

The (non-)survival of discourse particles in ellipsis
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In this talk, I argue:

- The discourse particles are head-finality projections at the clausal periphery cf. Abels & Neeleman 2012.
- Empirical evidence come from the fact that (i) the discourse particles are sensitive to clause type, (ii) show distributional restrictions, (iii) scope facts, and (iv) ellipsis diagnostics.
- Clausal ellipsis with the discourse particles can be derived by A'-movement followed by ellipsis which can be licensed from either the moving head or the trace of the moving head.
- The ellipsis site is a minimal projection deletion and the licensing head is part of the ellipsis site – in line with the C'-deletion approach to clausal ellipsis.

1. Introduction

- Thai is an isolating, SVO language which does not permit free scrambling. It is a radical pro-drop language and exhibits clausal ellipsis in matrix and embedded clauses - e.g., sluicing (Manowang 2024) and fragments (Manowang 2026).
- The proposed analysis is built upon the facts of sluicing and fragment in Thai, exemplified below.

- (1) A: dèkdèk māj kin māmûan
 children PROG eat mango
 'The children are eating the mangos.'
- B1: thûʔrian **tà:ŋhà:k** **(khâ)**
 durian FOC_{CONT} POL_{FEM}
- B2: thûʔrian **tà:ŋhà:k**
 durian FOC_{CONT}
- B3: *thûʔrian* **(khâ)**
 durian POL_{FEM}
- B4: *thûʔrian*
 durian
- (B1-B4): 'It's the durians <that the children are eating.'

- The distribution of the discourse particles in fragments: (i) the focus and politeness particles are adjacent to each other, (ii) the politeness particle is optional, and (iii) the focus particle can be omitted when the fragment bears pitch accent.

2. The discourse particles at the periphery

Main claim: the discourse particles project head-finality projection at the clausal periphery cf. Abels & Neeleman 2012, see also Pual 2009, 2014, Erlewine 2017.

2.1 *The focus particles:* Thai employs three lexically-distinct focus particles i.e., **lâ**, **ηaj**, and **tà:ηhà:k**.

2.1.1 Sensitivity to clause type

- *lâ* is only compatible with the interrogative sentences while *ηaj* and *tà:ηhà:k* are only compatible with non-interrogative sentences.

- (2) a. khaw kamlang kin ?araj { **lâ** | ***ηaj** | ***tà:ηhà:k** }
 3 PROG eat what FOC_{QUES} | FOC_{INFO} | FOC_{CONT}
 ‘What is he eating?’
- b. nakrien-khon-naj yiim nangsuu-Modality khong Portner
 student-CL-which borrow book-Modality POSS Portner
 { **lâ** | ***ηaj** | ***tà:ηhà:k** }
 FOC_{QUES} | FOC_{INFO} | FOC_{CONT}
 ‘Which student borrowed Modality by Portner?’
- (3) Q: khaw kamlang kin ?araj
 3 PROG eat what
 ‘What is he eating?’
- A: khaw kamlang kin kiewtiew { ***lâ** | **ηaj** | ***tà:ηhà:k** }
 3 PROG eat noodle FOC_{QUES} | FOC_{INFO} | FOC_{CONT}
 ‘He is eating noodle.’
- B: khaw kamlang kin ramen { ***lâ** | ***ηaj** | **tà:ηhà:k** }
 3 PROG eat ramen FOC_{QUES} | FOC_{INFO} | FOC_{CONT}
 ‘(No), he is eating **ramen**.’

The clearer example comes from the following ambiguously interrogative/indefinite readings of wh-phrases.

- (4) a. thim maj kin ?araj
 Tim NEG eat what
 (i): ‘**What** didn’t Tim eat?’
 (ii): ‘Tim didn’t eat **anything**.’
- b. thim maj kin ?araj **lâ**
 Tim NEG eat what FOC_{QUES}
 (i): ‘What didn’t Tim eat?’
 (ii): ≠ ‘Tim didn’t eat anything.’

- c. thim maj kin ?araj { **ηaj** | **tà:ηhà:k** }
 Tim NEG eat what FOC_{INFO} | FOC_{CONT}
 (i): ≠ ‘What didn’t Tim eat?’
 (ii): ‘Tim didn’t eat **anything**.’

- *lâ* carries [+Q(uestion)] feature which *ηaj* and *tà:ηhà:k* don’t.

3.1.2 Distribution

- All the focus particles generally occur at a clause-final position of the sentences
- They have no ability to occur at the clause-initial position on their own (a). They cannot occur at any clause-medial position (b).

- (5) a. { ***lâ** } khraj tham ?raj { **lâ** }
 FOC_{QUES} who do what FOC_{QUES}
- b. khraj tham ?raj { ***la** } yaangraj { ***la** } thii-naj { ***la** }
 who do what FOC_{QUES} how FOC_{QUES} where FOC_{QUES}
 muaraj { ***la** } thammaj { **lâ** }
 when FOC_{QUES} why FOC_{QUES}
 (Lit.) ‘Who did what how where when?’
- (6) a. { ***ηaj** | ***tà:ηhà:k** } khaw kin thurian { **ηaj** | **tà:ηhà:k** }
 FOC_{INFO} | FOC_{CONT} 3 eat durian FOC_{INFO} | FOC_{CONT}
 ‘He ate the durians.’
- b. khaw kin thurian { ***ηaj** | ***tà:ηhà:k** } cha-cha { ***ηaj** | ***tà:ηhà:k** }
 3 eat durian FOC_{INFO} | FOC_{CONT} slow-slow FOC_{INFO} | FOC_{CONT}
 thii-ban { ***ηaj** | ***tà:ηhà:k** } muawaanii { **ηaj** | **tà:ηhà:k** }
 at-house FOC_{INFO} | FOC_{CONT} yesterday FOC_{INFO} | FOC_{CONT}
 ‘He ate durians slowly at his house yesterday.’

