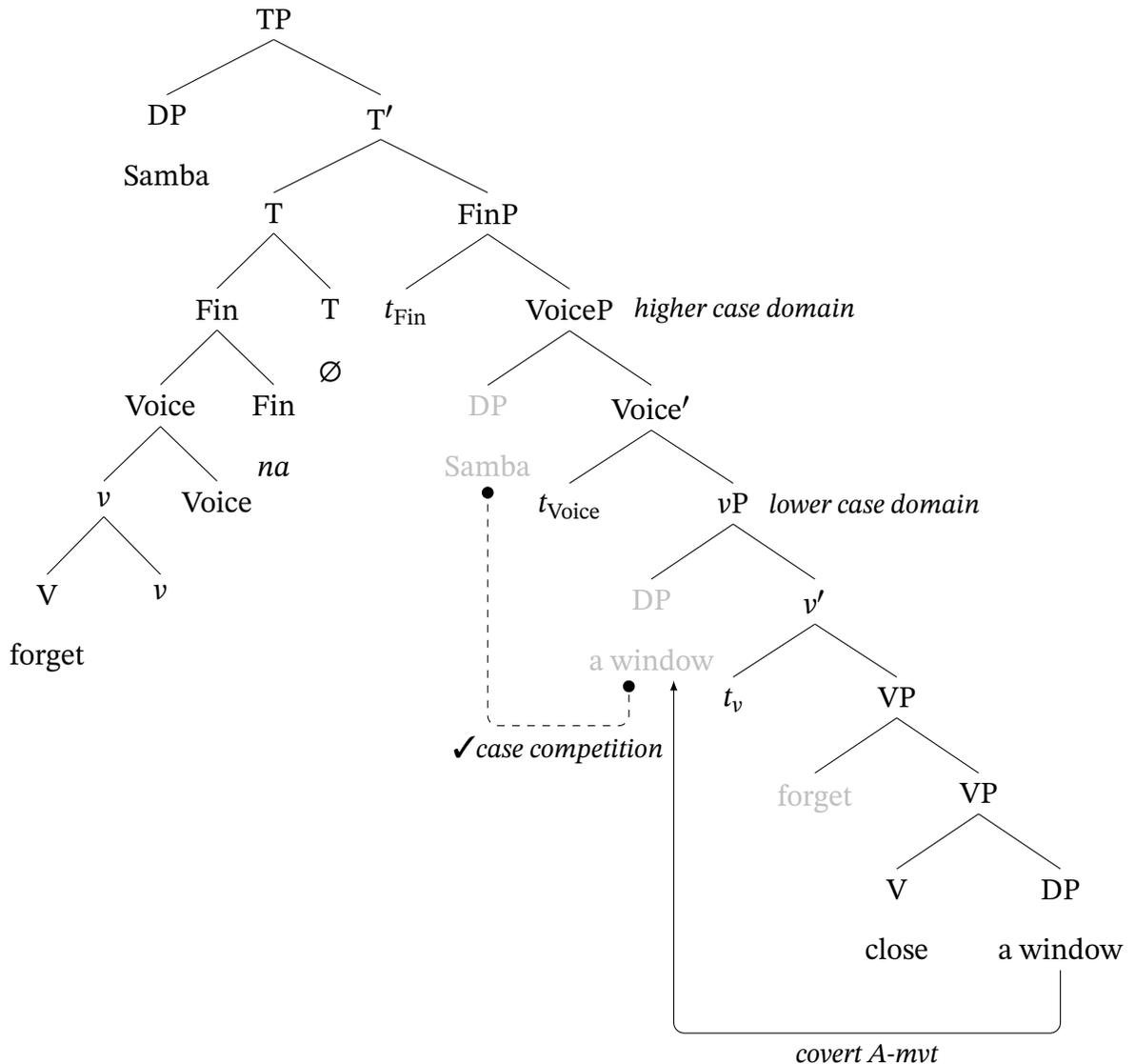
- (33) Jàngalekat b-i jàng-na { cikaw } taalif b-i { cikaw }.
 teacher CM.SG-DEF read-NA.3SG { loudly } poem CM.SG-DEF { loudly }
 ‘The teacher read the poem loudly.’



