Chapter 1

A quantifier-particle approach to exclusive focus particles in Yorùbá

Author 1 Name
Author 1 Affiliation

Author 2 Name
Author 2 Affiliation

This paper motivates a novel quantifier-particle approach to exclusive doubling. Yorùbá has two exclusive focus particles 'only': preverbal *kàn* and adfocal *nìkan*, which may be doubled with a single focus association and result in an apparent form-meaning mismatch. It is argued that *nìkan* is the exclusive quantifier while *kàn* is a scope-marking particle indicating the (c)overt movement of *nìkan* with the focus. Arguments are presented against the operator-particle approach proposed for other languages, based on the distinct association and scopal behavior in Yorùbá. It is shown that despite surface similarities, there are cross-linguistic variations in exclusive focus particles and doubling.

1 Introduction

Exclusive focus particles like *only* in English are known to have variable positions (Horn 1969; Jackendoff 1972; Taglicht 1984; Rooth 1985; Büring & Hartmann 2001, *i.a.*). In (1a)-(1b), for example, *only* may be used adverbially in a preverbal position, or adfocally to the left of the focus. These two uses of *only*, however, generally cannot co-occur in the same clause with a single focus association (AwF), as shown in (1c).

(1) a. John **only** gave MARY_{F} a book. (adverbial/sentential *only*)
b. John gave **only** MARY_{F} a book. (adfocal/adnominal/constituent *only*)

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c. *John **only** gave **only** MARY$_F$ a book (doubling prohibited)
Int.: 'The only one that John gave a book to was Mary.'

In Yorùbá (Benue-Congo), the adverbial-adfocal distinction is manifested as two exclusive focus particles with different forms: preverbal *kàn* and adfocal *nìkan*, as exemplified in (2a) and (2b) respectively. They are largely understudied and only noted in passing in Bisang & Sonaiya (2000: 190). Notably, we observe that the two particles, unlike English, may co-occur in the same clause with a single AwF, as in (2c). The truth condition remains the same as (2a)-(2b), which constitutes a case of *form-meaning mismatch*: apparently only one particle is interpreted as the exclusive. We refer to these cases as *exclusive doubling*.

(2) a. Ayọ̀ **kàn** fún Adé$_F$ ní ìwé (preverbal particle)
John only give Mary SEC book
'Ayo only gave *Ade* a book.'

b. Ayọ̀ fún Adé$_F$ **nìkan** ní ìwé (adfocal particle)
Ayo give Ade only SEC book
'Ayo gave only *Ade* a book.'

c. Ayọ̀ **kàn** fún Adé$_F$ **nìkan** ní ìwé (exclusive doubling)
Ayo only give Ade only SEC book
'Ayo only gave *Ade* a book.' (truth condition=a/b)

Exclusive doubling (also called "only"-concord) has been attested cross-linguistically, such as in Cantonese (Yip 2023; 2024), Dutch (Barbiers 2010; Hole 2015), German (Hole 2015; Bayer 2020), Kasem (Mabia, Gur; Aremu 2024b), Korean (Lee 2005), Mandarin (Hole 2017; Sun 2021; Yip 2023) and Vietnamese (Hole 2017; Erlewine 2017; Quek & Hirsch 2017; Sun 2021; Yip 2023). One prominent view on resolving the form-meaning mismatch is the *operator-particle approach* (henceforth OP-approach), which posits that the adverbial/preverbal 'only' is an exclusive operator, and the adfocal 'only' is a "concord" particle which establishes a syntactic relation with the operator (Bayer 1996; Lee 2005; Quek & Hirsch 2017; Bassi et al. 2022; Hirsch 2022; Sun 2021; Branan & Erlewine 2023; Yip 2023; Aremu 2024b, *i.a.*). The particle is claimed to be semantically inert.[1] Thus, there is no real "mismatch"—there is only one operator. An illustration is given below:

[1]Although Hole (2017); Yip (2024) observe that the particle may carry a scalar meaning, it still does not carry an exclusive semantics. We have also observed the effect of scalarity for *kàn* (see the end of this section).

(3) [**OP$_{\text{EXCL}}$/only$_{\text{adverbial}}$** ... [**Prt$_{\text{EXCL}}$/only$_{\text{adfocal}}$** [XP$_{\text{F}}$]]]

The goal of this paper is two-fold. First, it provides a detailed description of the syntactic and semantic properties of *kàn* and *nìkan*, filling in the empirical gap on Yorùbá focus. Second, it argues for an alternative and novel approach to exclusive doubling, namely, the ***quantifier-particle approach*** (henceforth Q-approach). Under the Q-approach, it is the adfocal particle but not the preverbal particle that carries the exclusive semantics. Drawing crucial evidence from AwF and scopal behavior of 'only', we show that adfocal *nìkan* is an exclusive quantifier, and the preverbal *kàn* is merely a scope-marking particle but not an operator. These two particles are related by syntactic movement, which may be covert or overt:

(4) [[**Prt$_{\text{EXCL}}$/only$_{\text{preverbal}}$** ... [**Qu$_{\text{EXCL}}$/only$_{\text{adfocal}}$** [XP$_{\text{F}}$]]]]

We also present a set of diagnostics to distinguish between the Q-approach and the OP-approach concerning their empirical predictions. This paper contributes to the ongoing debate on whether 'only' is a one-place propositional operator or a two-place quantifier (Rooth 1985; 1992; Erlewine 2017; Quek & Hirsch 2017; Bassi et al. 2022) by demonstrating that languages vary in the semantics of exclusive focus particles.