3.1.3 Structural height

- All the three focus particles occur above the subject and take scope over the TP. Evidence comes from scope facts and the ability to license an interrogative/indefinite reading.
- Given that **lâ** is compatible with interrogative sentences and **ηaj** and **tà:ηhà:k** are compatible with non-interrogative sentences, we can derive the two following predictions:
 - The subject wh-phrases like ‘who’ and ‘what’ (at Spec, TP) yields unambiguously interrogative reading when they are under the scope of **lâ**.
 - The subject wh-phrases yield unambiguously indefinite reading when they are under the scope of **ηaj** and **tà:ηhà:k**.

- (7) a. *khraj maj kin ?araj lâ*
 who NEG eat what FOC_{QUES}
 (i): 'Who doesn't eat what?'
 (ii): 'Who doesn't eat anything?'
 (iii): ≠ 'Anyone/someone didn't eat anything.'
- b. *khraj maj kin ?araj { ɲaj | tà:ɲhà:k }*
 who NEG eat what FOC_{INFO} | FOC_{CONT}
 (i): 'Anyone/someone didn't eat anything.'
 (ii) ≠ 'Who didn't eat anything?'
 (iii): ≠ 'What didn't someone eat?'
 (iv): ≠ 'Who didn't eat what?'

3.2.3 Focus ambiguity

- The sentence-final focus particles yield scope ambiguity of focalization (see Assmann et al. 2023 for focus syncretism).

- (9) Q1: 'Who is eating sashimi?'
 Q2: 'What is he eating?'
 Q3: 'What is he doing with sashimi?'
 Q4: 'What is he doing?'
 Q5: 'What is happening?'
- A: *khaw kamlang kin plaa-dip ɲaj*
 3 PROG eat fish-raw FOC_{INFO}
 'He is eating sashimi.'

The A's utterance in (9) can be used to answer the wh-questions: the subject, the object, the narrow verb, the VP, and the clausal focus, as in (Q1-Q5), respectively.

- The same effect is seen in the contrastive particle below.

- (10) A1: 'You are eating sashimi.' (subject focus)
 A2: 'He is eating unagi.' (object focus)
 A3: 'He is swallowing sashimi.' (narrow verb focus)
 A4: 'He is swallowing unagi.' (VP focus)
 A4: 'He used to eat sashimi.' (Aspect focus)
 A5: 'He used to swallow unagi.' (Predicate focus)
 A6: 'You will swallow unagi.' (Clausal focus)
- B: *khaw kamlang kin plaa-dip tà:ɲhà:k*
 3 PROG eat fish-raw FOC_{CONT}
 'He is eating sashimi.'

- The final-sentence focus particle can focalize multiple constituents in the same/different clauses.

- (11) raw khit waa khaw kamlang kin kuatiew **tà:nhà:k**
 1 think that 3 PROG eat noodle FOC_{CONT}
 (i): 'We think he is eating **noodle**.'
 (ii): 'We think he is eating noodle.'
 (iii): 'We think he is eating **noodle**.'

- The focus particles are structurally very high (even above the subject of the matrix clause).

- (12) a. khraj khit waa nakien maj ?aan ?araj { **ngaj | tanghak** }
 who think that student NEG read what FOC_{INFO} | FOC_{CONT}
 (i): 'Someone thought that the students didn't read anything.'
 (ii): ≠ 'Who thought that the students didn't read anything?'
 b. *nakrien-kii-khon bok khun waa khaw kamlang
 student-how.many-CL tell 2 that 3 PROG
 ?aan kaatoon { **ngaj | tanghak** }
 read comic FOC_{INFO} | FOC_{CONT}
 (Int.) 'How many students told you that they are reading **comic books**?'
 If they were attached to the complement clause, we would derive an interrogative reading of the subject wh-phrase (12a) and we predict that (12b) is grammatical.

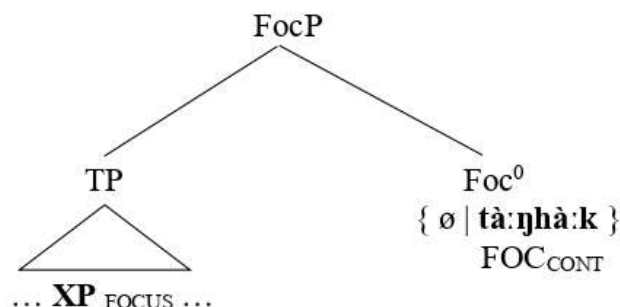
3.1.4 Embeddability

- lâ**, **ngaj** and **tà:nhà:k** can occur in the matrix and embedded clauses.

- (13) a. khaw tham waa nakrien maj chop wichaa-naj **lâ**
 3 ask that student NEG like subject-which FOC_{QUES}
 b. khaw tham waa wichaa-naj **lâ** nakrien maj chop
 3 ask that subject-which FOC_{QUES} student NEG like
 (a-b): 'He asked which subject the students didn't like.'
 (14) a. khaw khit waa nakrien maj chop fisik { **ngaj | tà:nhà:k** }
 3 think that student NEG like Physics FOC_{INFO} | FOC_{CONT}
 b. khaw khit waa fisik { **ngaj | tà:nhà:k** } nakrien maj chop
 3 think that Physics FOC_{INFO} | FOC_{CONT} student NEG like
 (a-b): 'He thought the student didn't like **Physics**.'

