

Backward association of exclusive particles and scope freezing*

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1 Introduction

Background. Cross-linguistically, (adverbial) exclusive particles ‘only’, unlike other focus particles like ‘even’, only associate with overt constituents in their c-command domains:

- English *only*_{adv} and Vietnamese *chi*, among many other languages (Jackendoff 1972; Tancredi 1990; Beaver and Clark 2008; Erlewine 2014, 2017; Yip this conference; *i.a.*)
- **Cannot** associate “backward” with the object moved out of its scope, nor the trace.
 - Note that (1-b) is grammatical but it does not convey the same meaning as (1-a)

(1) Failure of backward association in English

- a. Alex only bought LAMB_F.
- b. #LAMB_F, Alex only bought . (↔ Alex only BOUGHT lamb; truth condition ≠ (1-a))

(2) The focus association constraint

The exclusive operator EXCL must c-command its focus associate F in the **surface** syntax.
(adapted from Hirsch and Wagner 2025, ex.50; cf. Principle of Lexical Association in Tancredi 1990)

- Reported exceptions due to V2: German *nur* and Dutch *maar* (Barbiers 1995; Erlewine 2014:§7.4; Bayer 2018; Hirsch and Wagner 2019, 2025, *i.a.*)
- Reported exceptions due to prosody: English *only* with certain intonation (Rochemont 2018)¹
- ← Potentially confounded by the apparent ambiguity between **adverbial** and **adfocal** uses (cf. Jacobs 1986; Büring and Hartmann 2001; Reis 2005; Barbiers 2010; Bayer 2020)
- ← Adfocal particles are argued to be “concord” items, not the true exclusive operator/quantifier (Bayer 1996; Lee 2005; Quek and Hirsch 2017; Bassi, Hirsch, and Trinh 2022; Hirsch 2022; Sun 2021; Branen and Erlewine 2023; Yip 2023; Aremu 2024b)²

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1. Rochemont discusses the difference between Focus Preposing and Topicalization:

- (i) a. {A: Bill only likes Mary. B: That’s not true! ...} JOHN Bill only likes. (Rochemont 2018:280)
b. #JOHN, Bill only LIKES. (Rochemont 2018:280)

2. But see Rooth (1985) and Yip and Adedeji (2024) for an alternative quantifier view.

Goals. In this study, we present novel data from two genetically distinct languages, Yorùbá (Benue-Congo) and Kusaal (Mabia, formerly Gur):

- ① Adverbial and adfocal exclusive particles are *distinct in form*.
- ② Focus is only expressed *morphosyntactically* by designated focus particles and/or movement, without intonation/stress.

→ **Yet adverbial particles still allow for backward association!**

- ① We show that adverbial ‘only’ in both languages systematically allow **backward association** with fronted focus (henceforth **BAwF**).
 - ② We connect the exceptional pattern to the morphosyntactically marked focus which triggers **obligatory focus movement**.
 - ③ We propose a **scope-freezing** account (*à la* Bayer 2018) where the movement “preserves” the scope of exclusive operators.
- Consequently, the variations in BAwF shed light on the typology of movement based on its nature.

A language note:

- Yorùbá is spoken primarily in Nigeria, Benin, and Togo (around 50 million speakers) who speak Yorùbá natively, and confirmed by two more Yoruba speakers (see acknowledgment).
- Kusaal is spoken primarily in Ghana, and Burkina Faso (around 120,000 speakers) • The Kusaal data are from elicitation sessions (conducted by DA) with three Kusaal speakers who do not speak Yoruba (see acknowledgment).
- The Yoruba data are from two of the authors (DA and OA)

Roadmap:

- §2 Backward association
- §3 Obligatory focus movement
- §4 Proposal: scope freezing
- §5 Further support and typology

2 Backward association

2.1 Core pattern

- In *in-situ* cases, Yorùbá preverbal *kàn* ‘only’ may associate with the object but not the subject, the latter being **outside its c-command domain** in (3-a).^{3 4}
 - The associate may be followed by adfocal *nìkan*.
- The same patterns apply to Kusaal adverbial *kùdim* and adfocal *ma’a* in (3-b).
 - Kusaal focus marker *nɛ* occurs with in-situ focus; whereas in Yorùbá it is unmarked
 - There is no stress or prosody to mark focus in both languages

(3) In-situ focus must be c-commanded by the adverbial particle

- a. Akín_(*F) **kàn** ɕe [German]_F (nìkan).
 Akin **only** do German **PRT.only**
 ‘Akin only took GERMAN.’ [Yorùbá]
- b. Adam_(*F) **kùdim** di nɛ [mui]_F (ma’a).
 Adam **only** eat FOC rice **PRT.only**
 ‘Adam ate only RICE.’ [Kusaal]

3. While marked, in-situ subject focus is possible in Yorùbá without *kàn*. We suggest that there is a null EXCL above the subject.

- (i) [Akín]_F nìkan ɕe German.
 Akin **PRT.only** do German
 ‘Only AKIN took GERMAN.’ [Yorùbá]

4. “Backward” should be understood as “upward”, i.e., apparently associating an element higher up in the structure (\neq high elements that associate “leftward”, cf. exclusive SFPs in Bura (Central Chadic), Hartmann and Zimmermann 2008, and Cantonese, Yip 2023).

- In *ex-situ* cases, the object undergoes focus movement
 - As marked by *ni* in Yorùbá and *ka* in Kusaal in (4-a)-(4-b) (see Awóbùlúyì 1978; Bisang and Sonaiya 2000; Aremu 2024b and §3 below for *ni* focus movement)
- Notably, *kàn* and *kùdim* now associate “**backward**” with the moved object that is higher.⁵
- The adfocal particles are optional, licensed by the presence of an adverbial *only*.