This paper is organized as follows. §2 compares the AwF properties of preverbal *kàn* and adfocal *nìkan*. §3 contrasts the scopal behavior of the two paricles and its locality constraints. §4 motivates the Q-approach with the Yorùbá data, and presents four arguments against the OP-approach. §5 concludes the paper with an outlook of cross-linguistic variations in exclusive focus particles.

Before proceeding, two notes are in order. First, while both *kàn* and *nìkan* have quantificational/non-scalar exclusive readings, *kàn* additionally has a scalar reading, as in (5). Here, *nìkan* expresses an infelicitous reading where John could have got two kinds of points (e.g., one for performance and one for participation). To express the scalar reading that John's point is lower than some alternative (e.g., Mary's point), only *kàn*, as well as a scalar adfocal particle *lásán* 'only, just' (which is not reported in Bisang & Sonaiya 2000), may be used. We will focus on the quantificational reading throughout this paper.[2]

[2] *Kàn* also allows for a non-exclusive downplaying reading, which we set aside in this paper.

(5) Ìdá ọgọ́rin {**#nikan**/ **lásán**} ni John **kàn** gbà nínú ẹ̀kọ́ Faranse.
present eighty only just FOC John only get inside course French
'John only got 80 points for French.' (while Mary got 90 points!)

Second, the data in this paper is based on the Standard Yorùbá variety. The sentences and judgment were collected and confirmed in elicitation sessions with three native speakers, as well as constructed by the second author who is also a native speaker of Yorùbá.

2 Association with focus of exclusive particles

2.1 Adfocal *nìkan*

Let us discuss association with focus of the adfocal particle *nìkan* first. Its syntactic position depends on the position of the focus associate. *Nìkan* attaches to the right of an in-situ focus, as shown in (6).[3] Association at a distance is not possible. *Nìkan* may attach to any argument in a clause, or even a VP, but not to a verb. When *nìkan* is at the clause-final position, AwF is ambiguous between the VP and the last argument (i.e., the direct object in (6d)).

(6) a. Ayọ̀$_{F}$ **nìkan** fún Ade ní ìwé (Subj focus)
Ayo only give Ade SEC book
'Only *Ayo* (but not Akin) gave Ade a book.'

b. *Ayọ̀ fún$_{F}$ **nìkan** Ade ní ìwé (*Verb focus)
Ayo give only Ade SEC book
Int.: 'Ayo only *gave* Ade a book (but not selling).'

c. Ayọ̀ fún Ade$_{F}$ **nìkan** ní ìwé (IO focus)
Ayo give Ade only SEC book
'Ayo gave only *Ade* (but not Olu) a book.'

d. Ayọ̀ [fún Ade [ní ìwé]$_{\{i.\ F\}}$]$_{\{ii.\ F\}}$ **nìkan** (DO/VP focus)
Ayo give Ade SEC book only

(i) [Akín **kàn** ṣe German] ni. (ó tún ṣe Faransé.)
Akin just do German FOC 3SG also do French
'John just took German (as a requirement, nothing special). He also took French.'

[3] This is different from English adfocal *only* which attaches to the left of the focus. We do not discuss the difference further, but see Carstens & Zeller (2020) for a discussion on phrase-final exclusive particles.

i. 'Ayo gave Ade only *a book* (but not a drawing).' or
ii. 'Ayo only *gave Ade a book* (but not selling Olu a drawing).'

When the focus is ex-situ, *nìkan* moves along to the clause initial position, followed by the focus marker *ni* (Awóbùlúyì 1978; Bisang & Sonaiya 2000; Aremu 2024b), as in (7).

(7) Ex-situ object focus (with *nìkan*)

a. Akín ṣe German$_F$ **nìkan** (*ni) lẹ́ẹ̀mejì (in-situ)
Akin do German only FOC twice
'Akin only took *German* twice.'

b. German$_F$ **nìkan** ni Akín ṣe _ lẹ́ẹ̀mejì (movement)
German only FOC Akin do twice
'It is only *German* that Akin took twice.'

Note that *nìkan* may also associate with clauses with focus movement, including the complement clause in (8a) and the adjunct/adverbial clause in (8b).[4] For simplicity, we focus on the nominal cases throughout the paper.

(8) a. [pé ó fẹ́ràn Adé]$_F$ nìkan ni John sọ.
that 3SG love Ade only FOC John say
'The only thing John said is that he loves Ade.' (complement CP)

b. [Tí John bá jẹ ọ̀gẹ̀dẹ̀]$_F$ nìkan ni ikùn máa dùn ún.
when John if eat banana only FOC stomach will pain 3SG
'Only when John eats a banana, his tummy will feel bad.' (adv. CP)

2.2 Preverbal *kàn*

Now we turn to the preverbal particle *kàn*. First, it has a fixed syntactic position. As shown in (9), it may only occur between the subject and verb.