3.1.4 The structure of in-situ focus

(15)



- The in-situ focus particles project head-finality projection of FocP, given that they are sensitive to clause-type and show rigid word order.
- Based on indefinite licensing of the subject wh-phrases, I postulate that the in-situ focus particles are merged as higher than the subject of the matrix clause.
- The fact that the in-situ focus structures are island-insensitive strongly indicates that the in-situ focus structures do not involve overt/covert A'-movement.

3.2 The politeness particles

- The Thai politeness particles are strongly associated with the speaker – *kháp* for a male speaker and *khá/khâ* for a female speaker.
- Uttered by a speaker, these particles convey politeness or formality toward an addressee see e.g., Cooke 1989: 9, Peyasantiwong 1979: 32 ff., McCready 2019 chap. 4, Iwasaki & Inkapirom 2005: 179-180, *inter alia*.

- (16)
- | | | | | | | |
|----|------------------------------------|---------|------|--------|-----|---|
| a. | khaw | kamlang | maa | haa | raw | |
| | 3 | PROG | come | toward | 1 | |
| | 'He is coming to see us' | | | | | |
| | | | | | | |
| b. | khaw | kamlang | maa | haa | raw | { <i>kháp</i> <i>khâ</i> } |
| | 3 | PROG | come | toward | 1 | POL _{MAS} POL _{FEM} |
| | 'He is coming to see us (polite).' | | | | | |

(16a-b) yield the same truth-value proposition, but one crucial distinction is that (b) but not (a) carries the politeness of the utterance to the addressee.

Only (16b) but not (16a) is felicitous with the situational contexts forcing politeness and formality e.g., in which the speaker is younger or socially inferior to the addressee.

3.2.1 Distribution

- The politeness particles generally occur at the rightmost position of the sentences.
- Neither can they occur at the initial-clausal position on their own (0 nor they occur at any medial-position of the sentence).

- (17) a. { *khâ | *khráp } khaw kamlang kin itim { khâ | khráp }
POL_{FEM} | POL_{MAS} 3 PROG eat ice cream POL_{FEM} | POL_{MAS}
- b. khaw { *khâ | *khráp } kamlang { *khâ | *khráp }
3 POL_{MAS} PROG POL_{FEM} | POL_{MAS}
kin { *khâ | *khráp } itim { khâ | khráp }
eat POL_{FEM} | POL_{MAS} ice cream POL_{FEM} | POL_{MAS}
- (a-b): 'He is eating ice cream (polite).'

3.2.2 Insensitivity to clause types

- The politeness particles are compatible with all the clause types e.g., declarative, interrogative, and imperative clauses.
- They obligatorily follow the other discourse particles such as imperative, interrogative, and focus particles cf. Peyasantiwong 1981: 199-203.

- (18) a. khun ?aan nangsuu { si khráp | *khráp si }
2 read book IMP POL_{MAS} POL_{MAS} IMP
'Please read the book.'
- b. khun ?aan nangsuu { rii-maj khráp | *khráp rii-maj }
2 read book Q POL_{MAS} POL_{MAS} Q
'Do you read the book?'
- c. khun ?aan nangsuu { tà:nhà:k khâ | *khâ tà:nhà:k }
2 read book FOC POL_{FEM} POL_{FEM} FOC
'You read **the book** (not a newspaper).'

The fact that the politeness particle strictly follows the other discourse particle suggests that it occurs above the other particles.

3.2.3 Distinction of interrogative/non-interrogative sentences

- **khá** (with a high tone) and **khâ** (with a rise-fall tone) disambiguate between interrogative and non-interrogative clauses.
- The **khá**-particle is compatible with the interrogative sentences, but the **khâ**-particle is compatible with non-interrogative sentences (19).

- (19) a. khaw maj kin ?araj
3 NEG eat what
(i): 'What didn't he eat?'
(ii): 'He didn't eat **anything**.'

b. khaw maj kin ?araj **khá**
 3 NEG eat what POL_{FEM}

(i) 'What didn't he eat?'

(ii) ≠ 'He didn't eat anything.'

c. khaw maj kin ?araj **khâ**
 3 NEG eat what POL_{FEM}

(i) ≠ 'What didn't he eat?'

(ii) 'He didn't eat anything.'

We always derive an interrogative reading of the sentences in which **khá** co-occurs with wh-phrases whereas we derive an indefinite reading of the sentences in which **khâ** co-occurs with wh-phrases.

3.2.4 Clause-boundary breaker

- Despite occurring clause-finally, the politeness particles appear to intervene the VP constituents in the same clause.
- Their medial-clause occurrence serves to break a sentential boundary. Two pieces of evidence comes from scope facts and the loss of idiomatic reading.

- (20) a. khaw kin khaaw ?aan nangsuu **khâ**
 3 eat rice read book POL_{FEM}
 (i) 'He ate rice. He read books (polite).'
 (ii) 'He ate rice and read books (polite).'
- b. khaw kin khaaw **khâ** ?aan nangsuu
 3 eat rice POL_{FEM} read book
 (i) 'He ate rice (polite). He read books.'
 (ii) ≠ 'He ate rice and read books (polite)'

(20a) is structurally ambiguous.

- One reading comes from the fact that (a) consists of the two separate clauses. The second conjunct is potentially derived from a subject drop.
- The other reading is derived from the co-ordinate VP in the single clause in which **khâ** occurs above the subject.