(4) Backward association with ex-situ object focus

- a. [German]_F (nikan) ni [John kàn še _].
 German PRT.only FOC John only do
 ‘It is only GERMAN that John took.’ [Yorùbá]
- b. [Mui]_F (ma’a) ka [Adam kùdim di _].
 rice PRT.only FOC Adam only eat
 ‘It was only Rice that Adam eat.’ [Kusaal]

- Strikingly, when the subject undergoes focus movement, BAwF with the subject becomes possible!
 - Subject ex-situ focus in Yorùbá leaves a resumptive pronoun *ó*, argued to be an expletive for EPP requirements (cf. Adesola 2010)
- Although *kan* cannot associate with an in-situ subject focus backward, as in (3) above.

(5) Backward association with ex-situ subject focus

- [Akin]_F (nikan) ni [ó kàn še German_(*F)].
 Akin PRT.only FOC 3SG only do German
 ‘Only AKIN took German.’ [Yorùbá]

2.2 Long distance BAwF

- BAwF may even be long-distance!
- In (6-a) where the object is moved to the matrix clause, the embedded *kàn* still associates with it across a finite CP boundary.

(6) Long distance BAwF with narrow scope readings

- a. Mary mo [pe John kàn je [Iṣu]_F (nikan)].
 Mary know COMP John only eat yam PRT.only
 ‘Mary knows John only ate YAM. (So Mary knows John didn’t eat beef.)’ [Yorùbá]
- b. [Iṣu]_F (nikan) ni [Mary mo [pe John kàn je _]].
 yam PRT.only FOC Mary know COMP John only eat
 ‘Mary knows John only ate YAM. (So Mary knows John didn’t eat beef.)’ [Yorùbá]

- The narrow scope reading under “know” is retained.⁶
- Although the focus marker *ni* is in the matrix clause
- BAwF does not stem from exhaustivity of focus movement

5. Note that *kàn*, although might be historically related with *kan* ‘one’, should be distinguished from it, as well as *dá* ‘alone’ as in “Ade did it alone”, which has a manner reading that *kàn* lacks. Negating sentences with *dá* and sentences with *kàn* also yields different truth conditions. We thank a GLOW reviewer for raising this point.

6. The wide scope reading “Mary only knows that John ate YAM” is not available in (6-a), and less accessible in (6-b) particularly without *nikan*, if not impossible.

2.3 Not exhaustivity

- As we will see in §3 and Appendix §7.1, focus movement comes with exhaustivity (like clefting)
- However, BAwF *cannot* be reduced to exhaustivity, as we saw from the scopal evidence above
- An additional argument from negation:
 - In (7-a), negating the clause with *kàn* amounts to *negation of exclusiveness*
 - As opposed to (7-b) without *kàn* where only the *prejacent proposition is negated* with exhaustivity projected.⁷

(7) Negating exclusivity of *kàn*

- a. *kì-í* *ṣe* [German]_F *ní* John *kàn* *ṣe* __.
 NEG do German FOC John only do
 ‘It is not only German that John took.’ (John took German and other languages.)
- b. *kì-í* *ṣe* [German]_F *ní* John *ṣe* __.
 NEG do German FOC John do
 ‘It is not German that John took.’ (J. only took one course which is not German.) [Yorùbá]

Summarizing the patterns

- | | |
|---|--|
| <ul style="list-style-type: none"> • In-situ focus (Obj): ✓ AWF
 $[_{TP} \text{Subj } [_{\text{Adv}_{EXCL}} [_{vP} V \text{Obj}_F]]]$ • In-situ focus (Subj): ✗ BAwF
 $[_{TP} \text{Subj}_F [_{\text{Adv}_{EXCL}} [_{vP} V \text{Obj}]]]$ | <ul style="list-style-type: none"> • Ex-situ focus (Obj): ✓ BAwF
 $[_{\text{FocP}} \text{Obj}_F \text{FOC} ([_{\text{matrix}} \dots] [_{TP} \text{Subj } [_{\text{Adv}_{EXCL}} [_{vP} V _]]])]$ • Ex-situ focus (Subj): ✓ BAwF
 $[_{\text{FocP}} \text{Subj}_F \text{FOC} ([_{\text{matrix}} \dots] [_{TP} \text{EXPL } [_{\text{Adv}_{EXCL}} [_{vP} V \text{Obj}]]])]$ |
|---|--|

3 Obligatory focus movement

- Focus fronting in Yorùbá and Kusaal are not optional.
- They are driven by distinct focus interpretations.
 (Awóbùlúyì 1978; Ilọrì 2010; Aremu 2024a; cf. Bisang and Sonaiya 2000; Adesola 2005; Jones 2006)

3.1 Corrective focus context

- While ex-situ focus constructions are used for corrective focus, in-situ focus are not felicitous in corrective contexts.

(8) Yorùbá: Corrective focus

- Q: *Kí* ***ní*** *Tolú* *ṣe* __?
 what FOC Tolú eat
 ‘What did Tolú eat?’
- A: *Tolú* *ṣe* [*iṣu*]_F.
 Tolú eat yam
 ‘Tolú ate YAM.’
- B: *Rara*, [*ìrẹ̀ṣì*]_F ***ní*** *Tolú* *ṣe* __. *ex-situ focus*
 no rice FOC Tolú eat
 ‘It was RICE that Tolú ate.’
- B’: #(*Rara*), *Tolú* *ṣe* [*ìrẹ̀ṣì*]_F. *in-situ focus*
 no Tolú eat rice
 ‘No, Tolú ate RICE.’