Following this analysis, the derivation of a sentence like (29) is diagrammed in (34), also

repeated below. I assume that *fàtte* ‘forget’ takes an infinitival complement that is restructured (cf. Fong 2023 and references therein). Evidence for restructuring is provided by the obligatoriness of clitic climbing in such sentences (Wurmbrand 1998). Because the embedded clause is truncated, the only position that an embedded object can shift to is in the matrix *vP*.

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

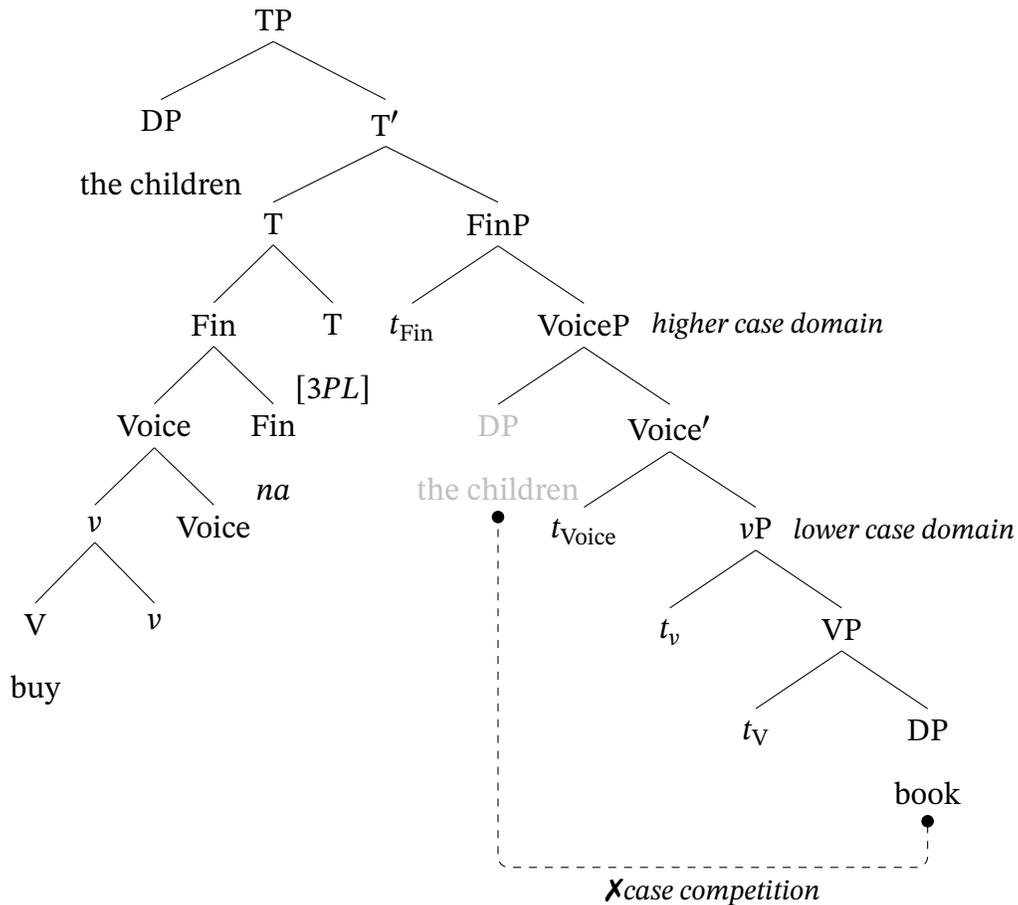


The embedded object undergoes covert A-movement, just as in (32). In (34), however, the covertness of the movement captures the observed word order. I leave this part of the analysis

as an underived stipulation. Notice, though, that it helps account for the scope contrast between full and bare nominal objects, since only the former can take wide scope; in (34), there is a point of the derivation where the FN indefinite is above the verb *forget*.

In contrast, the derivation of a sentence with a BN object like (3b) works as follows:

- (35) Xale y-i jënd-na-ñu téere.
 child CM.PL-DEF buy-NA-3PL book
 ‘The children bought a book.’