(20b) is unambiguous with only the first reading being available.

- Another argument comes from the loss of idiomatic reading. The insertion of **khâ** breaks clausality in (21b).

- (21) a. khaw [VP khii cháan càp tákkàtɛɛn] **khâ**
 3 ride elephant catch grasshopper POL_{FEM}
 ✓ Literal reading: 'He rode an elephant to catch a grasshopper.'
 X Idiomatic reading: 'He TOOK A SLEDGEHAMMER TO CRACK A WALNUT.'

b. khaw khii cháan **khâ** càp tákkàtɛɛn
 3 ride elephant POL_{FEM} catch grasshopper
 ✓ Literal reading: ‘He rode an elephant to catch a grasshopper.’
 X Idiomatic reading: ‘He TOOK A SLEDGEHAMMER TO CRACK A WALNUT.’

3.2.5 Root phenomena

- Unlike the focus particles, the politeness particles are restricted to the root phenomena cf. Miyagawa 2022.
- The key argument that supports the root phenomena of the politeness particles comes from the matching effect between the gender of the speaker and the form of the politeness particle.

(22) [Context: A (a male manager) is talking to B (his female colleague) about the female client’s parcel delivery]

A: phuying-khon-nan tham waa patsadu maa song
 woman-CL-that ask that parcel come deliver
 kii-mong { **kháp** | ***khâ** }
 what time POL_{MAS} POL_{FEM}
 ‘That woman asked what time the parcel was delivered.’

B: *pro* maa tangtee haa-mong { ***kháp** | **khâ** }
 come since five-o’clock POL_{MAS} POL_{FEM}
 ‘It arrived at 5 o’clock.’

- In (A), **kháp** clearly corresponds to the gender of the speaker who is a male manager. It doesn’t agree with the subject of the matrix clause ‘that woman’ and the subject of the embedded complement clause ‘the parcel’. It isn’t associated with the female addressee.
- In (B), the politeness particle is obligatorily associated with the gender of the speaker who utters (B)
- The particles are only associated with the speaker and they project the functional head of the Speaker Projection cf. Miyagawa 2022.

3.2.6 The ability to surface as verb-echo answer

- Both masculine and feminine politeness particles can surface as a remnant to yes-no questions.

(24) [Context: a female teacher is talking to parents at a school meeting]

Q: nakrien tham kaanbaan maj **khá**
 student do homework Q POL_{FEM}
 ‘Did the student (your child) do homework?’

A1: { **khâ** | **kháp** }
 POL_{FEM} POL_{MAS}

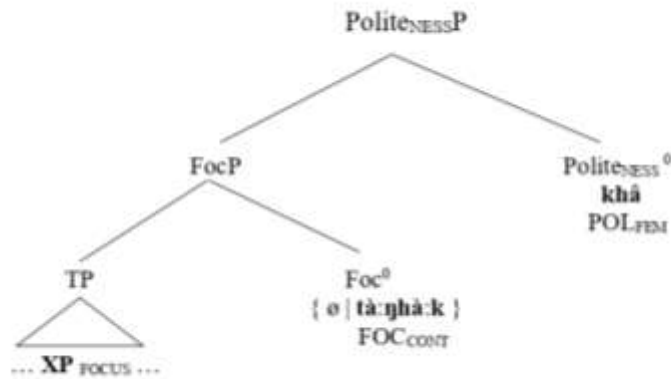
A2: #tham
 do

A3: tham { **khâ** | **kháp** }
 do POL_{FEM} POL_{MAS}
 (A1-A3): ‘Yes, s/he did (polite).’

- In (A1), the politeness particles project the highest functional head which carries a verbal feature cf. Laka 1984.
- In (A2), the intervening head **khâ/kháp** blocks the verb head to the head of Polarity Phrase under Head Movement Constraint (HMC) (Travis 1984).
- In (A3), the verb head *tham* ‘do’ undergoes successive-cyclic head-movement to the higher head of Politeness Phrase to form a complex head *tham+khâ/kháp* before landing at the head of Polarity Phrase, which is followed by PF-deletion of its complement.

3.2.7 The structure of politeness projection

(25)



4 Whether ex-situ or in-situ focus feed fragments

Distributional facts:

- Matrix contrastive fragments and in-situ and ex-situ focus obligatorily employ pitch accent or an overt focus particle with **the politeness particle being optional**.
- Embedded fragments and in-situ and ex-situ focus obligatorily employ pitch accent or an overt focus particle with **the politeness particle being banned**.

4.1 Matrix fragment

(26) A: dèkdèk kamlang kin màmûan
 children PROG eat mango
 ‘The children are eating the mango.’

B1: phakchi **tà:ŋhà:k**
 coriander FOC_{CONT}

B2: phakchi **tà:ŋhà:k** **khâ**
 coriander FOC_{CONT} POL_{FEM}

B3: phakchi
 coriander

B4: phakchi **khâ**
 coriander POL_{FEM}

(B1-B4): ‘It’s the coriander <that the children are eating>.’

(27) In-situ focus

a.	#dekdek children	kamlang PROG	kin eat	phakchi coriander		
b.	#dekdek children	kamlang PROG	kin eat	phakchi coriander	khâ POL	
c.	dekdek children	kamlang PROG	kin eat	<u>phakchi</u> coriander		
d.	dekdek children	kamlang PROG	kin eat	<u>phakchi</u> coriander	khâ POL	
e.	dekdek children	kamlang PROG	kin eat	phakchi coriander	tà:ŋhà:k FOC	
f.	dekdek children	kamlang PROG	kin eat	phakchi coriander	tà:ŋhà:k FOC	khâ POL

‘The children are eating the coriander.’