(9) {*__kàn__} Ayọ̀ {__kàn__} fún {*__kàn__} Adé$_F$ {*__kàn__} ní ìwé {*__kàn__}.
only John only give only Mary only SEC book only
'Ayo only gave Ade a book.'

[4] (8a) has an alternative reading: 'John said that the only one John loves is Ade', where the associate is the embedded object 'Ade' and the whole CP is pied-piped with the focus.

(10a) gives the general clausal schema in Yorùbá, where only particles may occur between the subject and the verb. Adjuncts can only occur in clause-initial or clause-final positions. In the preverbal field, the particles also have a fixed word order, as summarized in (10b).

(10) a. The general clausal schema in Yorùbá
Adjunct — Topic/Focus — COMP — S — **Particles** — V — O — Adjunct

b. The preverbal field in Yorùbá
S — NEG — Q/ONLY — MUST — HAB/PFV — MAY/PROG — V
S — *kò/kìí* — *ha/**kàn*** — *gbọdọ̀* — *máa/ti* — *lè/ń* — V

The examples in (11) show that *kàn* occurs after the negation, but before other particles including modal and aspectual particles. It occupies the same slot as the question particle *ha* and cannot co-occur with it.

(11) a. Adé {kò/kìí} **kàn** {*kò/kìí} jẹ ìrẹsì (NEG>*kàn*, **kàn*>NEG)
Ade NEG/NEG.HAB only NEG/NEG.HAB eat rice
'Ade didn't only eat rice/Ade doesn't only eat rice.'

b. *Ṣe Adé {ha} **kàn** {ha} ka ìwé kan nìkan? (*Q>*kàn*, **kàn*>Q)
Q Ade Q only Q read book one only
Int.: 'Does Ade only read one book?'

c. Adé {*gbọdọ̀} **kàn** {gbọdọ̀} jẹ ìrẹsì (*MUST>*kàn*, *kàn*>MUST)
Ade must only must eat rice
'Ade only must eat rice.' (only rice is compulsory; meat is optional)
NOT: 'Ade must only eat rice.' (meat is prohibited)

d. Adé {*ti} **kàn** {ti} ka ìwé kan (*PFV>*kàn*, *kàn*>PFV)
Ade PFV only PFV read book one
'Ade has only read one book.'

e. Adé {*ń} **kàn** {ń} ka ìwé (*PROG>*kàn*, *kàn*>PROG)
Ade PROG only PROG read book one
'Ade is only reading books.'

Unlike *nìkan*, the AwF of *kàn* may be at a distance. As shown in (12), it may associate with any element under its c-command domain, such as the verb, direct and indirect objects, and VP, but not the subject which is outside its c-command domain. The initial pattern is similar to English adverbial *only*.

(12) Ayọ̀ **kàn** [fún$_{\{i.\ F\}}$ Adé$_{\{ii.\ F\}}$ [ní ìwé]$_{\{iii.\ F\}}$]$_{\{iv.\ F\}}$ (V/IO/DO/VP focus)
John only give Mary SEC book
i. 'Ayo only *gave* (but not sell) Ade a book.' or
ii. 'Ayo only gave *Ade* (but not Olu) a book.' or
iii. 'Ayo only gave Ade *a book* (but not a drawing).' or
iv. 'Ayo only *gave Ade a book* (but not selling Olu a drawing).'

If we turn to ex-situ cases, however, Yorùbá differs from English in allowing backward AwF. In (13b), the focused object undergoes *ni*-movement to a position before *kàn*. Nevertheless, the truth condition remains the same as the in-situ case in (13a). That is, *kàn* associates backward with the moved object.[5] Exclusive doubling with *nìkan* is also possible in (13c). Such patterns are not allowed in English (Tancredi 1990; Erlewine 2014, *i.a.*), as illustrated in (14).

(13) Ex-situ object focus
a. Akín **kàn** ṣe German$_F$. (in-situ, obj focus)
Akin only do German
'Akin only took *German*.'
b. German$_F$ ni Akín **kàn** ṣe _. (movement, obj focus)
German FOC John only do
'It is only *German* that Akin took.' (truth condition=a/c)
c. German$_F$ **nìkan** ni Akín **kàn** ṣe _. (movement, obj focus)
German only FOC John only do
'It is only *German* that Akin took.' (truth condition=a/b)

(14) a. John only took GERMAN$_F$.
b. #It is GERMAN$_F$ that John only took. (truth condition≠a/c)
c. #It is only GERMAN$_F$ that John only took. (truth condition≠a/b)

The subject focus case is even more notable. While *kàn* cannot associate with the in-situ subject, AwF becomes possible once the subject undergoes *ni*-focus movement, as in (15).

(15) Ex-situ subject focus

[5] Backward AwF without *nìkan* (i.e., (13b)) is marked in some dialects, but nevertheless acceptable and can be heard frequently in Standard Yorùbá.

a. Akín$_{(*F)}$ **kàn** wá$_F$ (in-situ, only V focus)
Akin only come
'John only/just came (and did nothing else).'

b. Akín$_F$ (**nìkan**) ni ó **kàn** wá (movement, subj focus)
Akin only FOC 3SG only come
'It is only *John* that came.' (truth condition≠a)

Next, we turn to the scopal differences between *kàn* and *nìkan*.

