

# Agreeing with ‘only’

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## 1. Introduction

Doubling of exclusive focus particles (or ‘only’ concord), literally ‘John **only** bought **only** *lamb<sub>F</sub>*’ (meaning ‘John only bought *lamb<sub>F</sub>*’, with subscripted F indicating focus), is extensively found in natural languages, including Dutch (Barbiers 2014), German (Hole 2015, J. Bayer 2020), Japanese (Erlewine 2012), Korean (Y. Lee 2005), Mandarin Chinese (Hole 2017, Sun 2021), and Vietnamese (Hole 2013, 2017, Erlewine 2017b), among others. Doubling poses a challenge for *compositionality* since both particles associate with the same focus, but apparently only one particle is interpreted as the exclusive operator. Such quantifier doubling phenomena are ubiquitous in quantification, such as negative concord (Zanuttini 1991, Zeijlstra 2004), modal concord (Zeijlstra 2007), distributive concord (Rushiti 2019), *wh*-concord (Kratzer 2005), existential concord (Kratzer & Shimoyama 2002), and universal concord (Yip 2022). This paper explores an understudied case of ‘only’ doubling in Cantonese, Mandarin and Vietnamese, and, by arguing for a syntactic agreement approach, hopes to further our understanding on quantifier doubling.

Previous studies on ‘only’ doubling have focused on adverbial particles and adfocus particles (i.e. constituent ‘only’). The prevailing approach is the *operator-particle analysis* (aka. the bipartite analysis; S. Bayer 1996, Y. Lee 2005, Quek & Hirsch 2017, Sun 2021, Hirsch 2022, *i.a.*), where the adfocus particle is treated as a (i) semantically vacuous concord marker that (ii) establishes a syntactic dependency with an exclusive operator, which may be null or realized as the adverbial particle, as illustrated in (1).<sup>1</sup>

- (1) [<sub>TP</sub> Subj [**Operator-ONLY**<sub>[only]</sub> [<sub>VP</sub> V [**Particle-only**<sub>[only]</sub> [<sub>DP</sub> Focused element ]]]]

There are, however, several issues with this approach. **First**, the operator-particle approach is a *syntactic* solution to an interface problem motivated largely by *semantic* considerations. Yet, little syntactic evidence has been offered. Most arguments are based on compositionality and scope (split scope, unexpected scope in VP ellipsis, etc.; Y. Lee 2005, Quek & 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). **Second**, previous literature has not settled on the mechanism that gives rise to doubling. The syntactic dependency has been analyzed as (i) *Agree* (Quek & Hirsch 2017, Hole 2017, Hirsch 2022);<sup>2</sup> (ii) *covert movement* (S. Bayer 1996, Y. Lee 2005, Barbiers 2014; cf. Erlewine & Kotek 2018); or (iii) *overt movement* (Hole 2017, Sun 2021). **Third**, the empirical focus has been largely on adfocus particles, and other varieties of doubling have escaped scholars’ attention, such as doubling of *sentence-final particles* (SFPs) with adverbial particles. There are hence both theoretical and empirical gaps in need of a detailed study.

This study focuses on doubling of exclusive focus SFPs with adverbial particles (henceforth *only<sub>adv</sub>*), which is found in Cantonese as SFP *zaa3* doubled with adverbial *zinghai* ‘only’ (A. Law 2004, P. P.-I. Lee 2019), Mandarin as *eryi* with *zhi* (Erlewine 2011), and Vietnamese as *thôi* with *chỉ* (Hole 2013):

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

<sup>2</sup> Hole (2017) takes the adfocus particle to agree with a scalar projection rather than Operator-ONLY in *in-situ* cases.

(2) Doubling of exclusive focus SFPs with adverbial particles

- a. Aaming **zinghai** maai-zo joengjuk<sub>F</sub> bei Aafan **zaa3**. ((C)cantonese)  
 Ming only buy-PFV lamb to Fan SFP.only  
 ‘Ming only bought Fan *lamb* (but not beef or pork).’
- b. Zhangsan **zhi** mai-le niurou<sub>F</sub> **eryi**. ((M)andarin)  
 Zhangsan only buy-PFV beef SFP.only  
 ‘Zhangsan only bought *beef*.’
- c. Nam **chĩ** ăn [thĩt bò]<sub>F</sub> **thôi**. ((V)vietnamese)  
 Nam only eat beef SFP.only  
 ‘Nam only eats *beef*.’