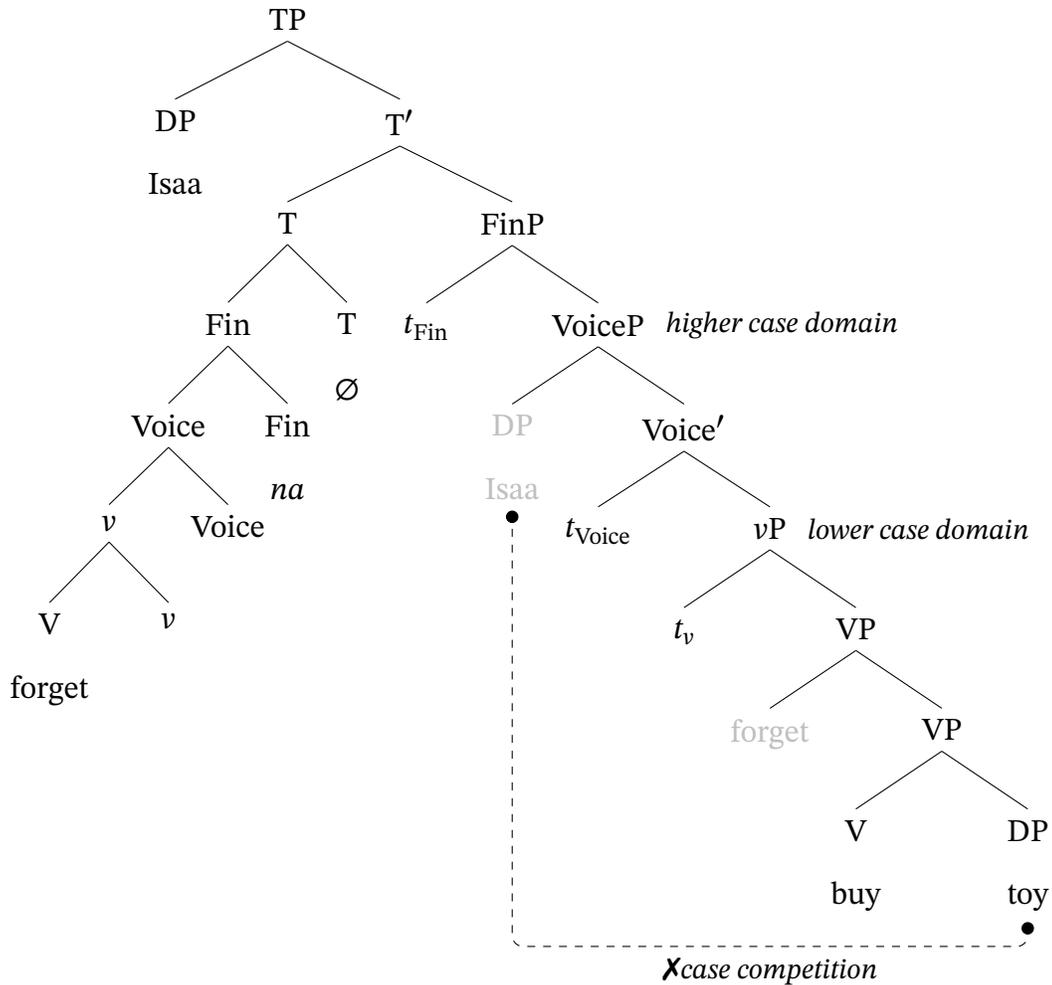


In (35), the bare nominal does shift to the edge of the lower case domain. As such, it is not accessible to the subject for dependent case assignment. It is then licensed via adjacency with the verb.

The obligatorily narrow scope of a sentence like (31) is analysed as follows. Unlike what happens in (34), where the embedded object is a full nominal, in (36), the BN object is unable

to shift into the matrix clause. As a consequence, there is no point in the derivation where the BN scope above the matrix verb *forget*, accounting for the lack of a wide scope reading for the BN.

- (36) Isaa fätte-na jënd fowekaay.
 Isaa forget-NA.3SG buy toy
 'Isaa forgot to a buy a toy.'



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 \(2022\)](#), 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 (32), 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.¹⁰

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. 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 ad-

¹⁰A *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.

adjacent to it, as long as nothing intervenes between them. A case in point would adverbs, as in (27b) 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 provided empirical support to this proposal based on scope. In the next section, we apply Branan’s theory to applicative, ditransitive, and causative constructions.