3 Scopal behavior of exclusive particles

3.1 Wide scope interpretation

English adfocal *only* is long known for its scopal ambiguities (Taglicht 1984; Rooth 1985, *i.a.*). In (16), *only* is embedded in the complement clause taken by the attitude verb *know*, and may either take narrow scope under it (=a) or wide scope over it (=b). The same ambiguities do not arise with adverbial *only*.

(16) I knew [(that) he had learnt only SPANISH$_F$]. (Taglicht 1984:150)

a. *Narrow scope (knew>only)*: I knew that he had only learnt *Spanish*, i.e., hadn't learnt any other language

b. *Wide scope (only>knew)*: I only knew that he had learnt *Spanish*, i.e., didn't know about any other language

In Yorùbá, *nìkan* also displays scopal ambiguities. (17b) has both narrow scope and wide scope readings, the former of which is infelicitous given the preceding sentence in (17a) (i.e., if the teacher knows that John only took German, s/he also knows that John didn't take French). The wide scope reading across the embedded CP boundary is the only felicitous reading.[6]

[6]Some may ask whether *nìkan* in (17b) is really attached to the embedded object or it may be in the matrix level, given the possible structural ambiguities. This can be clarified by the example below, where *nìkan* is followed by the frequency phrase *lẹ́ẹ̀mejì* 'twice' that is interpreted in the embedded clause, but *nìkan* is still able to take wide scope.

(i) Olùkọ́ mọ̀ [pé John ṣe German$_F$ **nìkan** lẹ́ẹ̀mejì].
teacher know COMP John do German only twice
i. 'The teacher knows that John only took *German* twice.' (and knows that John took French once) (know>only)
ii. 'The teacher only knows that John took *German* twice.' (but doesn't know that John

(17) Wide scope across CPs (object focus)

a. Olùkọ́ kò mọ̀ [bóyá John ṣe Faransé], ...
teacher NEG know whether John do French, ...
'The teacher doesn't know whether John took French or not, ...'

b. ... Olùkọ́ mọ̀ [pé John ṣe German$_F$ **nìkan**].
teacher know COMP John do German only

i. '#The teacher knows that John only took *German*.' (know>only)
ii. 'The teacher only knows that John took *German*.' (only>know)

Kàn, on the other hand, does not have such ambiguities, and indeed disambiguates the two readings in exclusive doubling. In (18a), *nìkan* can only take narrow scope with the embedded *kàn*. When *kàn* is in the matrix clause above *mọ̀* 'know' in (18b), *nìkan* can only take wide scope.

(18) a. ... # Olùkọ́ mọ̀ [pé John **kàn** ṣe German$_F$ **nìkan**].
teacher know COMP John only do German only
ONLY: '#The teacher knows that John only took *German*.' (know>only)

b. ... Olùkọ́ **kàn** mọ̀ [pé John ṣe German$_F$ **nìkan**].
teacher only know COMP John do German only
ONLY: 'The teacher only knows that John took *German*.' (only>know)

3.2 Island effects

Such scopal flexibility of adfocal particles, however, is constrained by syntactic locality. Specifically, the wide scope readings are unavailable across island boundaries. Let us consider the scenario in (19). With wide scope (*only>punish*), the teacher only punished Group C, which is not a responsible move since Group A also fed poisonous chocolate to dogs. With narrow scope (*punish>only*), the teacher is responsible for punishing both Group A and C.

(19) "Chocolate feeding" Scenario [GpA: dog & rat | GpB: rat | GpC: dog]
Student group A fed both dogs and rats chocolates, B fed only rats chocolates, and C fed only dogs chocolates. Since dogs cannot eat chocolates whereas rats can, both groups A and C should be punished by the teacher.

a. *Wide scope (only>punish)*:
The teacher only punished [students [who gave DOGs chocolates]]

took French twice as well).' (only>know)

b. *Narrow scope (punish>only)*:
#The teacher punished [students [who only gave DOGs chocolates]]

Now, consider (20) with the adfocal *only* in a complex NP island (CNPI) of a relative clause. The only reading is the narrow scope one, where the teacher did not punish Group A. In other words, *only* cannot take wide scope across a CNPI.

(20) #The teacher punishes [students [who gave **only** DOGs chocolates]]
(i.e., Only Group A is published) (punish>only)

Turning to Yorùbá, *nìkan* also cannot take wide scope across islands. As can be seen in (21), when *nìkan* is embedded in a CNPI, only the narrow scope reading is available. To express the wide scope reading, *kàn* must be placed in the matrix clause *without nìkan* in the CNPI.