I suggest that this understudied case offers a new perspective to ‘only’ doubling. **First**, I argue that ‘only’ SFPs establish a syntactic **Agree** relation with an exclusive operator like adverbial ‘only’. I further provide direct *syntactic* arguments from *minimality* (intervention-based) and *locality* (phase/island-based) effects for the Agree account. I also discuss how this Agree relation goes hand in hand with the semantic interpretation. **Second**, I show that SFP doubling shows clear contrasts with adfocus doubling in locality effects, and the latter is best analyzed as involving (c)overt movement. This finding implicates that both agreement and (c)overt movement are available strategies for quantifier doubling, and they may even co-exist in cases where SFPs, adfocus particles, and adverbial particles can occur at the same time (“tripling”) in these languages. This paper is organized as follows. Sect. 2 introduces the core doubling paradigm. Sect. 3 presents syntactic tests based on minimality effects and locality effects, whose results support an Agree account proposed in Sect. 4. Sect. 5 extends the discussion to adfocus doubling and suggests that both agreement and (c)overt movement strategies exist in doubling. Sect. 6 concludes.

## 2. ‘Only’ doubling with SFPs

To begin with, Cantonese SFP *zaa3* ‘SFP.only’ and adverbial *zinghai* ‘only’ may indicate an exclusive focus while appearing alone (*Singleton* cases), as in (3a-b), where the direct object ‘lamb’ is focused. Crucially, the two particles can co-occur in (3c) with exactly the *same truth conditions* (*Doubling* cases).

- (3) a. Aaming **zinghai** maai-zo joengjuk<sub>F</sub> bei Aafan. (Adverbial particle)  
 Ming only buy-PFV lamb to Fan
- b. Aaming maai-zo joengjuk<sub>F</sub> bei Aafan **zaa3**. (Sentence-final particle, SFP)  
 Ming buy-PFV lamb to Fan SFP.only
- c. Aaming **zinghai** maai-zo joengjuk<sub>F</sub> bei Aafan **zaa3**. (Doubling)  
 Ming only buy-PFV lamb to Fan SFP.only  
 (a-c): ‘Ming only bought Fan *lamb* (but not beef or pork).’

The same truth conditions may be diagnosed by the at-issueness of the exclusiveness in these three sentences. They can be directly dissented by (4), questioned, or negated, showing the presence of an exclusive operator in each sentence. The same can be said to Mandarin *eryi* and Vietnamese *thôi*. Their singleton cases share the same truth conditions with the doubling cases with *only<sub>adv</sub>*.<sup>3</sup>

- (4) B: M-hai. (Aaming zung maai-zo zyujuk bei Aafan.) (challenges (2a-c)’s exclusivness)  
 no Ming also buy-PFV pork to Fan  
 ‘No. (Ming also bought Fan pork.)’ (C)

The paradigm immediately gives rise to an apparent *form-meaning mismatch*, posing problems for compositionality. On one hand, the *doubling* case is interpreted as if there is one ‘only’ rather than multiple ‘only’ in truth conditions, suggesting that either particle is not the exclusive operator (the DOUBLING problem). On the other hand, both *singleton* cases convey exclusiveness, suggesting that the adverbial ‘only’ and SFPs both require the presence of a (null) exclusive operator (the OBLIGATORINESS problem).

- (5) a. DOUBLING: *Only<sub>adv</sub>* and ‘only’ SFPs cannot both be exclusive operators.  
 b. OBLIGATORINESS: Both *only<sub>adv</sub>* and ‘only’ SFPs should be exclusive operators.

<sup>3</sup> For space reasons, some Mandarin and Vietnamese examples are not shown in this paper.

Before going to the syntactic diagnostics, I present *semantic* evidence that the SFPs are not exclusive operators. They lack the ability to associate with a focus independently of *only<sub>adv</sub>*, and are always “parasitic” on *only<sub>adv</sub>*. This can be tested by multiple foci with one focus inside *only<sub>adv</sub>*’s scope, another one outside (e.g. subject). While the SFPs may associate with subjects in singleton cases, it fails so in doubling cases.