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 (37), where ‘APPL’ stands for the intermediate argument that is introduced between the subject and the BN object.

- (37) a. SUBJECT – VERB – **THEME_{BN}** – APPL
b. SUBJECT – VERB – APPL – **THEME_{BN}**

(37a) is the expected linear order, taking the adjacency condition into consideration, as the BN theme is indeed adjacent to the verb. However, (37b) is also an attested word order, where the BN is separated from the verb by the additional argument. Data that instantiate (37b) thus diverge from the requirement that the a BN theme be the immediately next to the verb.

If the flexible word possibilities in (37) 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 (37) are the result of scrambling. Indeed, Harris (2015) shows that, at least

in Wolof applicatives, (37b) is the underlying order, with (37a) 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 (37), 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.¹¹

(38) shows the basics of weak crossover in Wolof. In the (a) examples of (39) and (40), 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.¹²

¹¹I have adapted Harris's morphological analysis and glosses for uniformity.

¹²Regrettably, 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, even though the relevant properties, especially 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.

(38) *Weak crossover baseline*

- a. B-an yaay_i moo t nob doom=am_i?
CM.SG-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 ?
CM.SG-which child mother=POSS.3SG FOC.3SG love
'Which child_i does his_{*i/j} mother love?'

(Harris 2015: p. 95ff)

(39) *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-LNK CM.SG-who 2SG send author=POSS.3SG
'Whose_i letter did you send to its_{*i/j} author?'

(Harris 2015: p. 97)

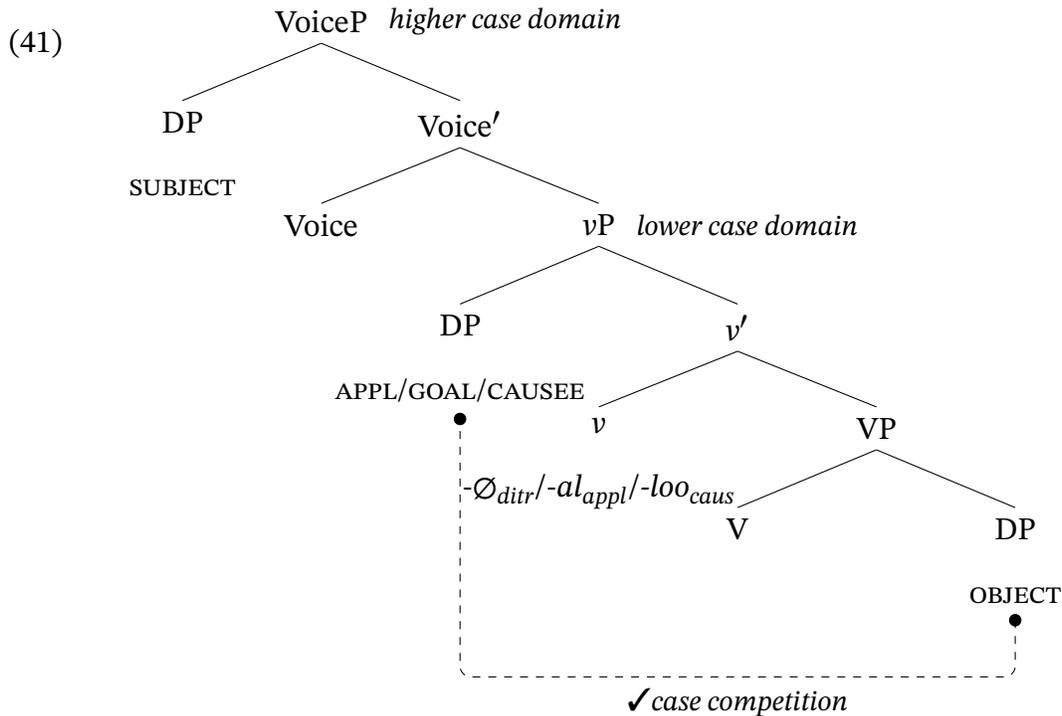
(40) *Weak crossover in applicative construction*

- a. B-an jigéén_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=am_{*i} t?
sheep-LNK who 2SG kill-APPL owner=POSS.3SG
'Whose sheep_i did you kill for his/her_{*i/j} 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 (41). 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 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 the 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.