7. Whether the same is found in Kusaal awaits further investigation.

(9) Kusaal: corrective focus

Q: Bɔ **ka** Adam di ___?
what FOC Adam eat
'What did Adam eat?'
A: Adam di **nɛ** [busa]_F.
Adam eat FOC yam
'Adam ate YAM.'

B: Ayei, [mui]_F **ka** Adam di ___.
no rice FOC Adam eat
'No, it was RICE that Adam ate.'
B': ??Ayei, Adam di **nɛ** [mui]_F.
no Adam eat FOC rice
'No, Adam ate RICE.'

3.2 D-linked question context

- Generally, the semantics of D-linked questions requires that they come with a salient set of alternatives.
- And an answer to a D-linked question would have to be the focus that is contrasted with the salient set of alternatives triggered by the question (cf. Katz and Selkirk 2011).

(10) Yorùbá

- a. Èwo nínú German àti French **ni** Akín şe? ___
which among German and French FOC Akín do
'Which among German and French did Akín do?'
- b. [German]_F **ni** Akín şe ___.
German FOC Akín *ex-situ focus*
'It was GERMAN that Akín did.'
- c. #Akín şe [German]_F. *in-situ focus*
Akín do German
'Akín did GERMAN.'

3.3 Mirative focus

- Mirative focus expresses surprises or unexpectedness (cf. Bianchi, Bocci, and Cruschina 2016; Cruschina 2019; Cruschina and Bianchi 2021).
- Yorùbá and Kusaal use ex-situ focus to express mirative foci.

(11) Yorùbá

Context: *The usual cost for hair cut in Nigeria is 150 naira. However, due to the scarcity of petrol, there is price hike. Unaware to John, he went to have his hair cut and had to pay 500 naira, instead of the usual 150 naira.*

- a. John, how much did you cut your hair?
b. [500 naia]_F **ni** mo ge irun mi ___.
500 naira FOC 1SG cut hair 1SG.POSS
'(Can you believe it?) I cut my hair for 500 NAIRA!'
c. #Mo ge irun mi ní [500 naia]_F.
1SG cut hair 1SG.POSS for 500 naira
'(Can you believe it?) I cut my hair for 500 NAIRA!'

(12) Kusaal

Context: *Adam is known to dislike fufu. However, to the greatest surprise of Ama, Adam ate three wraps of fufu. How would Ama express that surprise?*

- a. How many fufu did Adam eat?
b. Fufu gbilla [atan']_F **ka** Adam di ___.
fufu wrap three FOC Adam eat
'It was THREE wraps of fufu that Adam ate.'
c. ??Adam di **nɛ** fufu gbilla [atan']_F.
Adam eat FOC fufu wrap three
'Adam ate THREE wraps of fufu.'

3.4 Focus fronting is not obligatory in English

- There is no obligatory focus movement in English for the different focus types discussed above.

(13) Corrective focus: in-situ focus licensed in English with stress

Q: What did Adam eat ___? B: No, he ate YAM.
 A: Adam ate RICE. B': No, it was YAM that he ate.

(14) Mirative focus: in-situ focus licensed in English with stress

[Context: It is 8am on a Monday morning. John is expected to be ready for school. Surprisingly, he is not.]

- a. Where is John?
 b. He is still IN BED!

Summarizing the patterns

	Yoruba & Kusaal		English	
	Ex-situ focus	In-situ focus	Ex-situ focus	In-situ focus
Corrective focus	✓	★	✓	✓
Mirative focus	✓	★	✓	✓
D-linking	✓	★	✓	✓

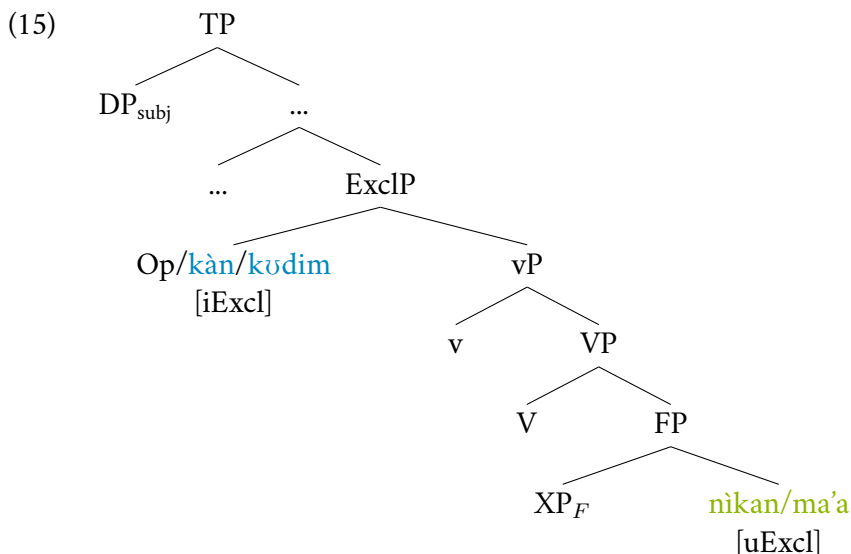
Table 1: Obligatory focus fronting patterns in Kusaal and Yorùbá