(21) Absence of wide scope across complex NP islands

a. # Olùkọ́ náà fi ìyà jẹ [$_{DP}$ àwọn akẹ́kọ̀ọ́ [$_{CP}$ tí wọ́n fún
teacher the use suffer beat PL student COMP 3PL give
ajá$_F$ **nìkan** ní chocolate]].
dog only SEC chocolate
'The teacher punished students who only gave dogs chocolates.'
(i.e., Only Group C is published) (punish>only)

b. Olùkọ́ náà **kàn** fi ìyà jẹ [$_{DP}$ àwọn akẹ́kọ̀ọ́ [$_{CP}$ tí wọ́n
teacher the only use suffer beat PL student COMP 3PL
fún ajá$_F$ (#**nìkan**) ní chocolate]].
give dog only SEC chocolate
'The teacher only punished students who gave dogs chocolates.'
(i.e., Group A and C are published) (punish>only)

Other islands also restrict the scope. In (22), *nìkan* is in an adjunct island of conditional clauses, and only the narrow scope reading is available. Again, the wide scope reading is achieved by placing *kàn* in the matrix clause.

(22) Absence of wide scope across adjunct islands

a. Olùkọ́ náà mọ̀ [pé [$_{adjunct}$ bí John bá ṣe Germań$_F$ **nìkan**],
teacher the know COMP if John if do German only
inú olùkọ́ German yóò dùn].
stomach teacher German will sweet

'The teacher knows that if John only took German, the German teacher would be happy.' (And knows that John also took French, the German teacher will not be happy) (know>only)

b. Olùkọ́ náà **kàn** mọ̀ [pé [$_{\text{adjunct}}$ bí John bá ṣe Germań$_{\text{F}}$
teacher the only know COMP if John if do German
(#**nìkan**)], inú olùkọ́ German yóò dùn].
only stomach teacher German will sweet
'The teacher only knows that if John took German, the German teacher will be happy.' (But doesn't know about French) (only>know)

Table 1 gives a summary of the syntactic and semantic properties of *kàn* and *nìkan*.

Table 1: The syntactic/semantic properties of Yorùbá exclusive particles

	Nìkan	*Kàn*
Particle types	Adfocal	Preverbal
Syntactic position	Immediately follows F	In-between Subj and V
AwF (in-situ)	Adjacent to F	At a distance, c-command F
AwF (ex-situ)	Must move together	Associate with moved F without c-commanding it
Embedded in CPs	Wide/narrow scope	Narrow scope
Embedded in islands	Narrow scope	Narrow scope

4 The proposal

4.1 The quantifier-particle approach

In this section, we propose the *quantifier-particle approach* to exclusive focus particles. We argue that this Q-approach captures the Yorùbá pattern better than the operator-particle approach, the latter of which makes empirical predictions that are not borne out in Yorùbá.

The components of the Q-approach are given in (23):

(23) The quantifier-particle approach

a. *Semantic import: Nìkan* is an exclusive quantifier whereas *kàn* is a scope-marking particle without exclusive interpretation.

b. *Syntactic dependency:* DP-*nìkan* moves to FP headed by *kàn* for scope.

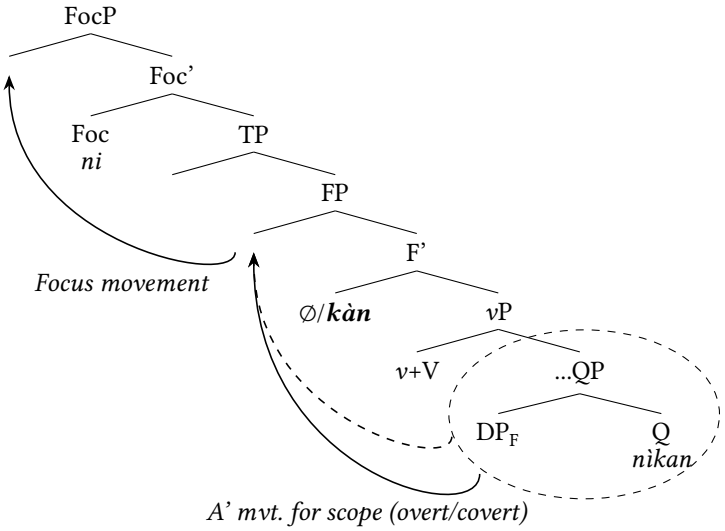
We propose it is *nìkan*, but not *kàn*, that carries the exclusive semantics. *Nìkan* is a two-place quantifier with the semantics in (24) (after Rooth 1985):

(24) $[\![nìkan]\!] = \lambda x.\lambda P.\forall y[P(y) \rightarrow y = x]$

Thus, there is no form-meaning mismatch in doubling cases: only one particle contributes to exclusivity. We also suggest that there is a null counterpart of *nìkan*, QU_{EXCL}, on par with the null exclusive operator in the OP-approach. When only *kàn* is present, the exclusivity comes from QU_{EXCL}.

