

Agreeing with ‘only’*

Ka-Fai Yip

Yale University

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1 Introduction

Doubling of exclusive particles (also called ‘only’ concord), literally ‘John **only** bought **only** *lamb*’, is extensively found in natural languages:

- (1) A non-exhaustive list of languages with exclusive particle doubling
 - a. Dutch (Barbiers 2014)
 - b. German (Hole 2015; Bayer 2020)
 - c. Hindi (Bajaj 2016)
 - d. Korean (Y. Lee 2005)
 - e. Mandarin Chinese (Hole 2017; Sun 2021)
 - f. Vietnamese (Hole 2013, 2017; Erlewine 2017b)

→ poses a challenge for **compositionality** since both particles associate with the same focus, but apparently only one particle is interpreted as the exclusive operator.

Similar phenomena have been attested for other quantifiers:

- (2) Quantifier concord
 - a. **negative concord** (Labov 1972; Zanuttini 1991; Zeijlstra 2004)
 - b. **modal concord** (Geurts and Huitink 2006; Zeijlstra 2007)
 - c. **distributive concord** (Oh 2006; Cable 2014; Rushiti 2019)
 - d. **wh-concord** (Kratzer 2005; Kinjo and Oseki 2016)
 - e. **existential concord** (Kratzer and Shimoyama 2002; Kratzer 2005)
 - f. **universal concord** (Yip 2022, cf. Dong 2009; C.-y. E. Tsai 2015)

The prevailing approach for “only” doubling is the **operator-particle analysis** (aka. the bipartite analysis; Y. Lee 2004, 2005; Quek and Hirsch 2017; Sun 2021, *i.a.*):¹ One particle as a (i) semantically vacuous concord marker that (ii) establishes a syntactic dependency with an exclusive operator (may be null or realized as the other particle).

- (3) $[_{TP} \text{Subj} [\text{Operator-ONLY}_{[i\text{ONLY}()]} \text{ } [_{VP} \text{V} [\text{Particle-only}_{[u\text{ONLY}(+)]} \text{ } [_{DP} \text{Focused element}]]]]]]$

1. See also A. Law (2004) and P. P.-I. Lee (2019), who alluded to a multiple-‘only’ analysis in Cantonese, and Hole (2017), who proposed a scalar analysis on adfocus particles in Vietnamese and Mandarin (but see Sun 2021 for counter-arguments).

- (4) a. Mary [**only**_{Op} [read one_F book]].
 b. Mary [read [**only**_{Prt} one_F book]].
 c. Nam [**chỉ**_{Op} [mua [**mỗi**_{Prt} cuốn_F sách]]].
 Nam only buy only one book.
 ‘Nam only bought one book.’ (Vietnamese, Quek and Hirsch 2017, ex. 23)

Question #1: Syntactic evidence?

The operator-particle approach is a *syntactic* solution to an interface problem motivated largely by *semantic* considerations.

There is, however, **inadequate recruitment of syntactic evidence**. Most of the arguments are based on compositionality and scopal arguments (split scope readings, unexpected scope in VP ellipsis, etc.) (e.g. Y. Lee 2005; Quek and Hirsch 2017), with notable exception like islands in Sun (2021) for overt movement (see also Hirsch 2022 for a recent argument from intervention by universal quantifiers).

Question #2: The nature of the syntactic dependency

Previous literature has not settled on the syntactic mechanism that gives rise to doubling:

- (5) Syntactic dependency:
- Agree (Quek and Hirsch 2017; Hole 2017; Hirsch 2022)²
 - Covert movement (Bayer 1996; Y. Lee 2005; Barbiers 2014; cf. Erlewine and Kotek 2018)
 - Overt movement (Hole 2017; Sun 2021)

Question #3: Varieties of doubling

Mainly focused on adfocus particles (aka. constituent ‘only’), but little attention has been paid on exclusive **sentence-final particles (SFPs)**

- (6) Two types of ‘only’ doubling³
- Doubling of **adfocus** particles with adverbial ‘only’
 - Doubling of **SFPs** with adverbial ‘only’ 📌 **Empirical gap!**

Such as *zaa3* in Cantonese, which can be doubled with adverbial *zinghai* ‘only’ :

2. Note that Hole (2017) takes the adfocus particle to agree with a scalar projection (and move to there in ex-situ cases), instead of the operator ONLY.

3. There are certainly more than these two types, for example, Akan allows doubling of two adfocus particles (Comfort Ahenkorah p.c.).

(7) Doubling of exclusive particles in Cantonese

阿明淨係買咗羊肉畀阿芬咋

Aaming **zinghai** maai-zo joengjuk_F bei Aafan **zaa3** (Cantonese)

Ming only buy-PERF lamb to Fan SFP.only

'Ming only bought Fan *lamb* (but not beef or pork).'

Also found in Mandarin Chinese (e.g. Erlewine 2011) and Vietnamese (e.g. Hole 2013):

(8) 張三只買了牛肉而已

Zhangsan **zhi** mai-le niurou_F **eryi** (Mandarin)

Zhangsan only buy-PERF beef SFP.only

'Zhangsan only bought beef.'

(9) Nam **chỉ** ăn [thịt bò]_F **thôi** (Vietnamese)

Nam only eat beef SFP.only

'Nam only eats beef.'