4 Proposal: scope freezing

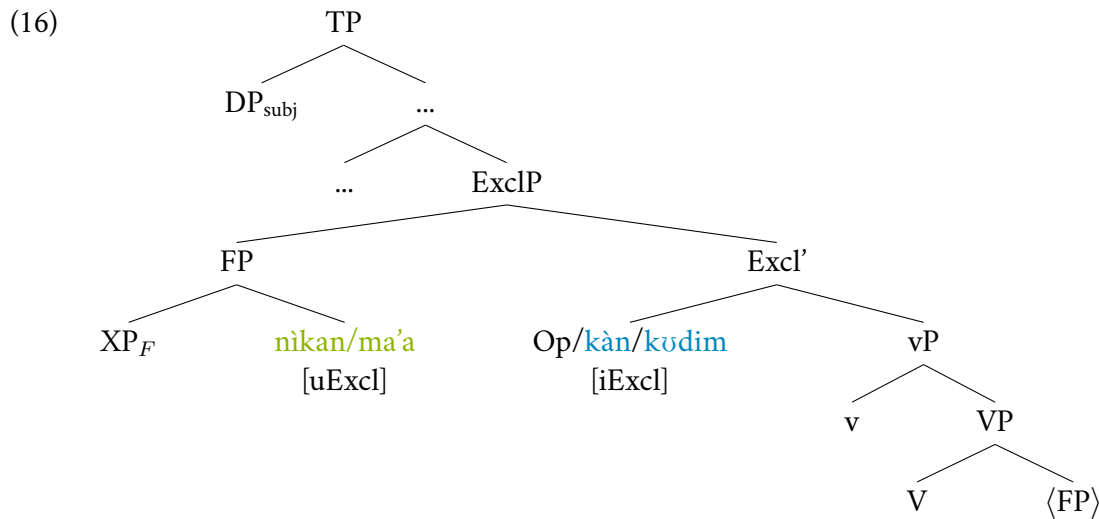
- We propose a scope freezing analysis for BAwF in Yorùbá and Kusaal (*à la* Bayer 2018, 2020).

4.1 Backward association with non-subject focus

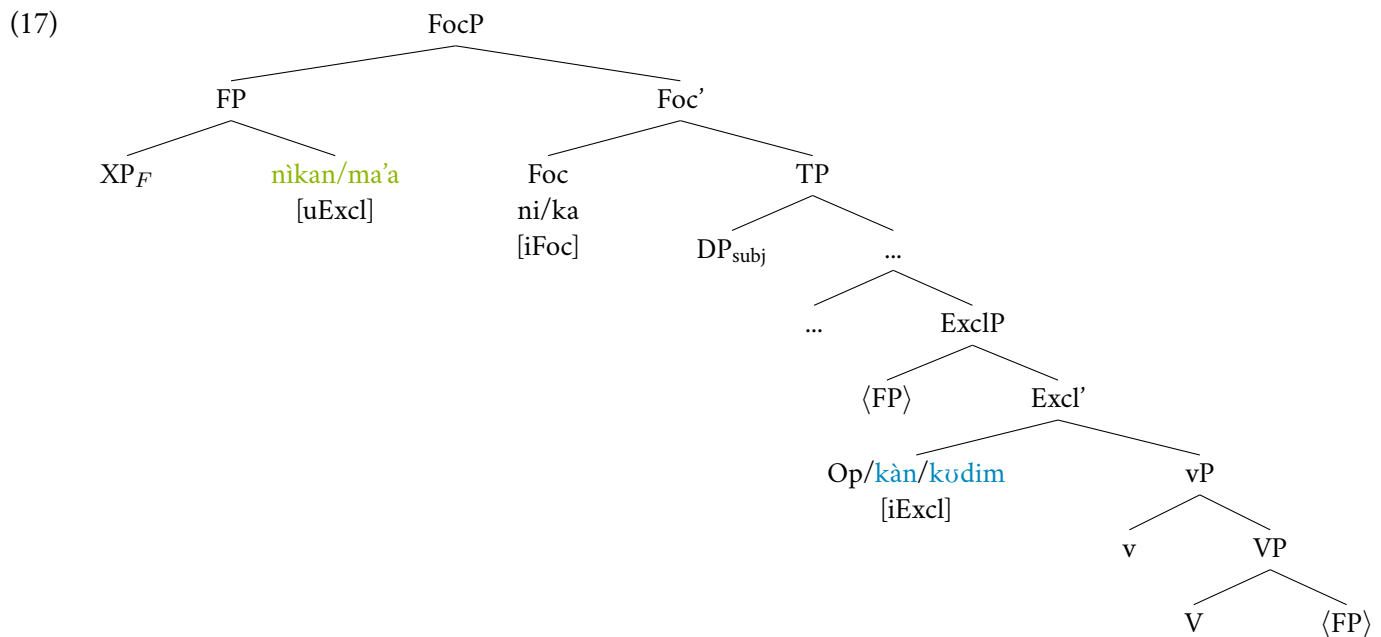
- **First**, we assume that adfocal particles form a constituent FP with the focus associate, and that adverbial particles are propositional above *vP*, projecting ExclP, as in (15).
- Exclusive operators may also be covert Op, see §5.1 (also Bayer 1996; Lee 2005; Quek and Hirsch 2017; Bassi, Hirsch, and Trinh 2022; Hirsch 2022; Sun 2021; Branán and Erlewine 2023; Yip 2023; Aremu 2024b)



- **Secondly**, FP moves to Spec,ExclP for Spec-Head agreement in (16). We propose that it is at this point that the exclusive particle's scope is *frozen*.



- **Thirdly**, the [F] on XP forces further movement to Spec,FocP as in (17), pied-piping the whole FP.