A *Syntax* reviewer asks why a DP in Spec-*vP* may participate in more than one case competition. In (41), the DP in the aforementioned position acts as a case competitor for the object, assigning downwards accusative to it. In (32) 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.

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 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.

- (42) 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.'
- (43) 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.'
- (44) a. *Jàngalekat b-i jàng-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 jàng-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.

- (45) 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 is reasonable to hypothesize that the ungrammaticality of (45) reduces to the ungrammaticality of (42b), (44), and (43), 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 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 (41)).

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. Adger & Harbour (2007), for instance, argue that the aforementioned position obeys a restriction like (46).

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

(47) ?We sent the conference the abstract.

(Adger & Harbour 2007: (62))

The reason sentences like (42) and (43) are ungrammatical would be that the BN cannot satisfy a requirement akin to that in (47). In order to account for why a BN cannot be a causee (44), we would have to extend the [PERSON] condition in (46) to causative sentences in Wolof, though it is not clear to me why this should be the case.

An expectation 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 (48b).

- (48) 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 (48)? 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 (49a). 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 (49b).

(49) *Two analyses for (48), illustrated with (48b)*

- a. Déeg-na-a [**xale** woy sama woy].
hear-NA-1SG [child sing POSS.1SG song]
- b. Déeg-na-a **xale**_k [*ec*_k 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 (49a). 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.

(50) 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. (51) establishes pseudo-clefting and (52b) is its bare perceptual complement counterpart.

(51) *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.'

(52) *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 (48b) is on the right track and that the BN there (*xale* ‘child’) 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.¹³

¹³Interestingly, the embedded subject cannot be an accusative pronoun:

- (i) a. *Isaa gis-na=**ko** binda a-y taalif.
 Isaa see-NA.3SG=OBJ.3SG write INDEF-CM.PL poems
 Int.: ‘Isaa saw him/her write some poems.’
- b. *Isaa gis-na=**ma** bind a-y taalif.
 Isaa see-NA.3SG=OBJ.1SG write INDEF-CM.PL poems
 Int.: ‘Isaa saw me write some poems.’

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.

- (53) **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. (54) shows that a phrase cannot be clefted out of a relative clause island.

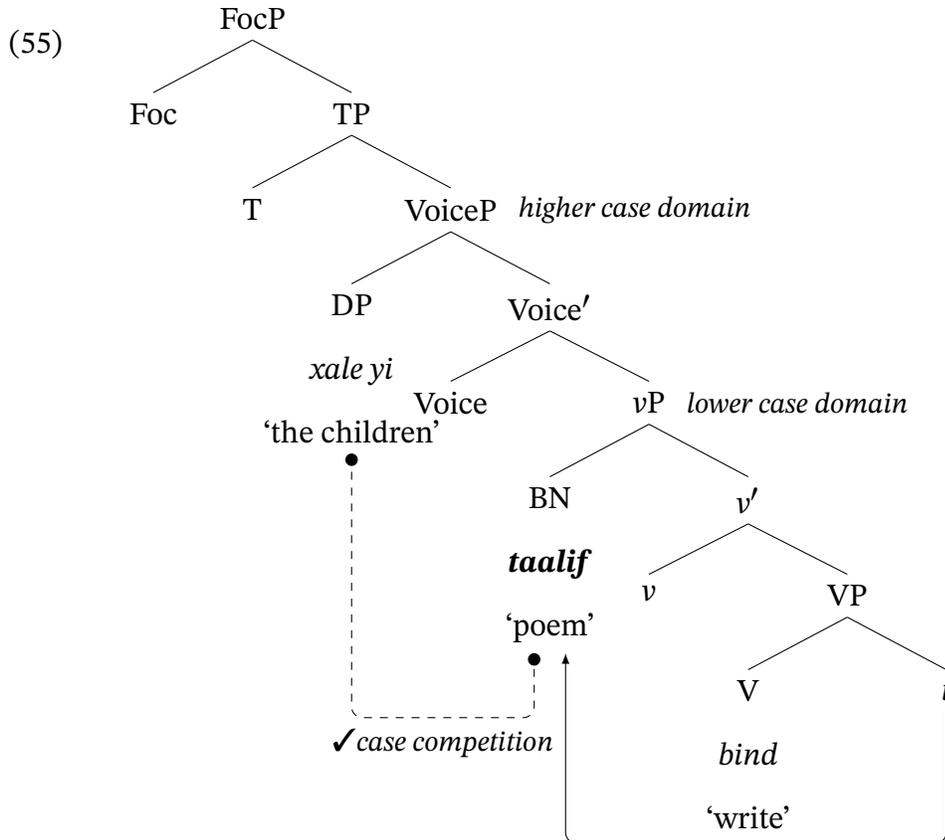
- (54) a. Gis-na-a a-b téere [b-u Roxaya jox **xale y-i**].
 see-NA-1SG INDEF-CM.SG book [CM.SG-COMP Roxaya give child CM.PL-DEF]
 ‘I saw a book that Roxaya gave the children.’
- b. ***Xale y-i** la gis a-b téere [b-u Roxaya jox ____
 child CM.PL-DEF COP.3SG see INDEF-CM.SG book [CM.SG-COMP Roxaya give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