A Cantonese example is given in (7a). When *zinghai* follows the subject, the subject is not c-commanded by it and outside of its scope. *Zaa3* cannot associate with the subject focus to give a multiple-‘only’ reading.<sup>4</sup> Such association is however possible in a single-focus case with singleton *zaa3*, as given in (7b).<sup>5</sup>

We can now conclude that ‘only’ SFPs like *zaa3* are not exclusive operators, resolving the problem of DOUBLING. The remaining problem is OBLIGATORINESS: why do singleton *zaa3* cases also convey an ‘only’ reading? Along the lines of the operator-particle approach, I hypothesize that ‘only’ SFPs establish a *syntactic dependency* with a (c)over t ‘only’ which denotes an exclusive operator. In the next section, I provide syntactic tests to diagnose the nature of this dependency.

### 3. Diagnosing the syntactic dependency in ‘only’ SFP doubling

### 3.1. Minimality effects

<sup>4</sup> To convey the intended reading, fronting with the adfocus particle *dak* ‘only’ is required:

<sup>3</sup> The contrast applies to Mandarin *eryi*. Vietnamese *thôi*, however, is syntactically lower and cannot associate with subjects when occurring alone in (i). Another case that works for Vietnamese is to put both foci inside *only<sub>adv</sub>*'s scope (e.g. (in)direct objects), and examine whether 'only' SFPs and *only<sub>adv</sub>* can associate with separate foci. As in (ii), *only<sub>adv</sub>* indeed associates with *both* foci, resulting a reading where <Minh, rose> is the only pair that satisfies the relation 'Nam gave x to y', rather than a multi-'only' reading like '*Minh* is the only person who Nam gave only *rose*'.

(b) *negation*; (c) *modals*, like ‘may’; (d) *quantifiers*, like ‘no one’; and (e) *adverbs of quantification*, like ‘often’. They are independently motivated by their minimality effects on syntactic dependencies such as A-not-A questions and/or *why*-questions (Wu 1997, A. Law 2001, Soh 2005, C.-Y. E. Tsai 2009, Tsai & Yang 2015; Vietnamese has only *why*-questions).

First, consider negation. In Cantonese, the aspectual negation *mou* ‘didn’t’ can only take narrow scope over adverbial *zinghai* in doubling (9a). Minimality effects in doubling are triggered when *mou* takes wide scope in (9b). For (9b) to be grammatical, *zaa3* must not be present. As schematized in (10), *mou* acts as an intervener between *zinghai* and *zaa3* in the wide scope case, disrupting their dependency.

- (9) 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<sub>F</sub>] (**zaa3**). (only > ¬)  
 Ming only NEG.PFV buy lamb SFP.only  
 ‘Ming only did not buy *lamb*.’ (i.e. but not beef - Ming did buy beef) (C)  
 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<sub>F</sub>] (**\*zaa3**). (¬ > only)  
 Ming NEG.PFV only buy lamb SFP.only  
 ‘Ming did not only buy *lamb*.’ (i.e. he bought beef as well) (C)
- (10) a. [SFP ... [only<sub>adv</sub> ... [AspP *mou* ‘NEG.PFV’]<sub>[QU:NEG]</sub> ...] (only > ¬)  
 b. \*[SFP ... [AspP *mou* ‘NEG.PFV’]<sub>[QU:NEG]</sub> ... [only<sub>adv</sub> ...] (¬ > only)  
 ×

The same effects are found in singleton *zaa3* cases. In (11), negation can only has narrow scope, indicating the presence of some covert exclusive operator (EXCL) with which *zaa3* establishes a syntactic dependency. This dependency is blocked by wide-scope negation, rendering the relevant reading not available.

- (11) a. ... Aaming [*mou* maai joengjuk<sub>F</sub>] **zaa3**. (only > ¬, \*¬ > only)  
 Ming NEG.PFV buy lamb SFP.only  
 ONLY: ‘Ming only did not buy *lamb*.’; BUT NOT: ‘Ming did not only buy *lamb*.’ (C)  
 b. \*[SFP ... [AspP *mou* ‘NEG.PFV’]<sub>[QU:NEG]</sub> ... [EXCL ...] ×

In Mandarin and Vietnamese, negation triggers similar minimality effects to SFP doubling:<sup>6</sup>

- (12) a. Zhangsan {a. **zhi**(shi)} *meiyou* {b. **\*zhi**} kan [zhongwen shu]<sub>F</sub> **eryi**. (M)  
 Zhangsan only NEG.PFV only read Chinese book SFP.only  
 ONLY: ‘Zhangsan only didn’t read *Chinese books*.’ (i.e. no Chinese books)  
 b. Nam {a. **chǐ**} *không* {b. **\*chǐ**} ăn [thịt bò]<sub>F</sub> **thôi**. (V)  
 Nam only not only eat beef SFP.only  
 ONLY: ‘Nam only does not eat *beef*.’ (i.e. no beef)

Second, deontic modals also trigger minimality effects in doubling when taking wide scope over *zinghai* (13). Again, the effects go away without *zaa3*, and are replicated in singleton *zaa3* cases (14).