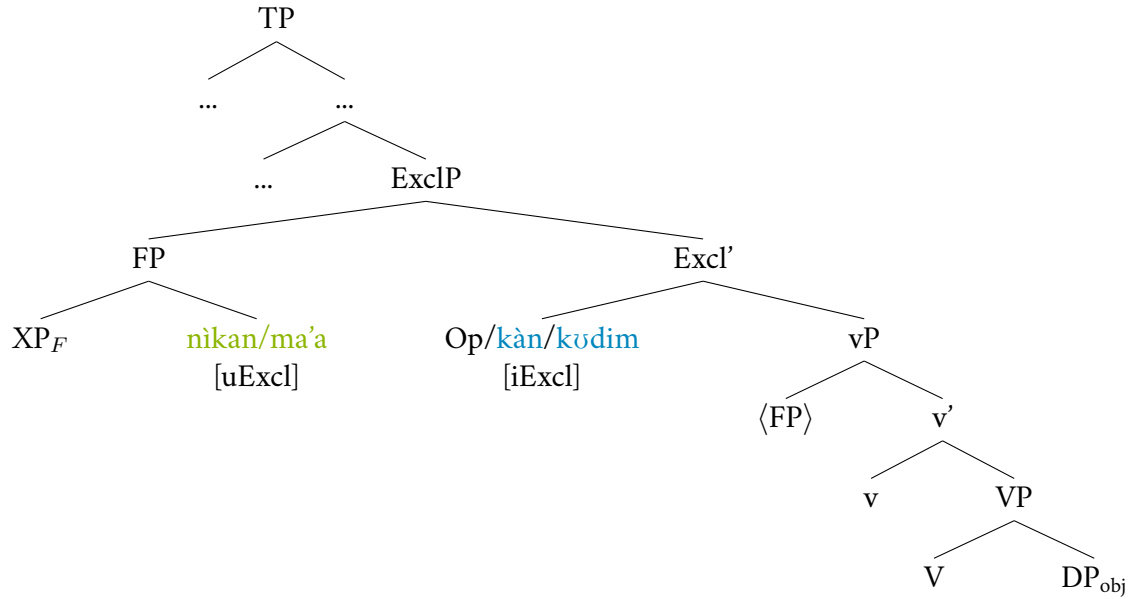


- With Criterial Freezing, *a phrase meeting a criterion* is frozen in place (Bayer 2018, 2020; cf. Rizzi 2006).
- In our case, we have both *a phrase* (i.e., the adfocal-particle) which meets the criterion in Spec,ExclP, and *another phrase* (i.e., the focus associate) which must meet another criterion high in the clause in Spec,FocP.
- This is why while the scope of exclusives is frozen, the focus associate may still further move to the higher criterial site and must pied-pipe the adfocal particles along (cf. Bayer 2018).

4.2 Backward association with subject focus

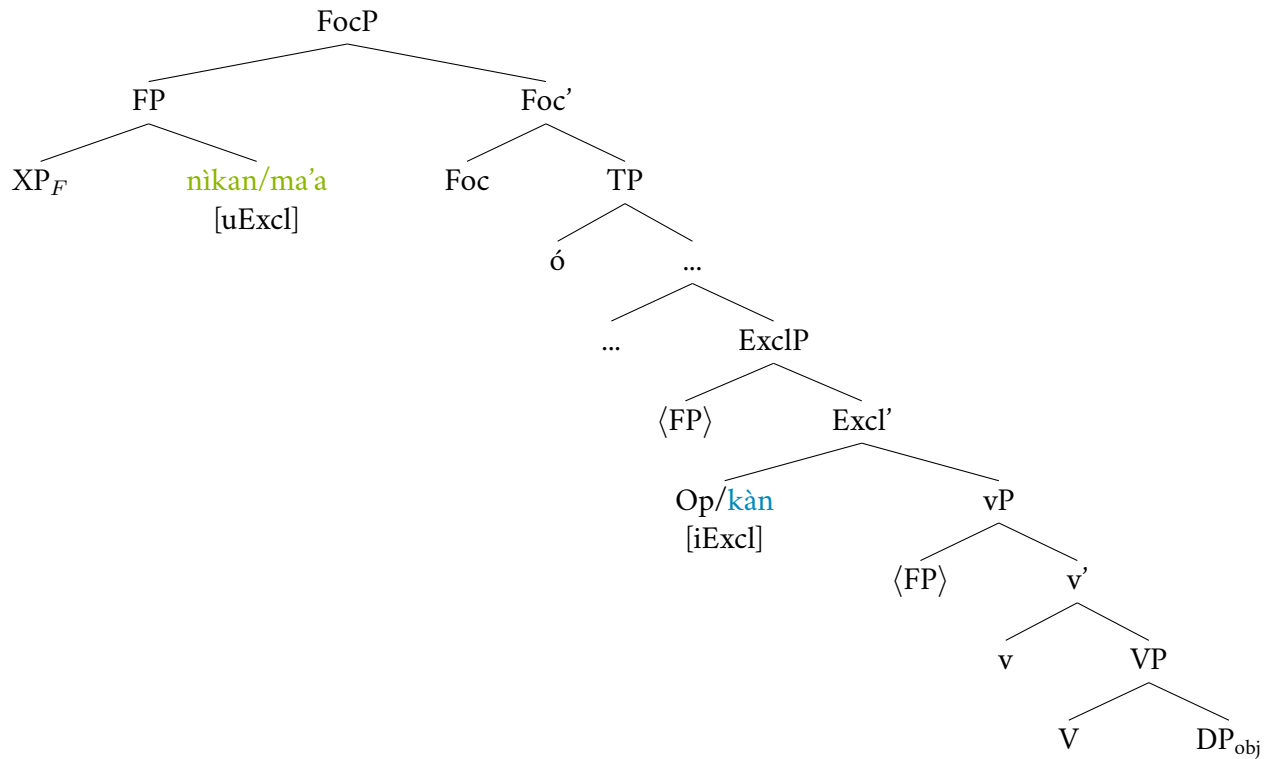
- In the subject focus case, we suggest that only A' criteria are operative for scope freezing.
- In the ex-situ subject focus case, **first**, the subject moves from SpecvP to SpecExclP (for Exclusive Criterion). Scope is frozen at this point.