(10) Overview of the talk

- a. The empirical focus is on an understudied case of doubling with 'only' SFPs.
- b. I propose that 'only' SFPs establishes a **syntactic Agree relation** with an exclusive operator like adverbial 'only', rather than covert movement dependency.
- c. I offer direct *syntactic* arguments from **minimality** and **locality** effects for the Agree account
 - Ultimately strengthens the operator-particle approach, both **theoretically** (syntactic support) and **empirically** (covering both adfocus particles and SFPs)
- d. I also contrast *adfocus* doubling with SFP doubling, and suggest that adfocus doubling involves (c)overt movement instead

• **Road map**

§2: 'Only' doubling with SFPs

§5: Proposal

§3: Minimality & locality

§6: Concluding remarks

§4: Contrasting with adfocus doubling

2 ‘Only’ doubling with SFPs

2.1 The core paradigm

Cantonese SFP *zaa3* ‘SFP.only’ can co-occur with adverbial *zinghai* ‘only’ (A. Law 2004; P. P.-I. Lee 2019), yet yielding exactly the *same truth conditions*.

(11) Doubling of exclusive particles in Cantonese

- a. Aaming **zinghai** maai-zo joengjuk_F bei Aafan. (Adverbial particle)
 Ming only buy-PERF lamb to Fan
 ‘Ming only bought Fan *lamb* (but not beef or pork).’
- b. Aaming maai-zo joengjuk_F bei Aafan **zaa3** (Sentence-final particle, SFP)
 Ming buy-PERF lamb to Fan SFP.only
 ‘Ming only bought Fan *lamb* (but not beef or pork).’
- c. Aaming **zinghai** maai-zo joengjuk_F bei Aafan **zaa3** (Doubling)
 Ming only buy-PERF lamb to Fan SFP.only
 ‘Ming only bought Fan *lamb* (but not beef or pork).’

There is an exclusive operator in each sentence, including the singleton *zaa3* cases - the exclusiveness is at-issue and can be directly dissented by (12), questioned, or negated.

(12) Can directly challenge the exclusiveness in (11a-c)

- B: M-hai. (Aaming zung maai-zo zyujuk bei Aafan.)
 no Ming also buy-PERF pork to Fan
 ‘No. (Ming also bought Fan pork.)’

The same can be said to Mandarin *eryi* and Vietnamese *thôi*. The use of the ‘only’ SFPs and doubling amounts to the same truth conditions as the adverbial *zhi* (M.) and *chi* (V.) ‘only’.

(13) Doubling of exclusive particles in Mandarin

(adapted from Erlewine 2011, ex. 1)

Context: “What does he do on Saturdays?”

- a. Ta **zhi** [kan-le dianshi]_F. (Adverbial particle)
 3SG only watch-PFV TV
 ‘He only watched TV.’
- b. Ta [kan-le dianshi]_F **eryi**. (SFP)
 3SG watch-PFV TV SFP.only
 ‘He only watched TV.’

- c. Ta **zhi** [kan-le dianshi]_F **eryi**. (Doubling)
 3SG only watch-PFV TV SFP.only
 ‘He only watched TV.’

(14) Doubling of exclusive particles in Vietnamese

- a. Nam **chi** ăn [thịt bò]_F. (Adverbial particle)
 Name only eat beef
 ‘Nam only eats beef.’
- b. Nam ăn [thịt bò]_F **thôi**. (SFP)
 Name eat beef SFP.only
 ‘Nam only eats beef.’
- c. Nam **chi** ăn [thịt bò]_F **thôi**. (Doubling)
 Name only eat beef SFP.only
 ‘Nam only eats beef.’

The paradigm immediately gives rise to an apparent **form-meaning mismatch**, posing problems for compositionality:

- DOUBLING: adverbial ‘only’ and ‘only’ SFPs cannot both be exclusive operators
 → The truth conditions of doubling cases remain the same (vs. a multiple-‘only’ reading)
- OBLIGATORINESS: Both adverbial ‘only’ and ‘only’ SFPs should be exclusive operators
 → The singleton cases **always** convey exclusiveness
 → Put differently, both adverbial ‘only’ and ‘only’ SFPs **require** the presence of an exclusive operator (which may be null)

2.2 ‘Only’ SFP ≠ exclusive operator

There is *semantic* evidence that the SFPs are not an exclusive operator. It lacks the ability to associate with a focus independently of adverbial ‘only’. In other words, the SFPs is always “parasitic” on adverbial ‘only’ in doubling cases.

Case #1: focus outside *zinghai*’s scope

(15) Focus association with a focus outside *only_{adv}*’s scope

- a. *[SFP ... F1 ... [only_{adv} ... F2]]
 └───┬───┘ └───┬───┘
 F1 F2
- b. [SFP ... F1 ... [only_{adv} ... F2]]
 └───┬───┘ └───┬───┘
 F1 F2

When *zinghai* follows the subject, the **subject focus** is not c-commanded by it and is outside of its scope. *Zaa3* cannot associate with the subject focus:

(16) Zaa3 fails to associate with a different focus outside zinghai's scope

- a. Q: Who only reads Chinese books?
- b. A: Aaming_F zinghai taai zungmansyu_F zaa3 (, Aafan dou hai.)
 Ming only read Chinese.book SFP.only Fan also be
 'Ming only read Chinese books. (Fan as well.)'
 BUT NOT: 'only Ming only read Chinese books.'

To convey the intended reading, fronting with adfocus *dak* is required:

(17) Dak [Aaming]_F zinghai maai-zo [joengjuk]_F.