- (13) Aaming [{i. **zinghai**} [*hoji* [{ii. **zinghai**} sik sou<sub>F</sub> ]]] (i.OK/ii.\*) **zaa3**. (C)  
 Ming only may only eat veggie SFP.only  
 i. ‘Ming can only eat *vegetable*.’ (i.e. Ming cannot eat meat) (only > ◇<sub>Deo</sub>)  
 ii. ‘It is allowed that Ming only eats *vegetable*.’ (i.e. Ming may also eat meat) (\*◇<sub>Deo</sub> > only)

<sup>6</sup> The syntactic position of the intervener matters. With sentential negation *m-hai* ‘(lit.) not-be’, which is syntactically higher than *zaa3* (since *zaa3* fails to associate with any focus higher than *m-hai*), no minimality effects are triggered. That is, sentential negation is too high to intervene between only ‘SFPs’ and *only<sub>adv</sub>*. The same applies to sentential negation in Mandarin (*bushi* vs. *meiyou* in (12a)) and Vietnamese (*không phải là* vs. *không* in (12b)).

(i) ... Aaming *m-hai* [[**zinghai** maai joengjuk<sub>F</sub>] (**zaa3**) ]. (Same as scenario (9b); ¬ > only)  
 Ming NEG-COP only buy lamb SFP.only  
 ‘It is not the case that Ming only bought *lamb*.’ (he bought beef as well)

- (14) a. Aaming [hoji sik sou<sub>F</sub>] **zaa3**. (only > ◇<sub>Deo</sub>, \*◇<sub>Deo</sub> > only)  
 Ming may eat veggie SFP.only  
 ONLY: ‘Ming can only eat *vegetable*.’; BUT NOT: ‘It is allowed that Ming only eats *vegetable*.’  
 b. \*[ SFP ... [TP ... Modal<sup>Deo</sup><sub>[QU:MOD]</sub> ... [only<sub>adv</sub>/EXCL ...] ]  
 (for (ii))

Such effects are also attested in Mandarin and Vietnamese in both doubling and singleton cases:<sup>7</sup>

- (15) a. \*Zhangsan *keyi* (**zhi**) kan [zhongwen shu]<sub>F</sub> **eryi**. (M)  
 Zhangsan can only learn Chinese book SFP.only  
 Int.: ‘It is allowed that ZS only reads *Chinese books*.’ (i.e. ZS may also read English books)  
 b. \*Nam *có thể* (**chǐ**) học [tiếng Pháp]<sub>F</sub> **thôi**. (V)  
 Nam may only learn French SFP.only  
 Int.: ‘It is allowed that Nam only learns *French*.’ (i.e. Nam may also learn German)

Third, quantifiers, such as negative quantifiers in subject positions, trigger the same minimality effects in both doubling and singleton *zaa3* cases, as illustrated in (16). Other quantifiers also induce minimality effects, as illustrated by *henshao ren* ‘few people’ in Mandarin in (17).<sup>8</sup>

- (16) a. Scenario: You and Fan are debating whether they should submit only one abstract to a conference if the host allows two. Fan thinks that they should submit one, and you say:  
 \*[ Moujan [(**zìng**hai) gaau jat<sub>F</sub> bin zaakjiu ]] **zaa3**. (C)  
 No.one only submit one CL abstract SFP.only  
 Int.: ‘No one submits *one* abstract.’ (i.e. we always submit two when it is allowed)  
 b. \*[ SFP ... [TP ‘no one’<sub>[QU:NEG]</sub> ... [only<sub>adv</sub>/EXCL ...] ]  
 (17) \*[ Henshao ren [(**zhi**) chi fan<sub>F</sub> (bu chi cai) ]] **eryi**. (M)  
 very.few person only eat rice not eat dish SFP.only  
 Int.: ‘Very few people only eat (plain) *rice* (without dish).’

Last but not last, quantificational adverbs like ‘often’ also pattern with the above quantificational elements and trigger minimality effects to Cantonese *zaa3* in (18).