Syntactically, *nìkan*, with the focus associate, moves to a projection headed by *kàn* for scope (i.e., narrow vs. wide), labeled as FP for expository purposes. The function of *kàn* is thus to indicate where *nìkan* is interpreted (i.e., scope-marking). The movement is generally covert, but becomes overt when the focus marker *ni* is present, as illustrated below:

(25) Movement in exclusive doubling in Yorùbá



It is important to note that we do not assume the covert movement to be Quantifier-Raising (QR). QR is generally clause-bounded, which is inconsistent with the fact that *nìkan* may take wide scope across CP boundaries. We assume that it is an A'-movement with Pronounce Lower Copy (Bošković & Nunes 2007), similar to covert *wh*-movement in *wh*-in-situ languages like Coptic Egyptian (Reintges 2007) or Mongolian (Fong 2019). We suggest that the higher copy

fails to be pronounced due to an independent PF constraint that only particles may occur between the subject and the verb, which is where SpecFP is located. When the focus is further moved up to, for instance, SpecFocP in the presence of *ni* (after Awóbùlúyì 1978; Ilọri 2010; Aremu 2024a),[7] the highest copy before the subject is pronounced.

(26) a. Covert movement: pronounce the lowest copy
$[_{TP}$ Subj $[_{FP}$ ~~<DP nikan>~~ ... $[_{VP}$ **<DP-nikan>** ...

b. Overt focus movement: pronounce the highest copy
$[_{FocP}$ **<DP-nikan>** ... $[_{TP}$ Subj $[_{FP}$ ~~<DP nikan>~~ ... $[_{VP}$ ~~<DP nikan>~~ ...

With the ingredients in place, we can now derive the AwF and scopal properties of *kàn* and *nìkan*. The scopal ambiguities are captured by the movement of *nìkan*, as given in (27):

(27) a. Covert movement to embedded FP for narrow scope
$[_{CP1}$ ... $[_{VP}$ V $[_{CP2}$ **$[_{FP}$** $\_$ $[_{F'}$ *kàn* ... **$[_{QP}$ DP_F-*nikan*]]**]]]]

b. Covert movement to matrix FP for wide scope
$[_{CP1}$ ... **$[_{FP}$** $\_$ $[_{F'}$ *kàn* ... $[_{VP}$ V $[_{CP2}$ ... **$[_{QP}$ DP_F-*nikan*]**]]]]]

When it moves to the embedded FP, it is interpreted under the matrix verb, yielding narrow scope. When it moves to the matrix FP, it acquires wide scope over the matrix verb. Since *kàn* merely marks where *nìkan* is interpreted, it cannot have such scopal ambiguities. Moreover, since movement is blocked across islands, *nìkan* cannot move to matrix FP, and hence the absence of wide scope readings, as illustrated in (28).

(28) Covert movement blocked by islands
*$[_{CP1}$ ... **$[_{FP}$** $\_$ $[_{F'}$ *kàn* ... $[_{VP}$ V $\boxed{[_{islands}$ ... **$[_{QP}$ DP_F-*nikan*]**]}]]]]

The peculiar AwF of *kàn* can also be derived. Recall that subject focus with *kàn* is possible in the *ex-situ* but not *in-situ* cases. This can be explained by the nature of the movement chain. Under the assumption that movement to SpecTP is A-movement, *in-situ* subject focus involves movement from Spec*v*P to

[7] We assume the monoclausal focus movement analysis of *ni* in this paper. For a biclausal cleft analysis, see Bisang & Sonaiya (2000); Adesola (2005); Jones (2006).

SpecFP (A'), then to SpecTP (A), which forms an Improper A-A'-A chain (Chomsky 1973), as in (29a). In contrast, the ex-situ focus movement does not move through SpecTP. As given in (29b), it moves directly from SpecFP to SpecFocP without landing on SpecTP, as evidenced by the resumptive/expletive pronoun *ó* in the subject position (for EPP requirements, see Adesola 2010).[8] Since both steps are A'-movement, the derivation is licit and the AwF pattern is captured. Strictly speaking, *kàn* is simply a scope-marking particle and does not establish its own AwF, as will be discussed in the next sub-section.

(29) a. In-situ subject focus with *kàn*: Improper Movement
*[$_{TP}$ **[$_{QP}$ Subj$_F$-*nìkan*/Qu$_{EXCL}$]** [$_{FP}$ __ [$_{F'}$ *kàn* [$_{vP}$ __ [$_{v'}$ *v* VP]]]]]
A-mvt ✗ *A'-mvt*

b. Ex-situ subject focus with *kàn*
[$_{FocP}$ **[$_{QP}$ Subj$_F$-*nìkan*/Qu$_{EXCL}$]** *ni* [$_{TP}$ *ó* '3SG' [$_{FP}$ __ [$_{F'}$ *kàn* [$_{vP}$ __ [$_{v'}$ *v* VP]]]]]]]
A'-mvt *A'-mvt*

4.2 Against an operator-particle approach

In the following, we argue that the OP-approach proposed for other languages (Lee 2005; Quek & Hirsch 2017; Sun 2021; Yip 2023; Aremu 2024b, *i.a.*) cannot be extended to Yorùbá. Under the OP-approach, *kàn* is the exclusive operator and *nìkan* is a "concord" particle that must (covertly) move to FP, as schematized in (30). This analysis captures the scopal ambiguities in §3 equally well with the proposed Q-approach, by resorting to relative positions of the (c)overt operator (see, e.g., Bassi et al. 2022).

