Agreeing with 'only' in Cantonese
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Introduction. Cross-linguistically, exclusive particles 'only' may be doubled with a single focus association, constituting an apparent FORM-MEANING MISMATCH: only one exclusive operator is interpreted despite the appearance of two particles (e.g. Dutch, Korean, Mandarin, Vietnamese; *cf.* Lee 2005, Barbiers 2014, Hole 2017, Sun 2021). The prevailing approach is to posit a *syntactic dependency* between the two particles: one particle is a semantically vacuous concord marker that either Agrees with (Quek & Hirsch 2017) or (c)overtly moves to (Lee 2004, Erlewine & Kotek 2018, Sun 2021) the another. However, the claim has been largely motivated by *semantic arguments* (e.g. compositionality & split scope readings) and *syntactic arguments* are not adequately recruited (except islands in E&K 2018). Moreover, while previous studies focus on *adverbial* and *adfocus* particles, other kinds of particles are rarely discussed, such as exclusive *sentence-final particles* (SFPs) found in Cantonese (A. Law 2004, Lee 2019), Mandarin (Erlewine 2010) and Vietnamese (Hole 2013).

Claims. This study aims at filling in both the theoretical gap and the empirical gap of exclusive particle doubling. Focusing on an understudied doubling case with exclusive SFP *zaa3* in Cantonese, I argue for an AGREE analysis by offering novel evidence from *syntactic* **minimality** and **locality** effects. Furthermore, I show that SFPs display a different profile from adfocus particles: although *zaa3* is not an exclusive operator, it is *not* semantically vacuous either. I suggest that *zaa3* has a *not-at-issue* focus-sensitive contribution which is *fed by* the exclusive operator it Agrees with, showing a close relation between syntax and semantics.

'Only' doubling in Cantonese. Adverbial *zinghai* 'only' and SFP *zaa3*, in their singular occurrence in (1)a-b, express non-scalar, at-issue exclusiveness (can be directly dissented by (3)). Crucially, they may be doubled in (2) with the same truth conditions, giving rise to a FORM-MEANING MISMATCH.

(1) Aaming{a. **zinghai**} maai-zo *lunghaa*$_F$ bei Aafan {b. **zaa3**}
    Ming   only   buy-PERF lobsters   to Fan   SFP.only
    'Ming only bought Fan *lobsters*.' (but not pork or beef) $=\neg\Phi_b\wedge\neg\Phi_p$

(3) No. (Ming also bought Fan beef and pork.) (can be a direct dissent to (1)a-b and (2))

(2) Aaming **zinghai** maai-zo *lunghaa*$_F$ bei Aafan **zaa3**
    Ming   only   buy-PERF lobsters   to Fan   SFP.only 'M only bought F *lobsters*.' $=\neg\Phi_b\wedge\neg\Phi_p$ =(1)

#1: Minimality. In doubling cases, *zaa3* and *zinghai* cannot be intervened by quantificational elements like negation as shown by (4)a vs. (4)b. The intended scope in (4)b can only be obtained without *zaa3*.

(4)a. Aaming **zinghai** mou maai *ngau*$_F$ (**zaa3**)   b. Aaming mou **zinghai** maai *ngau*$_F$ (*****zaa3**)
      Ming   only   not buy beef   SFP.only   Ming not only   buy beef   SFP.only
      'Ming only did not buy beef.'   (only > ¬)   'Ming did not only buy lobsters.' (*zaa3*: *¬ > only)

Other quantificational elements such as modals and quantificational adverbs also serve as interveners:

(5) Keoi hoji **zinghai** sik *sou*$_F$ (*****zaa3**)   (6) Keoi sengjat dou **zinghai** sik *juk*$_F$ (*****zaa3**)
    3SG may only   eat veggie SFP.only   3SG always DOU only   eat meat SFP.only
    'S/he can eat solely veggie.' (*zaa3*: *◊$_{Deo}$ > only) 'S/he always only eats meat.' (*zaa3*: *∀$_{always}$ > only)

#2: Locality. *Zaa3* must occur in the same local domain with *zinghai*. Doubling fails when they are separated by finite CPs in (7), control clauses in (8), and islands (examples not shown due to space reasons).

(7) Ngo {a. **zinghai**} [$_{v*P}$ zidou [$_{CP}$ keoi {b.*****zinghai**} sik *sou*$_F$] mounoi **zaa3**
    I   only   know   3SG   only   eat veggie short.time SFP.only
    a. 'I only learnt [that s/he eats *veggie*] recently. (I already knew if s/he eats other food)' (only>know)
    b. *'I learnt [that he only eats *veggie*] recently.'   (*know>only)

(8) Go lousi   {a. **zinghai**} [$_{v*P}$ bik   Aaming$_i$ [$_{TP}$ PRO$_i$ {b.*****zinghai**} duk *Dakman*$_F$ **zaa3**
    CL teacher   only   force Ming   only   take German SFP.only
    a. 'The teacher only forces Ming to take German.' (but does not care about French.)   (only > force)
    b. *'The teacher forces Ming to only take German.' (no French.)   (*force > only)

Towards an Agree analysis. Following Quek & Hirsch (2017), I propose that *zaa3* does not denote an exclusive operator. Rather, it carries an uninterpretable [*u*EXCL] feature and must AGREE with an exclusive

operator carrying the interpretable counterpart [*i*EXCL], realized as *zinghai* or remain unpronounced as EXCL (*cf.* ONLY in Q&H 2017; EXH in Chierchia 2006, *i.a.*).