- only Ming only buy-PFV lamb
 'Only Ming bought only lamb.'

i.e. 'Ming the only person who only bought lamb (and other people bought pork/beef in addition to lamb)'

Case #2: multiple foci within zinghai's scope(18) Focus association with another focus in zinghai's scope

- a. *[SFP ... [only_{adv} ... F1 ... F2]
 b. [SFP ... [only_{adv} ... F1 ... F2]

Consider the multiple-focus case in (19), where both objects are stressed and focused. *Zaa3* cannot associate just with the direct object, with *zinghai* associating with another one.

(19) Multiple-focus on the direct object and the indirect object: only can be uttered in (20c)

- a. Aaming zinghai sung-gwo JOENGJUK_F bei AAFAN_F zaa.
 Ming only give-EXP lamb DAT Fan SFP.only
 'Fan is the only one who Ming gave *lamb* to; *lamb* is the only thing that Ming gave to Fan.'
 ≠ 'Ming bought *only* lamb for *only* Fan.' (in English)
 ≠ 'Fan is the only person who Ming gave *only* lamb, i.e. Ming also gave lamb along with something else (e.g. pork) for someone else (e.g. Lok)'
- b. A: ($\neg\phi_{F,p} \wedge \neg\phi_{F,b}$) \wedge ($\neg(\phi_{L,l} \wedge \neg\phi_{T,l})$)

The assertion can only be true in (20c), but not (20a) and (20b). *Zaa3* does not associate with the direct object separately and yield a multiple-'only' reading. Rather, *zinghai* associates with *both* foci, resulting a reading where <Fan,lamb> is the only pair that satisfies the relation 'Ming gave x to y'.

- (20) a. Ming bought lamb, pork & beef for Fan; but he bought nothing for Lok & Ting. \rightsquigarrow (19) = F
 b. Ming bought lamb for Fan; lamb, pork & beef for Lok & Ting. \rightsquigarrow (19) = F
 c. **Ming bought lamb for Fan; pork & beef for Lok & Ting.** \rightsquigarrow (19) = T

To convey the genuine ‘multiple only’ reading, fronting with adfocus *dak* is again required:

- (21) **Dak**₁ [Aafan_i]_{F1} Aaming **zinghai**₂ maai-gwo [joengiuk]_{F2} bei keoi_i.
 only Fan Ming only buy-EXP lamb DAT 3SG
 ‘Fan is the only person who Ming bought only *lamb* for.’ = T in (20b)
 (i.e. Ming bought lamb for Fan; lamb, pork & beef for Lok & Ting.)

Again, the same can be said to Mandarin and Vietnamese.

- (22) ‘Only’ SFPs cannot associate with subject focus outside the scope of adverbial ‘only’⁴
 [Who only reads Chinese books?]
 Zhangsan_F **zhi** du zhongwenshu_F **eryi**. (Lisi ye shi.)
 Zhangsan only read Chinese.book SFP.only Lisi also be
 ‘ZHANGSAN only reads Chinese books. (Lisi as well.)’
 NOT: ‘Only Zhangsan only reads Chinese books.’ (Mandarin)
- (23) ‘Only’ SFPs cannot associate with another focus in the scope of adverbial ‘only’
- a. Q: Zhangsan gave what to whom? (Mandarin)
 A: Zhangsan **zhi** sung-gwo Lisi_F **meigui**_F **eryi**.
 Zhangsan only give-EXP Lisi rose SFP.only
 ‘Lisi is the only one who ZS gave *rose* to; *rose* is the only thing that ZS gave to Lisi.’
- b. Q: Nam gave what to whom? (Vietnamese)
 A: Nam **chi** tặng Minh_F **hoa hồng**_F **thôi**.
 Nam only give Minh rose SFP.only
 ‘Minh is the only one who Nam gave *rose* to; *rose* is the only thing that Nam gave to Minh.’

We now have seen empirical evidence from *semantics* supporting that ‘only’ SFPs like *zaa3* is not an exclusive operator. This resolves the problem of DOUBLING. However, the problem of OBLIGATORINESS remains: why do singleton *zaa3* cases also convey an ‘only’ reading?

4. Vietnamese *thôi*, unlike Cantonese *zaa3* and Mandarin *eryi*, occupies a lower syntactic position and cannot associate with subjects when occurring alone. Hence, the test in (16) cannot apply.

- (i) Vietnamese SFP *thôi* fails to associate with subjects
 [Who submitted an abstract?]
 # Nam_F nộp một bản tóm tắt **thôi**.
 Nam submit one abstract CL SFP.only
 Int.: ‘Only Nam submitted an abstract.’ (Vietnamese)

(24) Possible hypotheses (*compatible* with each other)

a. *Semantic* solution: ‘only’ SFPs’ meaning requires a (c)overt exclusive operator under its scope

← not discussed today, see my [LFRG handout](#)

b. *Syntactic* solution: ‘only’ SFPs establishes a **syntactic dependency** with a (c)overt ‘only’, which denotes an exclusive operator ← **Let’s examine this possibility!**

[_{CP} SFP ... [_{T/vP} only_{adv} ... [... focused elements]]]

→ Agree? Covert movement?