(30) An operator-particle analysis for Yorùbá, ver.1 *(to be rejected)*
a. $[\![kàn]\!](ALT) = \lambda p \lambda w : p(w). \forall q[(q \in ALT \wedge q(w)) \rightarrow p \subseteq q]$
b. [$_{FP}$ __ [$_{F'}$ **OP$_{EXCL}$/*kàn*** [$_{vP}$ ... [$_{QP}$ DP$_F$-**Prt$_{EXCL}$/*nìkan***]]]]

We argue against such an OP-approach with the following four arguments:

[8] Aremu (2024a) argues that subject *ni*-focus is base-generated. However, the ex-situ subject focus may be reconstructed for reflexive binding as in (i), supporting a movement approach.

(i) [ìwé nípa are **rẹ̀**$_i$] ni Adé$_i$ sọ pé ó dára
book about bode self FOC Ade say COMP 3SG good
'It is the book about himself$_i$ that Ade$_i$ said is good.'

(31) a. Backward association with focus
b. Multiple associations with focus
c. Scopal interaction with negation
d. Wide scope under ellipsis

The first argument comes from the ex-situ AwF of *kàn*. As we have already seen in §2.2, *kàn* may associate "backwards" with the focus that is moved out of its c-commanding domain. Backward AwF, however, is cross-linguistically rare, if not impossible (Jackendoff 1972; Tancredi 1990; Beaver & Clark 2008; Erlewine 2014, but see Bayer 2018:249-250 for potential exceptions in German). The backward AwF is unexpected under the OP-approach, but it is the natural consequence of the Q-approach where *kàn* is a scope-marking particle that has no AwF.

The second argument concerns whether multiple AwFs are possible, as adopted from Yip (2023; 2024) for Cantonese. If *kàn* is an operator, we expect it to establish focus association independent of *nìkan*. Similar configurations are possible in English. In (32), the adverbial *only* associates with the object whereas the adfocal *only* associates with the subject, giving rise to a multiple 'only' reading (see Horn 1969 for more examples).

(32) **Only** JOHN$_{F1}$ **only** reads [ENGLISH books]$_{F2}$. (multi-'only' reading)
'John is the only person who only reads English books.'

In Yorùbá, however, multiple AwFs cannot be achieved by (clausemate) *kàn-nìkan* pairs, as illustrated in (33a). The only available AwF is with the subject attached by *nìkan*, giving a doubled reading. *Kàn* cannot associate otherwise with the object to give a multi-'only' reading, even though it is within its scope. This pattern is unexpected if *kàn* is the operator. The OP-approach only predicts that adfocal particles may disambiguate between different AwF possibilities in single-focus cases. In multiple-focus cases, however, multiple operators should in principle be available to establish more than one AwF to derive cases like (32). Under the Q-approach, in contrast, such a pattern is a natural consequence of *nìkan* being the quantifier. The Q-approach further predicts that multiple AwFs would be made possible by multiple *nìkan*, which is borne out in (33a).

(33) [Context: Who only reads English books?]
a. John$_{F1}$ **nìkan** ni ó **kàn** máa-ń ka [àwọn ìwé Gẹ̀ẹ́sì]$_{(*F2)}$
John only FOC 3SG only HAB-PROG read PL book English

‘‘John is the only person who just reads English books (e.g., for fun).’ (#other people read both En.-books and Fr.-books)’ (Subj. focus)
NOT: ‘John is the only person who only reads English books.’ (Other people read both En.-books and Fr.-books) (*multi-‘only’ reading)

b. John$_{F1}$ **nìkan** ni ó máa-ń ka [àwọn ìwé Gẹ̀ẹ́sì]$_{F2}$ **nìkan**
John only FOC 3SG HAB-PROG read PL book English only
‘John is the only person who only reads English books.’ (and other people read both En. books and Fr. books) (*multi-‘only’ reading)

The third argument is about scopal interaction with negation. Consider (34a)-(34b). The negation takes wide scope over ‘only’ when *kì-í* ‘not (habitual)’ precedes the *ex-situ* focus, and narrow scope under ‘only’ when *kò* ‘not’ follows the focus, where *nìkan* may or may not pronounced. In both cases, however, the negation is higher than *kàn*. If *kàn* were really an operator, both (34a)-(34b) should have had a wide scope negation reading, which is not the case. In contrast, the Q-approach captures that it is the position of the (c)overt quantifier *nìkan* that determines the scope.

(34) a. kì-í ṣe German$_F$ (**nìkan**) ni John **kàn** ṣe _
NEG do German only FOC John only do
‘It is not only German that John takes (but also French).’ (i.e., John takes German and French) (NEG>only)

b. German (**nìkan**) ni John kò **kàn** ṣe _
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>NEG)

It is now clear from the above three cases that *kàn* is not an exclusive operator. Yet, this is an alternative implementation of the OP-approach, where the operator is always null and both *kàn* and *nìkan* are “concord” particles, as illustrated in (35).