(18)



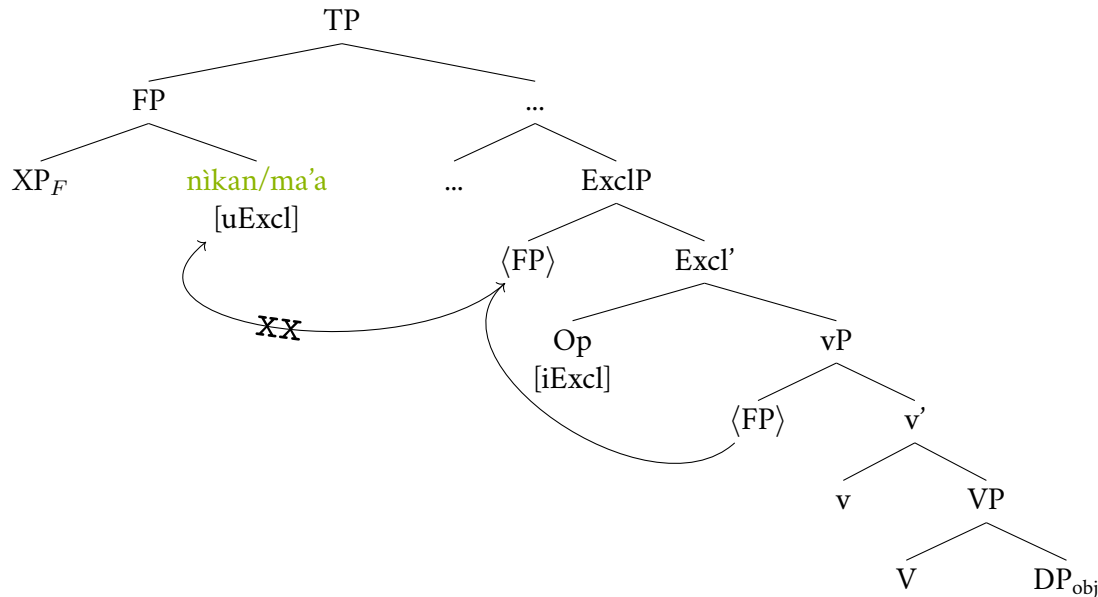
- **Second**, F in XP pied-pipes the adfocal particle along to SpecFocP (for Focus Criterion). BAwF is manifested at this point.
- There is no movement to SpecTP: it is filled by an expletive pronoun for EPP reasons. (Adesola 2010)

(19)



- In the in-situ subject cases, subjects move from Spec,vP directly to Spec,TP (for EPP).
- We assume that subjects do **not** move to SpecExclP.
- Because the movement to Spec,ExclP is A'-movement but the next one to Spec,TP is A-movement, leading to an *Improper Movement* (i.e., an A-A'-A chain).

(20)



5 Further support

5.1 Scopal interaction with other operators

- Prediction: The exclusive scope relative to **other operators** may also be frozen. → Borne out below!
- In (21), in-situ focus with adfocal particles may either scope under or over modal ‘may’ (cf. Taglicht 1984).
- Interestingly, **the narrow scope is retained** even after the focus movement in (21-b)

(21) Scope preservation with modals[Kusaal, same in Yorùbá]⁸

- a. Adam tun'e di nE [Mui]_F ma'a.
 Adam may eat FOC rice PRT.only
 i. 'It is okay for Adam to only eat rice (i.e., other food allowed).' (◇>only)
 ii. 'Adam is only allowed to eat rice (i.e., no other food allowed).' (only>◇)
- b. [Mui]_F ma'a ka Adam tun'e di __.
 rice PRT.only FOC Adam may eat
 i. 'It is okay for Adam to only eat rice (i.e., other food allowed).' (◇>only)
 ii. 'Adam is only allowed to eat rice (i.e., no other food allowed).' (only>◇)

→ We suggest a null Op_{Excl} below ‘may’ (◇>only) in (21-b)-i: narrow scope frozen before focus movement.

- Narrow scope: [_{FOCP} **Obj**_F FOC [_{TP} Subj [◇ [Op_{Excl} [_{vP} V __]]]]]
- Wide scope: [_{FOCP} **Obj**_F FOC [_{TP} Subj [Op_{Excl} [◇ [_{vP} V __]]]]]
- This contrasts with Vietnamese, a **non**-BAwF language (Erlewine 2017; cf. Hole 2017; Sun 2021; Yip 2023)

(22) No backward association in Vietnamese

[Vietnamese]

- a. Nam chí ăn mỗì [thịt bò]_F. c. Nam chí mỗì [thịt bò]_F (mới) ăn __.
 Nam only eat PRT.only beef 'Nam only PRT.only beef just eat
 'Nam only eats BEEF.' 'It is only BEEF that Nam eats.'
- b. *Nam mỗì [thịt bò]_F (mới) chí ăn __.
 'Nam PRT.only beef just only eat
 Int.: 'Nam only eat BEEF.'

8. Kusaal *kudim* has a flexible position above or below modals. Yorùbá *kàn*, however, always precedes modals in the preverbal field.

- Object fronting *always disambiguate* the scope as in (23) (Sun 2020, ex.24-25)
- The non-preservation of narrow scope ‘only’ in (23)-b correlates neatly with its inavailability of BAwF, as predicted by the proposed account.
- Vietnamese also has no obligatory focus movement (w.r.t. the contexts in §2).