3 Diagnosing syntactic dependencies

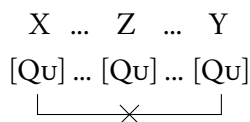
Syntactic operations are subject to two structural constraints:

- (i) **Minimality**: no elements of the same type with Probe & Goal may intervene between them
- (ii) **Locality**: a certain domain is opaque to syntactic operations from the outside.
 - Agree: Clauses (specifically phases)
 - Movement: Islands

3.1 Minimality effects

I adopt Rizzi (2001, 2004)'s feature-based Relativized Minimality (RM) to formulate minimality. For Rizzi, quantificational elements like focus operators 'only', negation, quantificational adverbs (i.e. A-quantifiers like 'often') and *wh*-operators carry the superfeature [QU].

(25) Feature-based Relativized Minimality (RM) (Rizzi 2001, 2004)



The set of [QU] interveners for quantificational dependency in Cantonese (also Mandarin Chinese and Vietnamese). They are independently motivated by their minimality effects on two syntactic dependencies, A-not-A questions and *why*-questions (Wu 1997; A. Law 2001; Soh 2005; Tsai and Yang 2015) (Vietnamese has only *why*-questions, C.-Y. E. Tsai 2009).

(26) Elements with [QU]-features in Cantonese, Mandarin and Vietnamese)

- a. Focus operators, e.g. 'only' (Soh 2005)
- b. Negation (Soh 2005; C.-Y. E. Tsai 2009)
- c. Modals, e.g. 'must' (Tsai and Yang 2015; C.-Y. E. Tsai 2009)
- d. Quantifiers, e.g. 'no one' (Wu 1997; A. Law 2001)
- e. Adverbs of quantification, e.g. 'often' (A. Law 2001; Soh 2005; C.-Y. E. Tsai 2009)

#1: Negation

The aspectual negation, *mou* 'didn't', triggers minimality effects in doubling when taking wide scope over *zinghai*. For (27b) to be grammatical, *zaa3* must not be present.

(27) Minimality effects of negation in doubling

- a. Scenario: Fan said Ming didn't buy beef for tonight's dinner. You know that Ming bought beef and pork but not lamb, so you say: 'no, ...'
 ... Aaming [**zinghai** [**mou** maai joengjuk_F]] (**zaa3**). (only > ¬)
 Ming only NEG.PFV buy lamb SFP.only
 'Ming only did not buy lamb.' (but not beef - Ming did buy beef)
- b. Scenario: Fan said Ming only bought lamb for tonight's dinner. You know that Ming did buy beef as well, so you say: 'no, ...'
 ... Aaming [**mou** [**zinghai** maai joengjuk_F]] (***zaa3**). (¬ > only)
 Ming NEG.PFV only buy lamb SFP.only
 'Ming did not only buy lamb.' (he bought beef as well)

As schematized in (28), *mou* is an intervener between *zinghai* and *zaa3*, disrupting their dependency.

- (28) a. [CP SFP ... [only_{adv} ... [AspP **mou** 'NEG.PFV'_[QU:NEG] ...
 └──────────┘
- b. *[CP SFP ... [AspP **mou** 'NEG.PFV'_[QU:NEG] ... [only_{adv} ...
 └──────────┘
 ×

Note that the same effects are found in singleton *zaa3* cases, indicating the presence of the covert exclusive operator (labeled as EXCL) with which *zaa3* establishes a syntactic dependency.

(29) Minimality effects of negation in singleton *zaa3* cases

- a. ... Aaming [**mou** maai joengjuk_F] **zaa3**. (only > ¬, *¬ > only)
 Ming NEG.PFV buy lamb SFP.only
 ONLY: 'Ming only did not buy lamb.' (but not beef - Ming did buy beef)
 BUT NOT: 'Ming did not only buy lamb.' (he bought beef as well)
- b. *[CP SFP ... [AspP **mou** 'NEG.PFV'_[QU:NEG] ... [EXCL ...
 └──────────┘
 ×

The sentential negation *m-hai* 'lit.) not-be' is syntactically higher than *zaa3* and does not trigger minimality effects.

(30) Lack of minimality effects with sentential negation

- a. Scenario: same as (27b)
 ... Aaming **m-hai** [[**zinghai** maai joengjuk_F]] (**zaa3**). (¬ > only)
 Ming NEG-COP only buy lamb SFP.only
 'It is not the case that Ming only bought lamb.' (he bought beef as well)
- b. [CP **m-hai** 'NEG-COP'_[QU:NEG] ... [SFP ... [TP only_{adv} ...
 └──────────┘

#2: Modals

Deontic modals, when taking wide scope over *zinghai*, also triggers minimality effects in doubling. The effects go away without *zaa3*.

(31) Minimality effects of deontic modals in doubling (only > \diamond_{Deo} , * \diamond_{Deo} > only)

a. Aaming [{i. **zinghai**} [hoji [{ii. **zinghai**} sik sou_F]]] (i.OK/ii.*) **zaa3** .

Ming only may only eat veggie SFP.only

i. 'Ming can eat only vege.' (Ming cannot eat meat.)

ii. 'It's okay for Ming to eat only vegetable.' (Ming may also eat meat.)

b. In (i): [_{CP} SFP ... [_{TP} only_{adv} ... [Modal^{Deo}_[QU:MOD] ...]

c. In (ii): * [_{CP} SFP ... [_{TP} ... Modal^{Deo}_[QU:MOD] ... [only_{adv} ...]

The minimality effects, again, are found in singleton *zaa3* cases, suggesting that *zaa3* establish a dependency with some covert 'only' EXCL.