These data would indicate that the intermediate argument is not in fact assigned accusative case via competition with the highest DP (i.e. *Isaa*). An alternative analysis then is that the embedded clause in the perceptual construction under investigation is a domain of case assignment to which the higher subject is impervious, so that the embedded subject, the highest DP in such a domain, receives unmarked case. This option, however, also yields ungrammaticality:

- (ii) *Isaa gis-na **mu** bind a-y taalif.
 Isaa see-NA.3SG SUBJ.3SG write INDEF-CM.PL poems
 Int.: ‘Isaa saw him/her write some poems.’

It seems, thus, that there can be some independent restriction ruling out the occurrence of a pronoun in the subject position of the perceptual complement. Given this putative restriction, the properties of case assignment in Wolof perceptual constructions is hard to diagnose. More precisely, the language does not have case morphology and case can only be gauged from the form of pronouns, which are ruled out in the construction under investigation.

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- v P. This intermediate position allows the subject in Spec-Voice to act as a case competitor for the BN at Spec- v P. The BN can thus be licensed by case assignment, dispensing with adjacency with the verb.



In the [appendix](#), we examine another instance of \bar{A} -movement and its potential licensing effects.

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?

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

- (57) 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:¹⁴

- (58) *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.’

¹⁴[Landau](#)’s original coordination example was replaced with a sentence that differed more minimally from the other sentences in the paradigm.

- 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): 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:

(59) *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 (57) and *e* in (58c)).

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.

- (60) 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 (59) requires that the head 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. The EPP is thus vacuously satisfied. Furthermore, even though the BN subject does not end the derivation at Spec-TP, it presum-

ably 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 (60) do not violate either the EPP nor the need for nominals to be licensed with case and are expected to be grammatical in the analysis put forward. 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 (20). 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 (2022), 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 (as evidenced by scope effects), where the subject is visible and can, thus, act as a case competitor. The adjacency requirement in 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 as a case competitor for the BN theme. This analysis is also helpful in explaining why \bar{A} -movement licenses a BN object in spite of the adjacency requirement. The reason is that \bar{A} -movement is successive-cyclic. There is, then, 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 licensing 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) observation that the adjacency requirement is not entirely correct to characterize PNI crosslinguistically. [Driemel](#) lists a few cases of PNI-ed nominals that can move, but remarks that this is possible only under particular circumstances. Specifically, 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, the findings of this paper motivate a reappraisal of the claim that dependent case and nominal licensing may be 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.

A Licensing by relativization

Relativizing a BN allows it not to be adjacent to the verb, similarly to focalization (§4.3). In (61a), 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 orders available to a BN. (61b) demonstrates that a BN under these conditions can be separated from the verb by an adverb (cf. (10b)).

- (61) 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.’

It is important to note that, when a BN is modified by a relative clause, it retains its narrow scope indefinite interpretation. In (62), the full nominal indefinite modified by a relative clause can scope above or below the intensional predicate *bëgg* ‘want’.