- (18) 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 [(**zìng**hai) sik-zing hunglobak<sub>F</sub>] ] **zaa3**. (C)  
 Ming always DOU only eat-leave carrot SFP.only  
 ‘Ming always only left *carrot* uneaten.’ (i.e. but not tomato)  
 b. \*[ SFP ... [TP ... ‘always’<sub>[QU:V]</sub> ... [only<sub>adv</sub>/EXCL ...] ]  
 (19) \*[ SFP ... [TP ... [QU:V] ... [only<sub>adv</sub>/EXCL ...] ]

While such patterns hold for Mandarin, it is important to note that subject quantifiers and quantificational adverbs do not induce minimality effects to Vietnamese SFP *thôi*. This is due to a lower syntactic position of *thôi*, which is presumably on the vP level, as evidenced by its inability to associate with the subject (see footnote 5). Thus, interveners on the TP level (like subjects) are too high to trigger minimality effects in Vietnamese, on a par with sentential negation in Cantonese and Mandarin (see footnote 6).

Taking stock, quantificational elements with [QU]-features trigger minimality effects to SFP doubling, as summarized in Table 1. The uniform pattern supports that ‘only’ SFPs establish a syntactic dependency with [QU]-features with *only<sub>adv</sub>* in doubling cases, and a covert EXCL in singleton cases.

<sup>7</sup> Just like negation (see footnote 6), modals that are high in the syntactic structure, namely, epistemic modals (W.-T. D. Tsai 2015), trigger no minimality effects in doubling in the three languages, in contrast with deontic modals.

<sup>8</sup> Upward entailing quantifiers like ‘every’ do not seem to trigger minimality effects, including both SFP doubling and ‘why’-questions. I thank Haoze Li for bringing my attention to this difference.

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

**Table 1:** Minimality effects in ‘only’ doubling with SFPs

### 3.2. Locality effects

We can also examine whether the dependency between ‘only’ SFPs and *only<sub>adv</sub>* is blocked by some opaque domain, which is a phase for Agree (Phase Impenetrability Condition, PIC, Chomsky 2000); or a syntactic island for movement (Ross 1967). To begin with, Cantonese SFP *zaa3* cannot be doubled with the embedded *zinghai* across a control clause boundary under ‘force’ (i.e. only > force, \*force > only).

- (19) Go lousi (**zinghai**) bik Aaming (\***zinghai**) duk [faatman]<sub>F</sub> **zaa3**. (C)  
 CL teacher only force Ming only take French SFP.only  
 ONLY: ‘The teacher only forces Ming to take *French*.’ (i.e. but does not care about German)  
 BUT NOT: ‘The teacher forces Ming to only take *French*.’ (i.e. no German)

Assuming with Huang (2022) that verbs like ‘force’ take a smaller clause (e.g. TP), *zinghai* is embedded in the complement of a lower v\*P phase, which is not accessible to (matrix) *zaa3* in a higher CP phase in accord with the PIC. In other words, the syntactic dependency in SFP doubling is phase-bounded.<sup>9</sup>

- (20) \*[ SFP ... [<sub>v\*P</sub> ... ‘force’ [<sub>TP</sub> only<sub>adv</sub>/EXCL ... ] ] ] (PIC violation)

Doubling is also banned across islands such as the complex DP island in (21). *Zaa3* can only be doubled with *zinghai* or (null) EXCL *outside* the island, but not the island-internal *zinghai*.

- (21) (Zinghai) [<sub>DP</sub> gogo [<sub>CP=RC</sub> **zinghai** dou bo ge ] jan lai-zo **zaa3**..  
 only that only bet ball MOD person come-PFV SFP.only  
 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.’ (C)

The ban in (21) however can be interpreted alternatively as a PIC violation due to the CP boundaries of relative clauses. Yet, the coordinated VP in (22), as an island without phasal boundaries, allows *zaa3* to be doubled with *only<sub>adv</sub>* within the VPs. To rule out ATB movement, different ‘only’ adverbs are used: *zinghai* and *zaaihai*. We can then conclude the dependency between *zaa3* and *only<sub>adv</sub>* is *not* island sensitive.

- (22) a. keoi camjat [[<sub>VP</sub> **zinghai** sik gajjik<sub>F</sub> ] tung [<sub>VP</sub> **zaaihai** jam holok<sub>F</sub> ] ] **zaa3**.  
 3SG ytd. only eat chick.wing and only drink coke SFP.only  
 ‘S/he yesterday only ate *chicken wings* and only drank *coke*.’ (C)  
 b. ... [ SFP ... [&P [<sub>VP</sub> zinghai<sub>adv</sub> ... ] & [[<sub>VP</sub> zaaihai<sub>adv</sub> ... ] ] ] ]

Similar island patterns are observed in Mandarin and Vietnamese. A Vietnamese example is given in (23).