(32) Minimality effects of deontic modals in singleton *zaa3* cases

Aaming [hoji maai [joengjuk]_F] **zaa3** . (only > \diamond_{Deo} , * \diamond_{Deo} > only)

Ming may buy lamb SFP.only

ONLY: 'Ming may buy *lamb* only.' (Ming cannot buy pork and beef.)

BUT NOT: 'It's okay for Ming to buy *lamb* only.' (Ming may also buy pork and beef.)

Epistemic modals, however, allow *zaa3* to be doubled with the narrow-scope *zinghai*. This can be explained if epistemic modals are higher than deontic modals (W.-T. D. Tsai 2015). It occupies a position higher than *zaa3* and does not serve as an intervener.

(33) Lack of minimality effects with epistemic modals

a. Aaming {i. **zinghai**} honang {ii. **zinghai**} zungji [Aafan]_F **zaa3** .

Ming only be.possible only like Fan SFP.only

i. Higher *zinghai*: 'It is only possible that Ming likes *Fan*.'

ii. Lower *zinghai*: 'It is possible that Ming likes *Fan* only.' (only > \diamond_{Epi} , \diamond_{Epi} > only)

b. In (i): [_{CP} SFP ... [only_{adv} ... [Modal^{Epi}_[QU:MOD] ... [_{TP} ...]

c. In (ii): [_{CP} Modal^{Epi}_[QU:MOD] ... [SFP ... [_{TP} adv ...]

#3: Quantifiers

Quantifiers, such as negative quantifiers, trigger the same minimality effects in both doubling and singleton *zaa3* cases.

(34) Minimality effects of negative quantifier subjects in doubling

- a. Scenario: You and Fan are debating whether they should submit only one abstract to a conference if the host allows two submissions. Fan thinks that they should submit only one, and you say:

[Moujan [zinghai gaau jat_F bin zaakjiu]] (**zaa3*).

No.one only submit one CL abstract SFP.only

'No one submits one abstract.' (We always submit two when it is allowed.)

- b. *_{[CP SFP ... [TP 'no one'_[QU:NEG] ... [only_{adv} ...}
- └──────────────────┘
×

(35) Minimality effects of negative quantifier subjects in singleton *zaa3* cases

*[Moujan [gaau jat_F bin zaakjiu]] *zaa3*.

No.one only submit one CL abstract

Int: 'No one submits one abstract.' (We always submit two when it is allowed.)

Other quantifiers, such as *housiu* 'few', also induce minimality effects to *zaa3*.

(36) [Housiu jan [zinghai sik faan_F m-sik sung]] (zaa3*).**

very.few person only eat rice not-eat dish SFP.only

'Very few people only eat (plain) rice without dish.'

#4: Quantificational adverbs

Quantificational adverbs also pattern with the above quantificational elements and trigger minimality effects to *zaa3*.

(37) Minimality effects of quantificational adverbs in doubling

- a. Scenario: You and Fan are discussing Ming being a picky eater. Fan wonders whether Ming does not eat tomato. You say:

[Aaming sengjat dou [zinghai sik-zing hunglobak_F]] (**zaa3*).

Ming always DOU only eat-leave carrot SFP.only

'Ming always only left carrot uneaten.' (But not tomato.)

- b. *_{[CP SFP ... [TP ... 'always'_[QU:V] ... [only_{adv} ...}
- └──────────────────┘
×

(38) Minimality effects of quantificational adverbs in singleton *zaa3* cases

*[Aaming **sengiat dou** [sik-zing hunglobak_F]] **zaa3**.

Ming always DOU eat-leave carrot SFP.only

Int.: 'Ming always only left carrot uneaten.' (But not tomato.)

→ All four types of Qu-elements trigger minimality effects to SFP 'only' doubling in Cantonese

Similar minimality effects are also found in Mandarin and Vietnamese.

(39) Minimality effects of negation in Mandarin

Zhangsan {a. **zhi(shi)**} **meiyou** {b. ***zhi**} kan [zhongwen shu]_F **eryi**

Zhangsan only NEG.PFV only read Chinese book

ONLY: 'Zhangsan only didn't read Chinese books.' (no Chinese books)

BUT NOT: 'Zhangsan didn't only Chinese books. (Chinese books and other books)'

(40) Minimality effects of negation in Vietnamese

Nam {a. **chỉ**} **không** {b. ***chỉ**} ăn [thịt bò]_F **thôi**

Nam only not only eat beef SFP.only

ONLY: 'Nam only does not eat beef. (no beef)'

BUT NOT: 'Nam not only eats beef. (beef and other meat)'

Notice that, however, Vietnamese *thôi* is lower than the subject (see footnote 4) and located on the TP level. Some of the potential interveners are syntactically higher than *thôi* and cannot be tested.

Intervening elements	With [QU]-feature?	Minimality effects?		
		Cantonese	Mandarin	Vietnamese
Focus operators	YES	N/A	N/A	N/A
Negation	YES	✓	✓	✓
Modals	YES	✓	✓	✓
Quantifiers	YES	✓	✓	N/A
Q-adv	YES	✓	✓	N/A

Table 1: Minimality effects in 'only' doubling with SFPs
(gray colour indicates examples not given in the handout)

Addressing Question #1: syntactic evidence

→ SFP 'only' doubling involves a **syntactic dependency** with [Qu]-feature: Agree? covert movement?