(28) Ex-situ focus

a.	*phakchi coriander	dekdek children	kamlang PROG	kin eat		
b.	#phakchi coriander	khâ POL	dekdek children	kamlang PROG	kin eat	
c.	<u>phakchi</u> coriander	dekdek children	kamlang PROG	kin eat		
d.	<u>phakchi</u> coriander	khâ POL	dekdek children	kamlang PROG	kin eat	
e.	phakchi coriander	tà:ŋhà:k FOC	dekdek children	kamlang PROG	kin eat	

- f. phakchi **tà:ŋhà:k** **khâ** dekdek kamlang kin
 coriander FOC POL children PROG eat
 (a-f): 'The coriander, the children are eating.'

The utterance of (a-b) are infelicitous with the preceding contexts when there is no pitch accent nor focus particle.

4.2 Embedded fragment

- (29) A: khaw khit waa dekdek maj kin phonlamaj
 3 think that children NEG eat fruit
 'He thinks the children don't eat the fruits.'
- B: khaw khit waa { phakchi **tà:ŋhà:k** | *phakchi* | #phakchi }
 3 think that coriander FOC coriander coriander
 'He thinks the children don't eat **the coriander**.'

- (30) khaw khit waa
 3 think that
 'He thinks...'

- a. phakchi **tà:ŋhà:k** dekdek maj kin
 coriander FOC children NEG eat
- b. *phakchi* dekdek maj kin
 coriander children NEG eat
- c. *phakchi dekdek maj kin
 coriander children NEG eat

- (31) khaw khit waa
 3 think that
 'He thinks...'

- a. dekdek maj kin phak **tà:ŋhà:k**
 children NEG eat coriander FOC
- b. dekdek maj kin *phak*
 children NEG eat coriander
- c. #dekdek maj kin phak
 children NEG eat coriander

- (a-c): 'the children don't eat **the coriander**.'

5 F-Movement followed by E-Extension

Claim: Contrastive fragments involve two syntactic operations: F-movement followed by E-Extension.

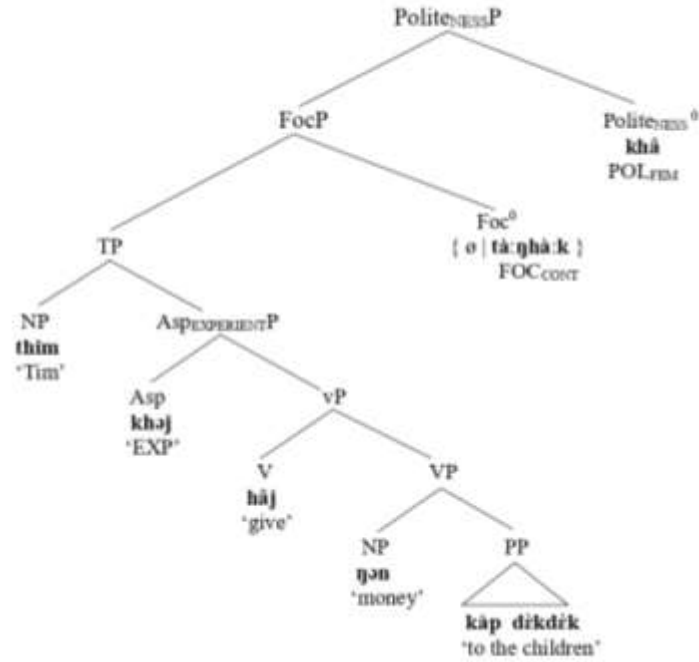
5.1 F-Movement

- Ex-situ and in-situ focus is derivationally related via head-movement. The in-situ focus feeds the ex-situ focus.
- We outline the three distinctions between in-situ and ex-situ focus.
 - 1) *The in-situ focus is head-finality projection whereas the ex-situ focus is head-initial projection.* Empirical evidence comes from the data in Sect. 2..
 - 2) *The ex-situ focus head carries the strong, uninterpretable [Foc] feature that triggers overt A'-movement to Spec, FocP, which the in-situ focus head does not.* Empirical motivation comes from the fact that ex-situ focus but not in-situ focus is island-sensitive.
 - 3) *The ex-situ focus particle projects a higher functional head of FocP than the in-situ focus particle.* Empirical motivation comes from (im)possible word order.