- (23) Nam [[<sub>VP</sub> **chỉ** ăn gà rán<sub>F</sub> ] và [<sub>VP</sub> **chỉ** uống cô ca<sub>F</sub> ] ] **thôi**. (V)  
 Nam only eat fried.chicken and only drink coke SFP.only  
 ‘Nam only ate *fried chicken* and only drank *coke*.’

Since the dependency in SFP doubling is phase-bounded yet island-insensitive, as summarized in Table 2, I suggest that it involves an Agree relation, but not covert movement. Combining with the minimality effects, this Agree relation is established between two elements with the [Qu]-features.

<sup>9</sup> Since *zaa3* can scope over the subject and is higher than TP, it cannot be embedded in the complement of ‘force’. Such configurations can only be extended to Mandarin, but not Vietnamese due to the low position of *thôi*.

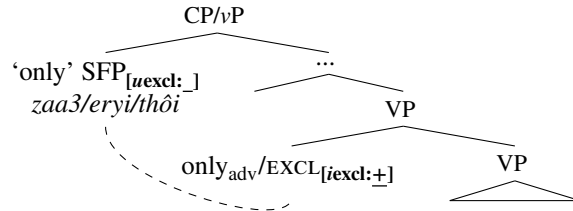
Domains	Phase	Island	Doubling		
			Cantonese	Mandarin	Vietnamese
$v^*P$	YES	NO	✗	✗	N/A
CP	YES	NO	✗	✗	N/A
Complex DP island	YES	YES	✗	✗	✗
Coordinated VP edge	NO	YES	✓	✓	✓

**Table 2:** Locality effects in ‘only’ doubling with SFPs

#### 4. Proposal: agreeing with ‘only’

Extending the operator-particle analysis (Quek & Hirsch 2017, Erlewine 2020) to SFP doubling, I propose that ‘only’ SFPs carry an uninterpretable, unvalued [ $\mu\text{EXCL}:\_$ ] feature and must *Agree* with an exclusive operator carrying the interpretable, valued counterpart [ $i\text{EXCL}:\_+$ ], realized as the adverbial ‘only’ (i.e. *zinghai/zhi/chǐ*) or remain unpronounced as EXCL (similar to Quek & Hirsch’s ONLY and comparable to EXH in Chierchia 2006).

- (24) The Agree relation between ‘only’ SFPs and exclusive operators



As mentioned before, Vietnamese SFP *thôi* is lower than TP and is best analyzed as on the  $vP$  level. Cantonese *zaa3* and Mandarin *eryi* are in contrast higher on the CP level, as argued by A. Law (2004), Tang (2015), and P. Law (2021) (but see Erlewine 2017a for Mandarin). Regarding the [EXCL] feature, it has a *morphological correlate* in Cantonese: the onset *z-* is shared by exclusive morphemes in Cantonese: SFPs like *zaa3*, *ze1* and their variants (Sybesma 2007), and adverbs including *zing6*, *zaai1* and *zi2*<sup>10</sup>

The proposal receives solid support from both *syntactic* minimality and locality effects. First, the Agree relation with [EXCL], a quantificational feature, is subject to intervention by the elements in the same type [QU], as schematized in (25). Second, the Agree relation is also subject to the PIC and cannot apply across *phases*, but crucially may apply across a *non-phasal island* boundary, which sets Agree apart from (c)overt movement. The schema is given in (26).

- (25)  $*[ \text{SFP}_{[\mu\text{QU}:\text{EXCL}]} \dots [\text{TP} \dots \text{Neg/Mod/Quantifier/Q-adv}_{[\text{QU}]} \dots [ \text{only}_{\text{adv}}[i\text{QU}:\text{EXCL}] \dots ] ]$

- (26)  $*[ \text{SFP}_{[\mu\text{QU}:\text{EXCL}]} \dots [ \text{CP/v}^*P=\text{phase} \dots [ \text{only}_{\text{adv}}[i\text{QU}:\text{EXCL}] \dots ] ]$