(23) Scopal interaction with modals [Vietnamese]

- a. Nam có thể **mỗi** [thịt bò]_F mới ăn __.
 Nam may PRT.only beef just eat
 ‘Nam is allowed to only eat BEEF.’ (◇>only)
- b. Nam **mỗi** [thịt bò]_F mới có thể ăn __.
 Nam PRT.only beef just may eat
 ‘Nam is only allowed to eat BEEF.’ (only>◇)

- Apart from modals, scopal preservation is observed with universal subject quantifiers, e.g., (24) in Yorùbá:⁹

(24) Scope preservation with universal quantifiers [Yorùbá]

There are 3 problem sets and 4 students in total, the set of students who did the PSs is:

- (i) Narrow Scope: PS1: {a, b, c, d}; PS2: ∅; PS3: ∅
 (ii) Wide Scope: PS1: {a, b, c, d}; PS2: {a, c}; PS3: {b, c}

- a. Gbogbo akékòò **kàn** ẹ [iṣẹ́ tí ó rọ̀jù] **nìkan**.
 every student only do work REL 3SG simple PRT.only
 i. ‘Every student only did the easiest assignment.’ (∀>only)
 ii. ‘It is only the easiest assignment that every student did (a few also did the harder ones).’ (only>∀)
- b. [Iṣẹ́ tí ó rọ̀jù] **nìkan** ní gbogbo akékòò **kàn** ẹ __.
 work REL 3SG simple PRT.only FOC every student only do
 i. ‘Every student only did the easiest assignment.’ (∀>only)
 ii. ‘It is only the easiest assignment that every student did (a few also did the harder ones).’ (only>∀)

5.2 A more general typology

- Previous reported cases of BAwF: **German V2 movement** (also Dutch; Barbiers 1995; Erlewine 2014:§7.4; Bayer 2018; Hirsch and Wagner 2019, 2025, *i.a.*)
- A **prosodic focus** is required for BAwF (Clara Terlaak p.c.)¹⁰

(25) Backward association in German

- a. [Das Abstract]_F hat Anna **nur** __ gelesen.
 the abstract has Anna only read
 ‘Anna only read THE ABSTRACT.’ (Hirsch and Wagner 2025, ex.55)
- b. [Jan]_F ist wieder **nur** __ durchgefallen.
 Jan is again only failed
 ‘Only Jan has failed again.’ (only>again, again>only, Hirsch 2019, ex.33)
- c. *Context: I don’t deal with this kind of stuff...*
 das [verwirrt]_F mich **nur** __.
 that confuses me only
 ‘That only confuses me.’ A naturally occurring example from Erlewine (2014, 189)

9. The wide scope may be derived by reconstruction of the subject under *kàn*.

10. Otherwise, *nur* is more naturally interpreted with the subject, i.e., like a right-attached adfocal particle, or with the verb, i.e., as an adverbial particle.

- Varying mechanisms have been proposed, which make different cuts on when BA_wF is possible:

(26) Different mechanisms of BA_wF and variations

- Langauge-specific*: Parameterization of the focus association constraint (Hirsch and Wagner 2025)
- Movement-type-specific*: (Radical) reconstruction (Erlewine 2014; Hirsch and Wagner 2019) or Scope freezing (Bayer 2018, this paper)

(27) The focus association constraint (adapted from Hirsch and Wagner 2025, ex.50)

The exclusive operator EXCL must c-command its focus associate F in the **surface** syntax.

- **Not every movement** allows for BA_wF!
- German object scrambling disallows BA_wF:

(28) No backward association in German object scrambling

- Ich glaube, dass [den Faust] der John __ gelesen hat.
I believe that the.ACC Faust the.NOM John read has
'I believe that John has read Faust.' (Hein 2011, ex.6)
- #Ich glaube, dass [**den Faust**]_F der John **nur** __ gelesen hat.
I believe that the.ACC Faust the.NOM John only read has
Int.: 'I believe that John has only read FRAUST.' (Clara Terlaak, p.c.)

- We have also seen that for subject A-movement in Yorùbá: No BA_wF
- Relativization in (29): *kàn* embedded in the relative clause cannot associate backward with the head noun.

→ **Not every A'-movement** allow for BA_wF!

(29) No backward association in Yorùbá relativization

Context: John read some English and French books. [Yorùbá]

- Mo rì [[ìwé e gèésì]_(*F) [tí John **kàn** [ka]_F _]].
1SG see book POSS English REL John **only** read
'I saw the English books that John only READ.'
NOT: 'I saw x such that x is English books and John only read ENGLISH BOOKS.'
- John **kàn** ka [[ìwé e gèésì]_F.
John **only** read book POSS English
'John only read ENGLISH books.'

Upshot

- (30) Typology of movement based on BA_wF
- A-movement → ✗ BA_wF
 - Other A'-movement → ✗ BA_wF
 - Obligatory A'-movement of focus** → ✓ BA_wF!

6 Concluding remarks

Summary

- ❶ We showed that adverbial ‘only’ in Yorùbá and Kusaal systematically allows *backward association* with fronted focus.
 - An unambiguous case without confounds of adverbial-adj focal homonymy and prosody
- ❷ We connected the exceptional pattern to the morphosyntactically marked focus which triggers **obligatory focus movement**.
- ❸ We proposed a *scope-freezing* account (*à la* Bayer 2018) where the movement “preserves” the scope of exclusive operators.