- (62) a. Sama doom bëgg-na jàng a-b téere [b-u Mariama
 POSS.3SG child want-NA.3SG read INDEF-CM.SG book [CM.SG-COMP Mariama
 Ba bind ___], *Une si longue lettre* la tudd.
 Ba 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
POSS.1SG child want-NA.3SG read INDEF-CM.SG book [CM.SG-COMP Mariama
Ba bind ___], waaye bu mu am baax-na.
Ba 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 (63), what the relative clause modifies is a BN. In that case, only a narrow scope reading is available (63b).

- (63) 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.'

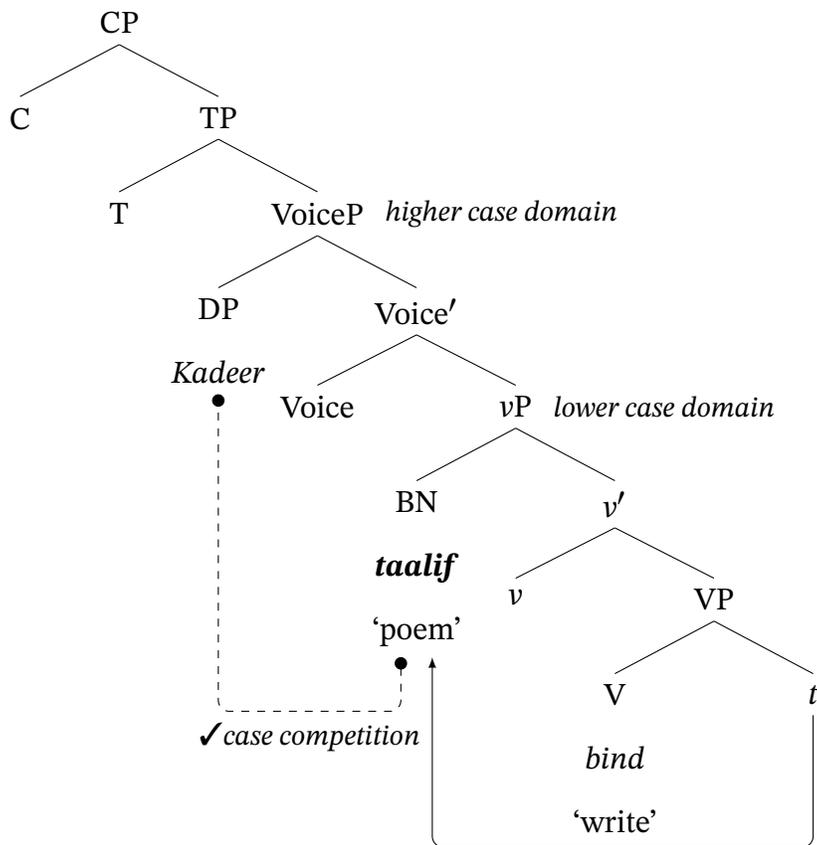
#∃ >want

- 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 (61b) looks as follows:

(64)



In order to raise out of the relative clause, the BN must first move through the edge of the phase that contains it, 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.

This analysis of the rescuing effects of relative clauses to the licensing of bare nominals, combined with the view of the EPP assumed in §4.4 leads to the prediction 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 trying to satisfy the EPP, even though it can be assigned case within the relative itself. To recall, the reason proposed for why BNs in Wolof cannot be subjects is that, even though they can receive case. Rather, they violate the EPP requirement that the head that of the phrase that occupies Spec-TP be overt (59). (65) shows that a full nominal modified by a relative clause can be the subject of a

finite clause, while (66) shows that this is not possible for a BN under the same conditions, as expected from the present analysis.¹⁵

- (65) 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 ndongo.dara [_{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.’
- (66) 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.’

A note is in order regarding the timing of case assignment inside relative clauses. 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 \(2021\)](#). I must say, however, that classifying Wolof as a inverse case

¹⁵However, 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. Alternatively, in these dialects, [Dayal’s \(2004\)](#) licensing my modification could be operative.

attraction language is an analysis-internal consequence.

Data-availability statement

All original data discussed in this article are given explicitly.

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