3.2 Locality effects

We can also examine whether the dependency between ‘only’ SFPs and adverbial ‘only’ will be blocked by some opaque domain. For Agree, the domain is a phase. For movement, the domain is a syntactic island, as standardly assumed (e.g. Ross 1967).

(41) Phase Impenetrability Condition (PIC) (Chomsky 2000)

$[_{ZP} \dots Z [_{XP} X \dots [_{HP} \alpha [H YP]]]]$;

where Z and H are phase heads, and YP is visible to operations in HP but not ZP.

Phases

SFP *zaa3* cannot be doubled with the embedded *zinghai* across a control clause boundary under ‘force’.

(42) Doubling is clause-bounded

Go lousi (zinghai) bik Aaming (*zinghai) duk [faatman]_F zaa3 .

CL teacher only force Ming only take French SFP.only

Only: ‘The teacher only forces Ming to take French.’ (but does not care about German.)

But not: ‘The teacher forces Ming to only take French.’ (no German.)

(only > force, *force > only)

Let us assume with Huang (2022) that verbs like ‘force’ take a smaller clause (e.g. TP).

→ ‘force’: *zinghai* is embedded in the complement of a lower v*P phase, which is not accessible to (martix) *zaa* in a higher CP phase. Agree is not possible due to the PIC, and thus the ban on doubling.

(43) PIC violation

*[_{CP} SFP ... [_{v*P} ... ‘force’ [_{TP} only_{adv}/EXCL ...

⏟
×

No such restriction is found for attitude verb like ‘know’, which takes a finite clause. The grammaticality is due to a parse where *zaa* is embedded in the complement CP of ‘know’, and is then local to *zinghai*.

(44) Go lousi (zinghai) zidou Aaming (zinghai) duk-zo [faatman]_F zaa .

CL teacher only know Ming only take-PERF French SFP.only

Higher *zinghai*: ‘The teacher only knows that Ming took French.’

Lower *zinghai*: ‘The teacher knows that Ming only took French.’

(only > know, know > only)

Again, assuming with Huang (2022), and verbs like ‘know’ take a bigger clause (e.g. CP).

→ ‘know’: both *zaa* and *zinghai* may be embedded in ‘know’. They are in the same phase, and thus the Agree relation can hold. Doubling is then allowed with relevant scope readings.

- (45) ... [_{v*P} ... 'know' [_{CP} SFP_[uQU:EXCL] ... [_{only_{adv}}/EXCL ...

We can create a configuration to prevent *zaa3* being embedded. Adding a matrix adverbial *mounoi* 'short time' on the matrix level enforces *zaa3* to be in the matrix clause. *Zaa3* cannot be doubled with the narrow-scope *zinghai* embedded in the CP.

- (46) Ngo (**zinghai**) [_{v*P} zidou [_{CP} keoi (***zinghai**) sik sou_F] mounoi **zaa3**
 1SG only know 3SG only eat veggie short.time SFP.only
 ONLY: 'I only learnt [that s/he eats veggie] recently. (I already knew if s/he eats other food)'
 BUT NOT: '*I learnt [that he only eats veggie] recently.' (only > know, *know > only)

- (47) * [_{CP} SFP ... [_{v*P} ... 'know' [_{CP} ... only_{adv}/EXCL ...

Islands

Moving on to islands, doubling is disallowed across an island with phasal boundaries, such as complex DP islands. *Zaa3* cannot be doubled with *zinghai* or a null EXCL *outside the island*, but not the island internal *zinghai*, as evidenced by the reading below.

- (48) Doubling banned across complex DP islands
 (**Zinghai**) [_{DP} gogo [_{CP=RC} **zinghai** dou bo ge] jan lai-zo **zaa3**.
 only that only bet ball MOD person come-PFV SFP.only
 (# [[gogo zinghai dou maa ge] jan] dou lai-zo)
 that only bet horse MOD person also come-PFV
 ONLY: 'Only the guy who only does *soccer* betting came. (#The guy who only does *horse racing* betting also came.)'
 BUT NOT: 'The guy who only does *soccer* betting came.'

This is however not informative of the nature of the dependency: the ban could be due to either PIC violation or island violation.

Nevertheless, the coordinated VP in (49) allows *zaa3* to be doubled with the 'only' adverbs within the VPs. To rule out ATB movement, two different 'only' adverbs are used: *zinghai* and *zaaihai*. We can then conclude the dependency between *zaa3* and *zinghai/zaaihai* is *not* island sensitive.

(49) Doubling allowed across coordinated VP

- a. keoi camjat [[VP **zinghai** sik gajjik_F] tung [VP **zaaihai** jam
3SG yesterday only eat chicken.wing and only drink
holok_F]] **zaa3**
coke SFP.only
'S/he yesterday only ate chicken wings and only drank coke.'
- b. ... [CP SFP ... [&P [VP zinghai_{adv} ...] & [[VP zaaihai_{adv} ...]]]]

→ Cantonese SFP *zaa* doubling is phase-bounded.

Similar patterns can be also observed in Mandarin and Vietnamese 'only' SFP doubling.