Implications and further questions

- Whether BAwF is allowed is a movement-type-specific issue
 - Not all movement, A and A’ included, allows BAwF
 - Focus (F-marking) plays a crucial role
- Why does V2 movement not always license BAwF (e.g., not in Icelandic, Oddur Snorrason, p.c.)?
- How does BAwF relate to different types of reconstruction?
 - E.g., reconstruction for variable binding \neq quantifier scope, e.g., Poole and Keine 2024; Yagi 2024 (cf. Trace Conversion vs. Syntactic reconstruction in Erlewine 2014)

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7 Appendices

7.1 Exhaustivity of focus movement in Yorùbá and Kusaal

Mention-some answers

- Given the Q&A context in (31):
 - the in-situ focus in (31-a) is felicitous because it is entailed by the given Ans.
 - however, the ex-situ focus in (31-b) is infelicitous because it has an EXH meaning, and so cannot be entailed by the given Ans.

(31) [**Context:** What did Tolú eat?] **Ans:** Tolú ate RICE AND YAM.

Yorùbá

- a. Tolú jẹ́ [işu]_F. (Ans ⇒ (31-a))
 Tolú eat yam
 ‘Tolú ate YAM.’

- b. #[Iṣu]_F ni Tolú jẹ ____ . (Ans ⇏ (31-b))
yam FOC Tolú eat
'It is YAM that Tolú ate.'

(32) [**Context:** What did Adam slaughter?] **Ans:** Adam slaughtered A FOWL AND A COW. Kusaal

- a. Adam kɔ̀dig nɛ [nua].
Adam kill FOC fowl
'Adam slaughtered A FOWL.'
- b. #Nua ka Adam kɔ̀dig ____ .
fowl FOC Adam kill
'It was A FOWL that Adam slaughtered.'

Contradiction test

- *Prediction:* If focus involves exhaustivity, then a continuation with the additive particle *also* should be infelicitous.
- If not, then such continuation should be felicitous.

(33) [What did Adam eat?]

- a. Adam ate yam. He also ate BEANS.
b. It was yam that Adam ate. #He also ate BEANS.

(34) *In-situ focus can have an a continuation with ADD* Yorùbá

- a. Tolú jẹ [iṣu]_F.
Tolú eat yam
'Tolú ate YAM.'
- b. Ó jẹ èwà pèlú. (✓ continuation)
3SG eat beans also
'Tolú also ate BEANS.'

(35) *Ex-situ focus cannot have a continuation with ADD* Yorùbá

- a. [Iṣu]_F ni Tolú jẹ ____ .
yam FOC Tolú eat
'Tolú ate YAM.'
- b. #Ó jẹ èwà pèlú. (#continuation)
3SG eat beans also
'Tolú also ate BEANS.'

(36) [**Context:** What did Adam slaughter?] Kusaal

- a. Adam kɔ̀dig nɛ nua ka mɛ kɔ̀dig nɛ naaf.
Adam kill FOC fowl CONJ also kill FOC cow.
'Adam slaughtered A FOWL and he also slaughtered A COW.'
- b. #Nua ka Adam kɔ̀dig ____ ka mɛ kɔ̀dig nɛ naaf.
fowl FOC Adam kill CONJ also kill FOC cow.
'It was A FOWL that Adam slaughtered and he also slaughtered A COW.'

7.2 Reconstruction of *ni* focus movement

(37) Ex-situ object focus reconstructed for reflexive binding (from Aremu 2024a)

[Iwe nipa ara **rè_i**]_F **ni** Adé_i ka ___i.
 book about body self FOC Adé read
 'Adé read A BOOK ABOUT HIMSELF.'

(38) Ex-situ subject focus reconstructed for reflexive binding (from Yip and Adedeji 2024)

[ìwé nípa ara **rè_i**] ni Adé_i sọ pé ó dára
 book about body self FOC Ade say COMP 3SG good
 'It is the book about himself_i that Ade_i said is good.'

(39) Ex-situ object focus reconstructed for quantifier scope

- a. Akékòṣọ kan fẹràn [gbogbo olùkọ]
 student one like every teacher
 Narrow: 'A specific student (e.g., Ade) likes all the teachers' (∃>∀)
 Wide: 'Ade likes the Yoruba teacher, Bode likes the English teacher, ...' (∀>∃)
- b. [Gbogbo olùkọ] ni akékòṣọ kan fẹràn __
 every teacher FOC student one like
 Narrow: A specific student (e.g., Ade) likes all the teacher (∃>∀)
 Wide: Ade likes the Yoruba teacher, Bode likes the English teacher, ... (∀>∃)

(40) Exception: No reconstruction below negation for quantifier scope

- a. Mary kò fẹràn [gbogbo èniyàn]
 Mary NEG like every person
 Narrow: 'Mary only likes some people and dislikes the others.' (¬>∀)
 Wide: 'Mary is a mean person and likes no one.' (∀>¬)
- b. [Gbogbo èniyàn] ni Mary kò fẹràn __
 every person FOC Mary NEG like
 NOT Narrow: *'Mary only likes some people and dislikes the others.' (*¬>∀)
 ONLY Wide: 'Mary is a mean person and likes no one.' (∀>¬)

(41) Exception: No reconstruction below negation for EXCL's scope (adapted from Yip and Adedeji 2024)

- a. John kò **kàn** ẹ German **nikan**
 John NEG only do German only
 Narrow: 'It is not only German that John takes (but also French).'
 (i.e., John takes German and French) (¬>only)
 Wide: 'It is only German that John just didn't take.'
 (i.e., John didn't take German—he took French and Latin) (only>¬)
- b. German (**nikan**) ni John kò **kàn** ẹ __
 German only FOC John NEG only do
 'It is only German that John just didn't take.'
 (i.e., John didn't take German—he took French and Latin) (only>¬)