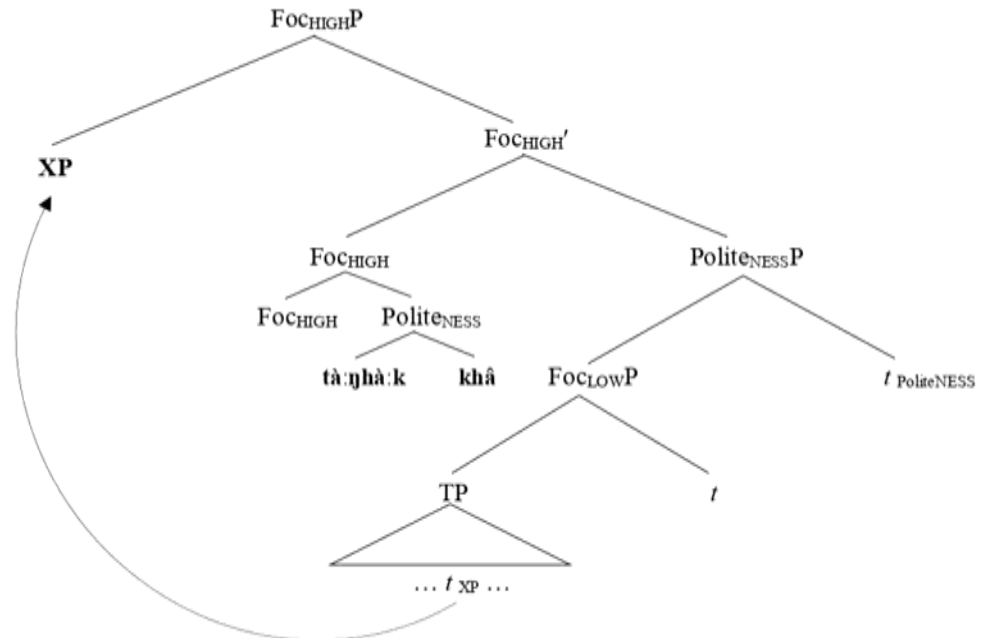
- (32) A: thim khey haj ngen kap dekdek **tà:nhà:k** **khâ**
 Tim EXP give money to children FOC POL_{FEM}
 'Tim gave **money** to him.'
- B: thim khey haj ngen kap dekdek **khâ**
 Tim EXP give money to children POL_{FEM}
 'Tim gave **money** to him.'

The following diagram illustrates the structure of (32)

(33) a.



b.



- *tà:nhà:k* undergoes successive-cyclic head-movement to the head of Politeness Phrase to form a complex head *tà:nhà:k-khâ* before they head-move to the higher head (High FocP) to obey Head Movement Constraint (Travis 1984).

- This high head (ex-situ focus head) carries the feature bundles of focus features that needs to be checked, which thus triggers A'-movement of the focus constituent.

Empirical evidence to support the successive-cyclic head-movement comes from the fact that the politeness particles are not preferentially stranded at a clause-final position.

(34) a. *ngen **tà:nhà:k** thim khey haj ngen kap dekdek **khâ**
 money FOC_{CONT} Tim EXP give money to children POL_{FEM}

b. ngen **tà:nhà:k** **khâ** thim khey haj ngen kap dekdek
 money FOC_{CONT} POL_{FEM} Tim EXP give money to children

(a-b): 'Tim gave **money** to the children (polite).'

(35) a. ? ngen thim khey haj ngen kap dekdek
 money Tim EXP give money to children

b. ngen **khâ** thim khey haj ngen kap dekdek
 money POL_{FEM} Tim EXP give money to children

(a-b): 'Tim gave **money** to the children (polite).'

Empirical evidence to support the presence of complex head comes from the following (im)possible stack of discourse particles.

(37) ngen { **tà:nhà:k** **khâ** | ***khâ** **tà:nhà:k** } thim khey haj kap dekdek
 money FOC_{CONT} POL_{FEM} POL_{FEM} FOC_{CONT} Tim EXP give to children
 'Tim gave **money** to the children (polite).'

5.2 E-Extension

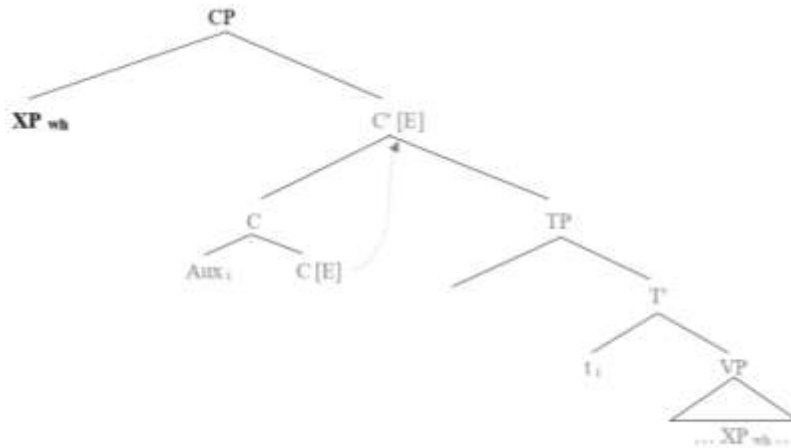
Claim: Ellipsis/E-extension can be licensed from the two distinct head, either the trace of the moving/raised head or the targeted head.

- Benbaji-Elhadad and Pesetsky (henceforth, BE&P 2024) propose the system of **E-Extension** to account for sluicing and VPE.
- On this view, sluicing is derived from wh-movement followed by PF-deletion – see e.g., Ross 1969, Lobeck 1995, Merchant 2001, Van Craenenbroeck & Liptak 2013.