The syntactic Agree relation allows us to resolve the compositionality issues by accounting for the OBLIGATORINESS problem. In singleton ‘only’ SFP cases, the SFPs must agree with a null EXCL to check the [ $\mu\text{EXCL}$ ] feature, which is the source of exclusiveness. The null EXCL is realized as the adverbial particles in doubling cases. Moreover, the Agree relation also has a welcoming semantic consequence that resolves the DOUBLING problem. By assuming a mapping between the syntactic [ $i\text{EXCL}$ ] feature and an exclusive operator in the semantics, the [ $\mu\text{EXCL}$ ] on ‘only’ SFPs is not mapped onto an exclusive operator, since it is *uninterpretable* and is deleted after Agree. Hence, only the adverbial particle is the operator in doubling cases, confirming the patterns in Sect. 2.<sup>11</sup>

<sup>10</sup> Except adfocus *dak1* (see fn. 4), whose origin is ‘acquire’. It may also be a verb or a verbal suffix (Tang 2002).

<sup>11</sup> Note that this Agree approach does *not* stipulate ‘only’ SFPs to be semantically vacuous. It only prohibits ‘only’ SFPs from being an exclusive operator, but it could well have other semantic contributions (just like n-words in negative concord expressing a non-negative indefinites). For instance, Cantonese *zaa3* has its own focus-sensitive

## 5. Co-existing strategies of doubling

This section turns to doubling of adfocus and adverbial particles. First, I show that unlike SFP doubling, (*in-situ*) adfocus doubling in Vietnamese involves covert movement instead of Agree (*pace* Hole 2017, Quek & Hirsch 2017; *à la* Erlewine & Kotek 2018, Erlewine 2020). Second, I discuss how different syntactic strategies may co-exist in a “tripling” case with SFPs, adfocus, and adverbial particles.

To begin with, Vietnamese adfocus particle *mỗi*, with the focus associate, may be *in-situ* in (27), apart from the *ex-situ* use (cf. Hole 2017). While the *ex-situ* case is analyzed as overt movement (Hole 2017, Sun 2021), the *in-situ* case is treated differently as Agree (Hole 2017, Quek & Hirsch 2017).<sup>12</sup>

- (27) Nam **chỉ**<sub>Adv</sub> [ăn [**mỗi**<sub>Prt</sub> [thịt bò]<sub>F</sub>] ].  
 Nam only eat PRT.only beef.  
 ‘Nam eats only beef.’ (V, adapted from Hole 2017, ex. 13a)

In the following, I demonstrate that the *in-situ* adfocus doubling shows clear contrasts in locality effects with SFP doubling, casting doubts on the Agree analysis. First, unlike SFP doubling, long-distance adfocus doubling is possible in Vietnamese. In (28), there is a CP boundary between adverbial *chỉ* and adfocus *mỗi* on the *in-situ* focus associate ‘French’. The sentence is fully acceptable with wide scope ‘only’ over the attitude verb ‘know’. This shows that adfocus doubling is not clause/phase-bounded.

- (28) a. Thầy giáo **chỉ** biết [<sub>CP</sub> là Nam [<sub>V\*P</sub> học **mỗi** tiếng Pháp<sub>F</sub>] ] (V)  
 teacher only know COMP Nam study PRT.only French  
 ‘The teacher only knows that Nam took French. (and didn’t know that Nam took English)’  
 b. [<sub>CP</sub> ... [<sub>V\*P</sub> only<sub>adv</sub> ... [ ‘know’ [<sub>CP</sub> [<sub>TP</sub> ... [<sub>V\*P</sub> ... [ PRT<sub>adfocus</sub>-DP ] ... ] ] ] ] ]

The adfocus doubling, however, is subject to island constraints. A complex DP island boundary between *chỉ* and *mỗi* blocks the doubling reading, as in (29). Only the multiple-‘only’ reading is possible: *mỗi* is linked with a covert EXCL inside the island, but not with the island-external *chỉ*.

- (29) a. Thầy giáo **chỉ** biết [<sub>DP</sub> tin [<sub>CP</sub> 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 the *news* that Nam only took French (# but doesn’t know whether Nam took English).’ (multiple-‘only’ reading)  
 BUT NOT: ‘The teacher only knows the news that Nam took French (but doesn’t know whether Nam took English).’ (doubling reading) (V)  
 b. \*[[<sub>CP</sub> ... [<sub>V\*P</sub> only<sub>adv</sub> ... [ ‘know’ [<sub>DP</sub> ‘news’ [<sub>CP</sub> ... [<sub>V\*P</sub> ... [ PRT<sub>adfocus</sub>-DP ] ... ] ] ] ] ] ]

The adfocus doubling is further blocked by non-phasal islands like (30), where *chỉ* cannot associate with *mỗi* in the second conjunct of the coordinated VP. Note that even if another *mỗi* occurs in the first conjunct, doubling is still ungrammatical, suggesting that ATB movement is not an option here.