(35) An operator-particle analysis for Yorùbá, ver.2 *(to be rejected)*
[$_{\text{ExclP}}$ _ [$_{\text{Excl'}}$ **OP$_{\text{EXCL}}$** [$_{\text{FP}}$ ***kàn*** [$_{\text{vP}}$ … [$_{\text{QP}}$ DP$_F$-**Prt$_{\text{EXCL}}$/*nìkan***]]]]]

We present an argument from VP ellipsis *against* (35). As a cross-linguistically robust generalization, exclusive operators cannot associate with elided materials

(English: Beaver & Clark 2008:§7; Bassi et al. 2022; Cantonese: Cheung 2009:213; Kasem: Aremu 2024b; cf. Tancredi 1990), as shown by the VP ellipsis in (36).[9]

(36) a. Kim only SALUTES because Sandy only SALUTES.
b. *Kim only SALUTES because Sandy only does ~~<SALUTES>~~.
(Beaver & Clark 2008:177)

Bassi et al. (2022) argue that English adfocal *only* is not a quantifier, and it merely signals the presence of a null operator (see Aremu 2024b for Kasem). In (37a), *only* may take scope over or under *may*. The scopal ambiguity, however, disappears with ellipsis in (37b). *Only* only has narrow scope under *may* (i.e., Jill is allowed to not bring anything other than wine). Bassi et al. (2022) propose that the lack of wide scope readings is due to the illicit association with elided materials by a null operator above *may*, as in (37d). On the other hand, an operator lower than *may* can be included in the elided site (see footnote 9), enabling the narrow scope reading.

(37) a. Jill may bring **only** WINE. (may>only, only>may)
b. Jill may bring **only** WINE. Bill may, too. (may>only, *only>may)
c. ^{OK}[Bill [may ~~<EXCL [bring only WINE]>~~]]]
d. *[Bill [EXCL [may ~~<bring only WINE>~~]]]
(adpated from Bassi et al. 2022:816,818)

Turning to Yorùbá, *nìkan* similarly has scopal ambiguities with verbs like 'permit' in (38a). Strikingly, both wide and narrow scope are *retained* when *nìkan* and the focus are elided in (38b). The existence of the wide scope reading can be further confirmed by the felicitous continuation in (38c). This speaks against the presence of a null operator before 'permit'.

(38) a. Olùkọ́ náà gba John láàyè [láti ṣe German$_F$ **nìkan**]. (...)
teacher the permit John give.chance to do German only
i. 'The teacher allows John to take only German.' (John can take French if he likes) (permit>only)

[9] Unless the operator is included in the elided site. This constraint is formulated as (i) by Bassi et al. (2022).

(i) Beaver & Clark's Constraint (Bassi et al. 2022:817, cf. Beaver & Clark 2008)
Only and its associated Foc cannot be separated by a node targeted for ellipsis.

ii. 'The teacher only allows John to take German.' (John cannot take French) (only>permit)

b. ... Olùkọ́ gba Mary náà láàyè. (...)
teacher permit Mary as.well give.chance

i. 'The teacher also allows Mary to take only German.' (Mary can take French if he likes) (permit>only)

ii. 'The teacher also only allows Mary to take German.' (Mary cannot take French) (only>permit)

c. ... Fún ìdí èyí Mary kò lè ṣe Faransé.
for reason this Mary NEG can do French
'Therefore, Mary cannot take French.'

Note further that (D-)quantifiers may take wide scope under ellipsis (Sag 1976; Fox 2000; Bassi et al. 2022), patterning with *nìkan*, as shown below:

(39) a. A boy is standing on **every** building. (...) (every>a)

b. A girl is, too. (every>a)
(Bassi et al. 2022:820)

We therefore conclude *nìkan* is a quantifier, and the null-operator alternative in (35) cannot be upheld.

5 Concluding remarks

To conclude, this paper has argued for an alternative and novel view on exclusive doubling, namely, the quantifier-particle approach. We drew data from a pair of understudied exclusive focus particles 'only' from Yorùbá, preverbal *kàn* and adfocal *nìkan*. We have demonstrated that *nìkan* is the exclusive quantifier and *kàn* is a scope-marking particle where *nìkan* with the focus covertly moves to. This view captures a number of patterns in doubling that are distinct from other languages, including backward association with focus, failure of multiple associations, unexpected scopal interaction with negation, and survival of wide scope readings under ellipsis. We suggest that the operator-particle approach cannot be upheld in Yorùbá despite the surface similarities with the adverbial-adfocal distinction in other languages (e.g., Quek & Hirsch 2017; Bassi et al. 2022; Sun 2021): there is no exclusive operator in Yorùbá, neither *kàn* nor a null one.

The findings implicate that languages vary in the source of exclusivity of focus particles: from an operator or a quantifier. Nevertheless, languages recruit a similar set of syntactic relations in exclusive doubling. Covert movement of adfocal particles is also found in other doubling languages (e.g., Vietnamese, Yip 2023). We would like to stress the importance of cross-linguistic studies in exclusive focus particles, and more work is needed to uncover the universals and variations in this domain.

Abbreviations

1, 2, 3=first, second, third person respectively; COMP=complementizer; FOC=focus marker; HAB=habitual aspect; NEG=negation; PL=plural; PFV=perfective aspect; PROG=progressive aspect; Q=question particle; SEC=secundative preposition; SG=singular.

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To be added.

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