(50) Mandarin *eryi* doubling banned across a phasal boundary

- Laoshi {a. **zhi**} [v*P bi Zhangsan [{b. ***zhi**} du Dewen_F]] **eryi**
teacher only force Zhangsan only take German SFP.only
ONLY: 'The teacher only forces him to take German. (and doesn't care about French)'
BUT NOT: 'The teacher forces him to only take German. (and no French)'

(51) Vietnamese *thôi* doubling allowed across non-phasal coordination islands

- a. Nam [[VP **chỉ** ăn gà rán_F] và [VP **chỉ** uống cô ca_F]] **thôi**
Nam only eat fried.chicken and only drink coke SFP.only
'Nam only ate fried chicken and only drank coke.'
- b. Nam [[VP ăn gà rán_F] và [VP **chỉ** uống cô ca_F]] **thôi**
Nam eat fried.chicken and only drink coke SFP.only
'Nam ate fried chicken and only drank coke.'

Again, Vietnamese *thôi* is lower than TP and may be freely embedded under control clauses, and more tests like (46) that forces the SFP to take matrix positions are needed (in progress).

Domains	Phase	Island	Doubling		
			Cantonese	Mandarin	Vietnamese
v*P	YES	NO	✗	✗	N/A
CP	YES	NO	✗	✗	N/A
Complex DP island	YES	YES	✗	✗	✗
Coordinated VP edge	NO	YES	✓	✓	✓

Table 2: Locality effects in 'only' doubling with SFPs
(gray colour indicates examples not given in the handout)

Addressing Question #2: nature of the dependency

→ SFP ‘only’ doubling involves an Agree relation (but not covert movement)

4 Contrasting with adfocus ‘only’ doubling

In Cantonese and Mandarin, adfocus particles with the focused elements are ex-situ, and constitute a clearer case of overt movement (Sun 2021).

In Vietnamese, however, adfocus particle *môi* can be either in-situ or ex-situ (Hole 2017), raising a question of whether it establishes an Agree relation or a covert movement dependency with the adverbial ‘only’.

(52) Nam [**chỉ**_{Op} [mua [**môi**_{Prt} cuốn_F sách]]].

Nam only buy only one book.

‘Nam only bought one book.’

(Vietnamese, Quek and Hirsch 2017, ex. 23)

I will show that Vietnamese adfocus *môi* doubling involves covert movement and shows a sharp contrast to SFP doubling in locality effects.

Domains	Phase	Island	SFP doubling	Afocus doubling
v^*P	YES	NO	✗	✓
CP	YES	NO	✗	✓
Complex DP island	YES	YES	✗	✗
Coordinated VP edge	NO	YES	✓	✗

Table 3: Locality effects: SFP vs. adfocus ‘only’ doubling

(53) Adfocus doubling applies across v^*P boundaries

a. Thầy giáo **chỉ** bắt Nam [_{TP} [_{v^*P} học **môi** tiếng Pháp_F]] (không bắt Nam
teacher only force Nam study PR_T.only French not force Nam
học tiếng Anh.)
study English

‘The teacher only forced Nam to take French. (and didn’t force Nam to take English)’

b. [_{CP} ... [_{v^*P} only_{adv} ... [‘force’ [_{TP} ... [_{v^*P} ... [Pr_t_{adfo}c-DP] ...]]]]]

(54) Adfocus doubling applies across CP boundaries

- a. Thầy giáo **chỉ** biết [CP là Nam [v*P học **mỗi** tiếng Pháp_F]] (không
teacher only know COMP Nam study PRT.only French not
biết Nam có học tiếng Anh.)
know Nam have study English
'The teacher only knows that Nam took French. (and didn't know that Nam took English)'
- b. [CP ... [v*P only_{adv} ... ['know' [CP [TP ... [v*P ... [Prt_{adfoc}-DP] ...

(55) Adfocus doubling banned across complex DP islands

- a. Thầy giáo **chỉ** biết [DP tin [CP Nam học **mỗi** tiếng Pháp]]. (# không
teacher only know news Nam study PRT.only French not
biết Nam có học tiếng Anh)
know Nam have study English
ONLY: 'The teacher only knows that Nam only took French (# but doesn't know whether
Nam took English).' (multiple-only reading)
BUT NOT: 'The teacher only knows that Nam took French (but doesn't know whether
Nam took English).' (doubling reading)
- b. *[CP ... [v*P only_{adv} ... ['know' [DP 'news' [CP ... [vP ... [Prt_{adfoc}-DP] ...

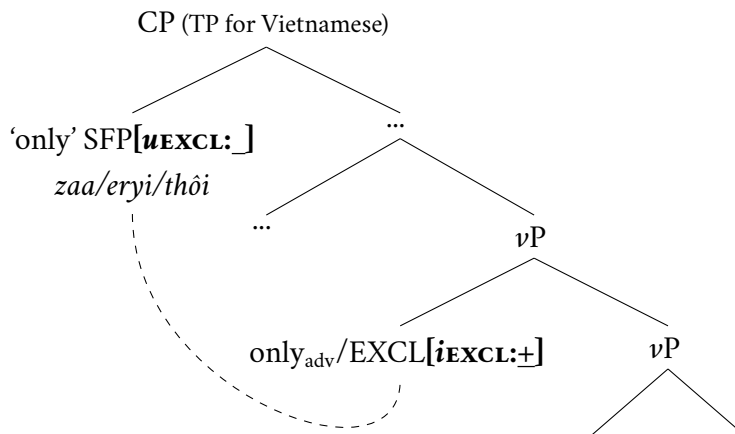
(56) Adfocus doubling banned across coordinated VP

- a. *Nam **chỉ** ăn [[DP sushi] và [DP **mỗi** pizza_F]]
Nam only eat sushi and PRT.only pizza
Int.: 'Nam only eat *sushi* (among Japanese food) and *pizza* (among Italian food).'
- b. *[CP ... [v*P only_{adv} 'eat' [&P [DP sushi] & [DP Prt_{adfoc}-pizza]]] ...