(34) E-Extension

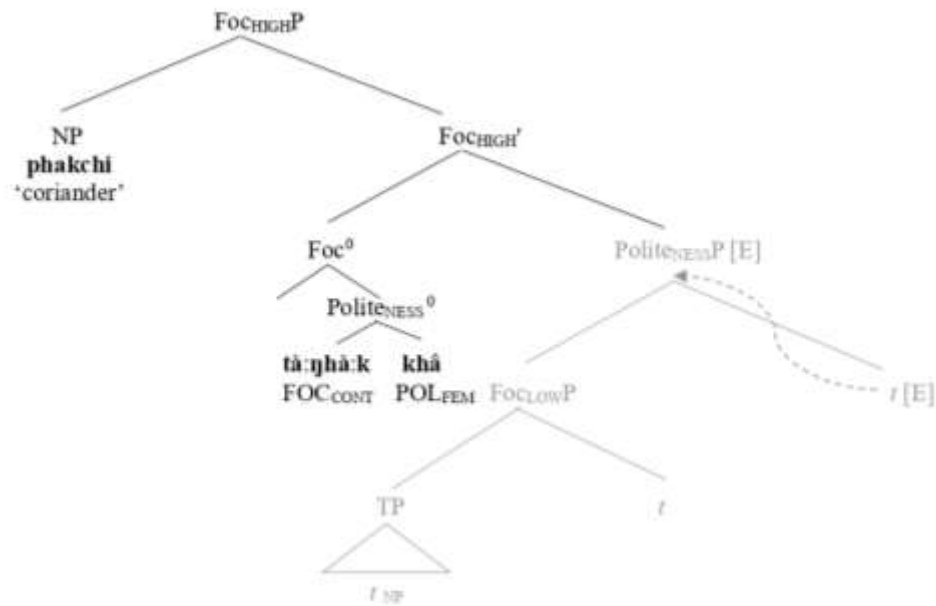
Optional: If H⁰ bears E, copy E to the smallest phrasal node containing H and its selected complement.

(35)



- **E extension** obligatorily silences the three elements: (i) **the complementizer**, (ii) **any head that moves to the C head**, and (iii) **the complement of C**.
- Modifying the system of E-Extension, I propose a machinery of ellipsis that operates E-Extension from **the two distinct heads of low and high Focus Projections**.

(36)



- The structure of (36) derives us the following pattern of fragments with the survival of discourse particles.

(37) a. phakchi **tà:nhà:k**
 durian FOC_{CONT}

(repeated from B1 in 26)

b. phakchi **tà:nhà:k** **khâ** (repeated from B2 in 26)
 durian FOC_{CONT} POL_{FEM}

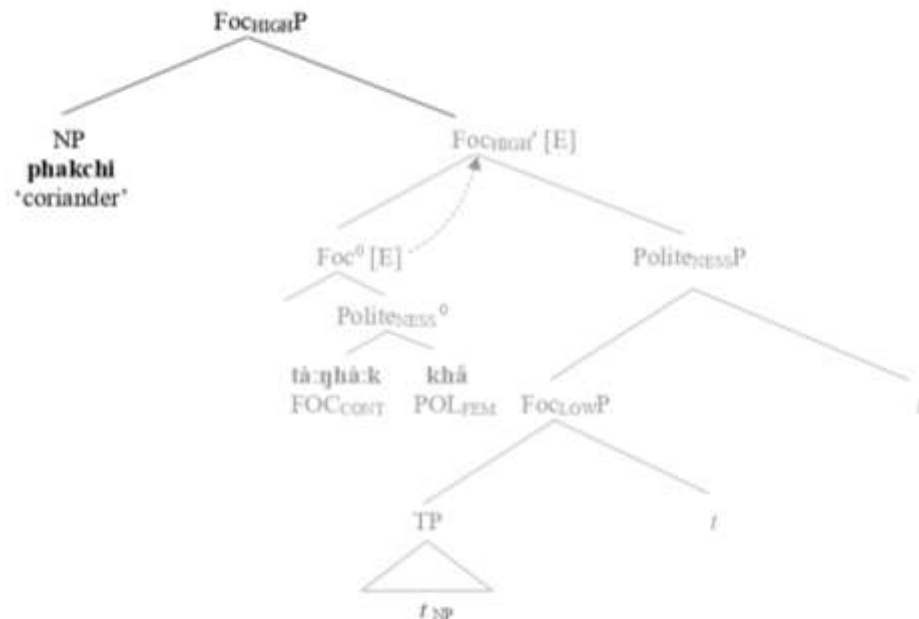
c. *phakchi* **khâ** (repeated from B4 in 26)
 durian POL_{FEM}

(a-c): 'It's the coriander.'

d. khaw khit waa phakchi **tà:nhà:k** (repeated from B in 29)
 3 think that coriander FOC_{CONT}
 'He thinks the children don't eat **the coriander**.'

- If the targeted head of FocP (C head bears E and this [E] undergoes E-Extension, we derive the pattern of fragment with the suicidal of the discourse particle.

(38)



(39) a. *phakchi* (repeated from (29b))
 coriander
 'It's **the coriander**.'

b. khaw khit waa *phakchi* (repeated from (29b))
 3 think that coriander
 'He thinks the children don't eat **the coriander**.'

Upshot:

- The proposed system immediately captures the distribution of the focus and politeness in fragments.
 - If **the trace of moving/raised head** bears E feature and it undergoes E-Extension, we derive the pattern of fragments with **the overt presence of politeness and focus particles**.
 - If **the targeted head** bears E feature and it undergoes E-Extension, we derive the pattern of fragments bearing **a pitch accent** or **without the politeness and focus particles**.
- It also accounts for the distribution of *ah* in Singlish sluicing, *-yo* in Korean fragments and the absence of *-kah* and *-yang* in Bahasa Indonesian sluicing.

6. The cross-linguistic distribution of E-Extension

Main claims:

- (i) The final-sentence **áh** are head-finality projection. The **áh**-particle and the *wh*-phrase do not form a constituent/single syntactic unit cf. Yeo's 2010 constituent-based analysis
- (ii) My analysis outperforms Yeo's 2010 account regarding the distribution and scope facts of **áh**.

6.1 *Wh-movement and wh-in-situ questions with áh in CSE*

- Colloquial Singaporean English (CSE, also known as *Singlish*) is a contact language between Standard English and local varieties of Chinese, Hokkien, Malay, and Tamil.
- Singlish is a **wh-movement language** which employs **wh-in-situ strategy** as an option e.g., Kim et al. 2009, Yeon 2010, Sato 2013, Sato & Ngui 2017, Qizhuong 2016.¹ The data comes from my own elicitation (unless mentioned).