(9) [CP zaa3[*u*EXCL] … [TP/*v*P zinghai/EXCL[*i*EXCL] …]]
AGREE
(*cf.* Tang 2015, P. Law 2022 for CP position of *zaa3*)

First, [EXCL] has a morphological correlate: the onset *z-*, related to "restrictiveness" in SFPs (*zaa3, ze1*), is shared by exclusive morphemes in Cantonese (*zing6, zaai1 & zi2*). Second, Assuming that [*i*EXCL] is mapped onto exclusive operators in LF, an Agree analysis explains the FORM-MEANING MISMATCH in (1)-(2): only *zinghai*, but not *zaa3*, is interpreted as 'only' in (2) since [*u*EXCL] on *zaa3* is already deleted before Transfer to the LF; on the other hand, the exclusiveness in (1)b comes from a null EXCL whose presence is required by the Agree relation with *zaa3*. Third, the Agree relation also receives direct support from **minimality** and **locality**. (i) Adopting Rizzi's (2004) feature-based **Relativized Minimality**, quantificational elements carry superfeature [Qu] and may not intervene each other. The minimality effects in (4)-(6) suggest the presence of an Agree dependency between *zinghai* & *zaa3* being blocked by [Qu] elements, as schematized in (10). (ii) The Agree relation also obeys locality like **Phase Impenetrability Condition** (Chomsky 2000). *Zinghai* embedded in phase complements (of *v**P/CP in (7)/(8)) is inaccessible to *zaa3* and fails to Agree (=(11)).

(10) *[CP zaa3[*u*QU:EXCL] … [Neg/Modal^Deo/Q-adv etc[QU:NEG/MOD/∀…] … [zinghai[*i*QU:EXCL] …   (RM violation)

(11) *[CP zaa3[*u*QU:EXCL] … [**phase=*v**P/CP** … [zinghai[*i*QU:EXCL] …   (PIC violation)

Finally, an alternative multiple-'only' analysis that treats *zaa3* as exclusive operators (as alluded to in A. Law 2004, Lee 2019), apart from the compositionality challenge of doubling in (1)-(2), also falls short of explaining the lack of "split-only" readings in (4)-(6), which is otherwise possible with two adverbial 'only':

(12) [Aaming **zinghai** [hoji **zaai** maai *lunghaa_F*]]   ("split-only" reading, vs. (5) with *zaa3*)
      Ming   only   may only buy lobsters 'Ming may only solely buy lobsters.' (only > ◇_Deo > only)

The focus-sensitive contribution of *zaa3*. While the syntactic Agree approach requires *zaa3 not* to be an exclusive operator (via deletion of [*u*EXCL]), it does not stipulate *zaa3* to be semantically vacuous. I suggest that SFP *zaa3 has* focus-sensitive semantic contribution: it relates the focus alternative set (quantified by 'only') to the discourse. *Zaa3* requires the excluded alternatives to be **contextually salient** s.t. participants are *aware of* them, shown by the contrast in felicity in (13) where the alternative, 'beef', is salient only in (b).

(13) [a. You are a cashier in a meat/seafood [b. You are a cashier in a meat/seafood market. Beef is newly
      market. You just served a customer, and arrived and is really good. You just served a customer, and your
      your colleague asks what (s)he bought.]   colleague asks whether (s)he bought beef.]

      c. Go haak   **zinghai** maai-zo *lunghaa_F*   (^{a.#/b.OK}**zaa3**)
          CL customer only   buy-PERF lobsters   SFP.only   'The customer only bought lobsters.'

Given that the difference between *zinghai* and *zaa3* rests on felicity but not truth conditions, I suggest formalizing *zaa3*'s meaning as a **not-at-issue** (NAI) requirement on focus alternative sets in (14); where p is the prejacent of exclusive operators like *zinghai*, and q is an (excluded) proposition in the alternative set ALT with respect to p in the context c, such that q is more salient than p. Importantly, *zaa3* operates on the alternative set quantified by *zinghai*/EXCL, i.e. its meaning is fed by the exclusive operator that it agrees with.

(14) $\exists q[q \in \text{ALT}_{c,p} \land p \neq q \land p <_{salient} q]$ (simplified version of *zaa3*'s NAI requirement)

Implications. (i) Novel *syntactic* arguments (minimality & locality) are provided for the AGREE relation in exclusive particle doubling. (ii) The proposal extends to Vietnamese SFP *thôi* 'only' and Mandarin SFP *eryi* 'only' which show similar minimality (=(15)) and locality effects (=(16)) in doubling. (iii) An apparent FORM-MEANING MISMATCH is resolved and further reveals intimate interaction between syntax & semantics w.r.t how the meaning of focus particles is fed by the exclusive operator it Agrees with.

(15) Nam {a. **chỉ** } không {b.***chỉ** } ăn *thịt bò* **thôi**.   (16) Laoshi {a. **zhi** } [bi ta {b.***zhi** } du *Dewen*] **eryi**.
      Nam   only   not   only eat beef SFP.only   teacher   only force 3SG only take Germen SFP.only
      'Nam {only} does not {*only} eat beef.'   [V]   'The teacher {only} forces him to {*only} take German.' [M]