A parametric view on exclusive focus particles

Background. *D-quantification* and *A-quantification* are two basic apparatuses of natural language meaning. Exclusive focus particles like *only* in (1) seems to allow for both: adfocal *only* for D- and adverbial *only* for A-quantification. There are, however, recent attempts to reduce D-quantification to A-quantification (Kratzer 2005; Szabolcsi 2017, 2024), which has become the prominent view on exclusive particles (Quek and Hirsch 2017; Bassi et al. 2022; Sun 2021; Branan and Erlewine 2023, *i.a.*)—instead of a D-quantifier, *only* adfoc is claimed to be a concord particle signaling an exclusive (propositional) operator, either null (OP_{EXCL}) or realized as *only* adv. (1) a. John gave **only** adfoc MARY a book.

Goal. This study argues that such a view is too strong and *cannot* be universal. I argue that both D- and Aquantification strategies are available for exclusives, but the choice is parameterized in individual languages, and shapes the empirical landscape of variations in exclusive doubling. Through a cross-linguistic survey, I demonstrate that exclusive semantics may encoded on (i) adverbial particles (as A-quantifiers); (ii) adfocal particles (as D-quantifiers); (iii) both adverbial and adfocal particles; or (iv) neither of them (but on a null operator). Exclusive doubling in Vietnamese and Yoruba. In Vietnamese [VN], adverbial chi and adfocal moi can doubled with a single-'only' reading in (2) (Hole 2017; Erlewine 2017; Yip 2023). While (2) appears to be a formmeaning mismatch, it is only apparent if we treat chi as semantically exclusive but not moi (Quek and Hirsch 2017, QH17). Yoruba [YO] similarly allows for exclusive doubling of adverbial kan and adfocal nikan (Yip and Adedeji 2024, YA24), as in (3). YA24, on the other hand, propose *nìkan* to be semantically exclusive but not *kàn*. (2) Nam chỉ tăng hoa cho **môi** [cô ấy]_F. [VN] (3) Ayò kàn fún [Adé]_F nìkan ní ìwé [YO] Nam only give flower to only her Ayo only give Mary only 'Nam only gave flowers to her.' 'Ayo only gave *Ade* a book.'

Differential semantic import. I argue that in Vietnamese, it is adverbial *chi* that carries exclusive semantics; whereas in Yoruba it is adfocal *nìkan*. VN data come from my fieldwork (21 spkrs.) and YO data are from YA24.

① Backward association. Adverbial 'only' must c-command its focus associate and cannot associate "backward" with a moved focus (Jackendoff 1972; Tancredi 1990; Beaver and Clark 2008; Erlewine 2014). While Vietnamese adverbial *chi* fails to associate backward with the fronted object focus in (4), Yoruba adverbial *kàn* allows for backward association in (5). The pattern remains the same in exclusive doubling with adfocal *mõi/nìkan*.

(4) *Hôm qua (mỗi) [thịt bò]_F Nam (mới) chi ăn _. [VN] (5) [German]_F (nìkan) ni Akín kàn ṣe _. [YO] yesterday only beef Nam just only eat German only Foc Akin only do Int.:'Nam only ate *beef* yesterday.' 'It is only *German* that Akin took.'

- **2 Multiple association.** Consider cases with multiple foci. In Vietnamese, when $m\tilde{o}i$ is moved out with the focus, *chi* may establish another association with elements within its scope, yielding a multiple/stacked 'only' reading in (6). The multi-'only' reading is however not possible in Yoruba with just one $k\tilde{a}n$ and $n\tilde{k}an$ in (7a), but it requires two $n\tilde{k}an$ in (7b). Put differently, $k\tilde{a}n$'s focus association seems to be dependent on $n\tilde{k}an$.
- (6) Mỗi [Minh]_F (là) Nam **chỉ** tặng [hoa hồng]_F (thỏi). (only-IO > only-DO) [VN] only Minh cop Nam only give rose sfp.only 'Minh is the only one who Nam only gave *rose* to.' (Nam gave rose and lavender to other people.)
- (7) [John]_{F1} nìkan ni ó {a. kàn} máa-ń ka [àwọn ìwé Gèésì]_{F2} {b. nìkan}.

 John only foc 3sg only нав-ряод read pl book English only
 a. 'John is the only person who reads English books.' (#others read both En. and Fr.-books) (Subj. focus)
 b. 'Only John only reads English books.' (others read both En. and Fr.-books) (multi-'only')
- **Scopal interaction with negation.** In Vietnamese, scope of 'only' with negation is determined by the position of chi, as in (8). Yet, in Yoruba, the scope with negation is not determined by the relative position of kan. In (9), the negation takes wide scope over 'only' when preceding the ex-situ focus, and narrow scope under following the focus, where nikan may or may not pronounced. In both cases, the negation is higher than kan.
- (8) a. Nam chỉ không học mỗi [tiếng Pháp]_F. b. Nam không chỉ ăn mỗi [tiếng Pháp]_F. [VN]

 Nam only not learn PRT.only French

 'Nam only does not learn French.' (only>¬)

 'Nam does not only learn French.' (¬>only)