5 Proposal

5.1 'Only' doubling as agreement

Extending the operator-particle analysis (e.g. Quek and Hirsch 2017; Erlewine 2020; Sun 2021) to doubling with SFPs, I propose that 'only' SFPs carries an uninterpretable, unvalued [$u_{EXCL}:$] feature and must **Agree** with an exclusive operator carrying the interpretable, valued counterpart [$i_{EXCL}:+$], realized as the adverbial 'only' (i.e. *zinghai/zhi/chỉ*) or remain unpronounced as EXCL (cf. ONLY in Quek and Hirsch 2017; EXH in Chierchia 2006).

(57) The Agree relation between ‘only’ SFPs and exclusive operators⁵**A morphological support from Cantonese**

Notice that the [EXCL] features have a *morphological correlate*: the onset *z-* is shared by exclusive morphemes in Cantonese:

- (58) a. Exclusive SFPs: *zaa3*, *ze1* and their variants (Sybesma 2007)
 b. Exclusive adverbs ‘only’: *zing6*, *zaai1* and *zi2*⁶

Syntactic arguments from minimality and locality

The proposal receives solid support from both *syntactic* minimality and locality effects.

Minimality: The Agree relation with [EXCL], a quantificational feature, is subject to intervention by the elements in the same type [QU].

- (59) *_{[CP SFP_[uQU:EXCL] ... [TP ... Neg/Mod/Quantifier/Q-adv_[QU] ... [only_{adv}[iQU:EXCL] ...}
- ✗

Locality: The Agree relation is also subject to PIC and cannot apply across *phases*, but crucially may apply across an *non-phasal island* boundary. This sets Agree apart from (c)overt movement.

- (60) *_{[CP SFP_[uQU:EXCL] ... [CP/v*P=phase ... [only_{adv}[iQU:EXCL] ...}
- ✗

5.2 On the syntax-semantics interface

The syntactic Agree relation allows us to resolve the compositionality problem by accounting for OBLIGATORINESS:

5. For the CP position of *zaa* (C.) and *eryi* (M.), see A. Law (2004), Tang (2015), and P. Law (2021) (*contra*. Erlewine 2017a for Mandarin *eryi*). See footnote 4 for the discussion that Vietnamese *thôi* is lower than TP.

6. Except the verb/verbal suffix *dak1* whose origin is ‘acquire’, cf. Tang (2003)

(61) Explaining obligatory exclusiveness in singleton *zaa* cases

'Only' SFPs must agree with a null EXCL to check the [*u*EXCL] feature, which is the source of exclusiveness.

It also explains DOUBLING:

(62) Explaining doubling cases

The [*u*EXCL] on 'only' SFPs is *un*interpretable and will be deleted after Agree. Hence, 'only' SFPs will not be mapped onto an exclusive operator, and only adverbial 'only' is the operator in doubling.

The Agree approach does *not* stipulate 'only' SFPs like *zaa3* to be semantically vacuous. Such stipulation is conceptually implausible: unlike adfocus particles, which generally attach to and mark focused elements in surface syntax (but see Branan & Erlewine 2023 for mismatches), SFP *zaa3* seems to play no role in exclusive focus if it were semantically inert.

I argue instead that SFP *zaa3* has focus-sensitive semantic contribution. Specifically, it relates the focus alternative set (quantified by 'only') to the discourse: it requires the excluded alternatives to be contextually salient such that participants are aware of them.

(63) **Contextual information: (non-)salience**

- a. [Scenario: You are a cashier in a meat market in the US. You just served a customer, and your colleague seems to be curious about what they bought. You say:]

Go haak (zinghai) maai-zo joengjuk_F (#zaa3)
CL customer only buy-PERF lamb SFP.only

'The customer only bought lamb.'

- b. [Scenario: Same with (a), except that **beef is newly arrived and is really good today.**]

Go haak (zinghai) maai-zo joengjuk_F (zaa3) (#keoi zung maai-maai zyujuk)
CL customer only buy-PERF lamb SFP.only 3SG also buy-ALSO pork

'The customer only bought lamb.' (#S/he also bought pork.)



For a compositional account, please see my [LFRG handout](#).

Thus, the syntactic account thus has an extra merit in ensuring the scopal relation to be that *zinghai* is always in *zaa3*'s scope so as to "feed" its semantics which looks for excluded alternatives.

(64) Feeding the semantics of *zaa*

To achieve (downward) Agree, the Probe *zaa* c-commands the Goal *zinghai*, and takes (i) the alternative set passed up by *zinghai*, (ii) the proposition returned by *zinghai*, which excludes and thus is inconsistent with the alternatives.

In this way, the syntactic structure is mapped neatly onto semantic interpretation.

6 Concluding remarks

(65) Take home messages

- a. ‘Only’ doubling with SFPs is **agreement**; contrasting with adfocus doubling like Vietnamese *môi* which involves *covert movement*
- b. → Strengthen the operator-particle approach, both **theoretically** (syntactic support) and **empirically** (covering both adfocus particles and SFPs)
→ Adds a case of quantifier concord
- c. We need **syntactic** arguments to justify a *syntactic* proposal, even though the proposal might have received (indirect) support from its semantic consequences

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