- (30) a. \*Nam **chỉ** ăn [[<sub>DP</sub> (**mỗi**) sushi<sub>F</sub>] và [<sub>DP</sub> **mỗi** pizza<sub>F</sub>] ] (V)  
 Nam only eat PRT.only sushi and PRT.only pizza  
 Int.: ‘Nam only eat *sushi* (among Japanese food) and *pizza* (among Italian food).’  
 b. \*[[<sub>CP</sub> ... [<sub>V\*P</sub> only<sub>adv</sub> ‘eat’ [&P [<sub>DP</sub> sushi ] & [<sub>DP</sub> PRT<sub>adfocus</sub>-pizza] ] ... ] ] ]

Taking stock, Vietnamese *in-situ* adfocus doubling is island-sensitive but not phase/clause-bounded. I suggest that it involves a covert movement dependency instead of an Agree relation (*pace* Hole 2017, Quek & Hirsch 2017; *à la* Erlewine & Kotek 2018, Erlewine 2020), contrasting with SFP doubling. Since

semantic contribution: it relates the focus alternative set (quantified by ‘only’) to the discourse by requiring the excluded alternatives to be contextually salient. For space reasons, I postpone the discussion to other occasions.

<sup>12</sup>Cantonese and Mandarin adfocus particles with the focused elements are always *ex-situ* (*dak* in Cantonese, see fn. 4; *zhiyou* in Mandarin, see Sun 2021). See Sun (2021) for a comprehensive set of arguments for movement.



both adfocus doubling and SFP doubling are attested in Vietnamese, we have a case where both (c)overt movement and Agree are available syntactic mechanisms in doubling.<sup>13</sup>

Agree and (c)overt movement strategies not only co-exist in a single language, but they can also co-exist in a single sentence. In Vietnamese, SFP *thôi*, adfocus *mỗi*, and adverbial *chỉ* can co-occur together with the same focus association, constituting a case of “tripling” in (31).<sup>14</sup> That covert movement and Agree may co-exist in the case of (31) raises interesting questions for the operator-particle approach, such as whether one operator can be associated with multiple particles in different ways (vs. Multiple-Agree).

- (31) Nam **chỉ** ăn **mỗi** [thịt bò]<sub>F</sub> **thôi**. (V)  
 Nam only eat PRT.only beef SFP.only  
 ‘Nam only eats *beef*.’

## 6. Conclusion

To conclude this paper, I have argued that ‘only’ doubling of SFPs and adverbial particles in Cantonese, Mandarin and Vietnamese involves an Agree relation in exclusive [EXCL] features, which is quantificational and subject to minimality effects induced by other quantificational elements that carry a [QU] feature. Moreover, this Agree relation is phase-bounded and island-insensitive, contrasting with the covert movement dependency in Vietnamese ‘only’ doubling of *in-situ* adfocus particles and adverbial particles, which may cross clausal but not island boundaries. Consequently, the operator-particle approach (Quek & Hirsch 2017, Sun 2021, Hirsch 2022, *i.a.*) is strengthened: theoretically by direct syntactic arguments, and empirically by covering both cases of adfocus particles and SFPs, in addition to the (indirect) support from the semantic consequences on compositionality. Moreover, the “tripling” case where three types of particles (SFP, adfocus, adverbial) co-occur raises a possibility for covert movement and Agree to co-exist, which, with careful examination, may shed light on a unified theory of ‘only’ doubling and quantifier doubling in general.

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<sup>13</sup>One motivation for the Agree account of adfocus particles in Quek & Hirsch (2017) is split-scope readings, where the focus associate’s scope may be lower than some quantifier below ‘only’ (‘only’ > Qu > F-associate) in English. This speaks against a QR approach. The covert movement involved hence must either move only *mỗi*, or partial reconstruct the associate to the base position (like *wh*-mvt., Aron Hirsch p.c.). While Vietnamese requires further examination, the non-clause-boundedness of *mỗi* doubling also suggests that the covert movement is *not* QR.

<sup>14</sup>The same applies to Cantonese (but not Mandarin where adfocus *zhīyou* cannot co-occur with adverbial *zhīyou*).

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