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(9) a. kì-í şe [German]<sub>F</sub> (nìkan) ni John kàn şe _. b. [German]<sub>F</sub> (nìkan) ni John kò kàn şe _.
                                                                                                                   [YO]
     NEG do German only
                                    Foc John only do
                                                             German only
                                                                                  FOC John NEG only do
                                                             'It is only German that John didn't take.' (only>¬)
     'It is not only German that John takes.' (¬>only)
• Wide scope under ellipsis. Adverbial only cannot associate into ellipsis site unless itself is also elided
(Beaver and Clark 2008). Bassi et al. (2022) suggest that null OP<sub>EXCL</sub> behaves alike, and that only<sub>adfoc</sub>'s wide scope
reading in (10a) come from OP<sub>EXCL</sub>, hence wide scope is unavailable under ellipsis in (10b). (D-)quantifiers, in
contrast, perverse the wide scope under ellipsis (Sag 1976; Fox 2000; Bassi et al. 2022), as in (11).
(10) a. Jill may bring only<sub>adfoc</sub> WINE. (\diamond>only, only>\diamond) b. ... Bill may, too.
                                                                                                    (◊>only, *only>◊)
    c. OK [Bill [may <<u>EXCL [bring only WINE</u>]>]]]
                                                            d. *[Bill [EXCL [may <bri>d. *[Bill [EXCL [may | String only WINE>]]]]
(11) a. A boy is standing on every building. (every>a) b. A girl is, too. (every>a) (Bassi et al. 2022:816,818,820)
Turning to Vietnamese, while m\tilde{\delta}i may have wide scope above a modal like 'may', it is not available under ellipsis
in (12), indicating the presence of OP<sub>EXCL</sub>. In Yoruba, in contrast, both wide and narrow scope of 'only' are
retained when nikan and the focus are elided, as in (13), which patterns with D-quantifiers (cf. (11)).
(12) a. Nam có thể mang mỗi [rươu vang]<sub>E</sub>.
                                                            b. ... Lan cũng có thể.
       Nam may bring only wine
                                                                  Lan also may
       i. 'It's allowed that Nam only brings wine.' (may>only) ONLY: '... It is also allowed that Lan only brings
       ii. 'Nam may only bring wine.' (only>may)
                                                               wine.'
                                                                                         (may>only,*only>may) [VN]
(13) a. Olùkó náà gba John láàyè
                                          [láti se German<sub>F</sub> nìkan]. b. ... Olùkó gba
                                                                                          Mary náà
                                                                                                       láàyè.
      teacher the permit John give.chance to do German only
                                                                         teacher permit Mary as.well give.chance
      i. 'The teacher allows John to only take German.' (permit>only) i. 'The teacher also allows M. to only take Ger.'
      ii. 'The teacher only allows John to take German.' (only>permit) ii. 'The teacher also only allows M. to take Ger.'
Parametric variations in exclusive doubling. I propose that whether a language adopts D- or A-quantification
for exclusives is parameterized. Adverbial chi in Vietnamese is an exclusive A-quantifier (one-place proposi-
tional operator) as in (14), whereas adfocal nìkan in Yoruba is a two-place D-quantifier as in (15).
(14) [\![chi]\!](ALT) = \lambda p \lambda w : p(w). \forall q[(q \in ALT \land q(w)) \rightarrow p \subseteq q] (A-quantification, after Rooth 1992, QH17)
(15) [nikan] = \lambda x.\lambda P.\forall y[P(y) \rightarrow y = x]
                                                                                   (D-quantification, after Rooth 1985)
Under this view, 1-4 fall out. Chi is an exclusive operator that establishes its own association, which requires c-
commanding the focus, and controls the scope with negation. Kàn is not a true operator and does not associate
with focus, thus free from the backward association restriction and also cannot determine scope. Instead, nìkan
is a D-quantifier responsible for focus association (its sister) and scope, and its wide scope survives ellipsis.
Towards a four-way typology. Extending the parameterization, we expect some languages to have both types
particles semantically exclusive, and some other to have neither of them exclusive, giving a four-way typology:
(16) a. Type I: doubling, adverbial particle=OP_{EXCL}
                                                               c. Type III: doubling, OP_{EXCL}=null
        OP_{EXCL} [VP ... Prt-XPF]
                                              (Vietnamese)
                                                                  \mathbf{OP_{EXCL}}-\varnothing | ... \mathbf{Prt} [VP ... \mathbf{Prt}-XPF]
    b. Type II: doubling, adfocal particle=Qu_{EXCL}
                                                               d. Type IV: no doubling, having both OP_{EXCL} & Qu_{EXCL}
       Prt[VP ... | Qu_{EXCL} | -XP_F]
                                                   (Yoruba)
                                                                   OP_{EXCL} |[VP ... | Qu_{EXCL} | -XP_F]
I suggest that Kasem manifests Type III (pace Aremu 2024). In (17), adverbial weeni allows backward association.
On the other hand, multiple adfocal yerane does not give rise to a multi-'only' reading: (18) has a single-'only'
reading associating a ordered pair <Adam,rice>, the only pair that satisfies the eating relation.
(17) [Chworo]<sub>F</sub> (yerane) mo Adam weeni o goa
                                                           _.(18) [Adam]<sub>F</sub> yerane mo di [mumuna]<sub>F</sub> yerane. [KS]
                          FOC Adam only 3sg kill.compl
                                                                   Adam only
                                                                                     FOC eat rice
    fowl
    Lit. 'A fowl, Adam only slaughtered. (and nothing else)' 'No one ate anything, except that Adam ate rice.'
Finally, I suggest that Mandarin exemplifies Type IV, where both particles are exclusive (pace Sun 2021). Hence,
no doubling is possible (=19), and scope is determined by adverbial zhi (=20) and adfocal zhiyou (see Sun 2021:333).
(19) *Ta zhi/zhishi zhiyou [niurou]<sub>F</sub> cai chi. (20) Zhangsan {a. zhi} keyi {b. zhi} chi [niurou]<sub>F</sub>.
       3sg only/only.be only
                                                                             only may
                                    beef
                                              just eat
                                                              Zhangsan
                                                                                            only eat beef
      Int.: 'S/he only/just eats beef.'
                                                              'Zhangsan may eats only beef.' (a. only>o; b. o>only)
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