- 40) a. **What** you think she buying? (wh-movement)
b. You think she buying **what**? (wh-in-situ)
(a-b): 'What do you think she is buying?'
- 41) a. ***What** John like [_{DP} the man that think Mary eat *t*]? (cf. Sato & Ngui 2017: 11)
b. John like [_{DP} the man that think Mary eat **what**]?
(a-b): 'What is the thing X such that John likes the man who thinks Mary eats X?'

(40a) but not (40b) is island-sensitive; therefore, (40a) involves *wh*-movement while (40b) is a genuine in-situ structure.

- Interestingly, Singlish permits the question particle **-áh** (with a high tone) to occur in *wh*-in-situ and *wh*-movement below.

- (42) a. You eat **what**? (wh-in-situ baseline in Standard English)
b. You eat **what áh**?
(a-b): 'What did you eat?'

¹ Thank to Nick Huang and Wenkai Tay for providing the judgement and data.

- (43) a. **What** did you eat? (wh-movement baseline in Standard English)
 b. **What** you eat **áh**?
 c. **What** did you eat **áh**?
 d. **What** **áh**, you eat?
 e. **What** **áh** did you eat?
 (a-e): 'What did you eat?'

Key properties

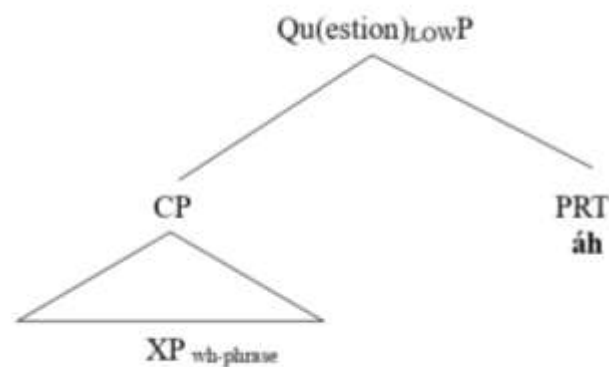
- Function of **áh**: the wh-questions with **áh** tends to more require a response from the addressee than those without the **áh**-particle cf. Lim 2007.
- **áh** (with a high tone) but not **àh** (with a low tone) is compatible with wh-interrogatives as in (44)
- The **áh**-particle can turn declarative sentences into yes-no interrogative as in (45).

- (44) a. You buy what { **áh** | ***àh** } ? (Yeo 2010: 66)
 b. What you buy { **áh** | ***àh** } ?
 (a-b) 'What did you buy?'

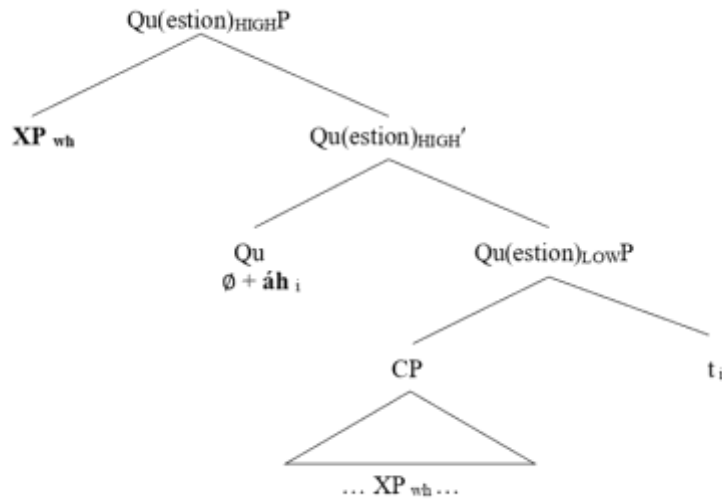
- (45) a. The food here very good **àh** ? (Yeo 2010: 67 ex. 37)
 'The food here is very good, isn't it?'
 b. Very good **áh**, the food here?
 c. Very good, the food here **àh**?
 (b-c): 'Very good isn't it, the food here?'

- I extending the analysis proposed in Sect. 5 to wh-interrogatives with **áh** in Singlish.

- (46) a. In-situ/wh-in-situ structure



b. Ex-situ/wh-movement structure



1. Island effect

- Wh-movement questions with **áh** at the left periphery show island violation, but wh-in-situ with the final-sentence **áh** does not.

(47) Complex NP Island

- *What **áh** the professor admire [_{DP} the student [_{CP} that give *t* to the monkey]] ?
 - The professor admire [_{DP} the student [_{CP} that give what to the monkey]] **áh**?
- (a-b): 'What is the thing X such that the professor admired the student who gave X to the monkey?'

(48) Adjunct Island

- *What **áh** John broke [_{Adjunct} because he buy *t*]?
 - John broke [_{Adjunct} because he buy what] **áh**?
- (a-b): 'What was the thing X such that John was broke because he bought X?'

(47a, 48a) involves operator/wh-movement dependencies while (47b, 48b) involve in-situ structure.

2. The presence of an internal pause

- Wh-movement questions with **áh** at the left periphery must be followed by an internal pause (shown by (,)) as in (c). Those without **áh** and with final-sentence **áh** do not need an internal pause, as in (a-b).

- (49)
- What** (did) you buy
 - What** (did) you buy **áh**?
 - What áh**, (did) you buy?

- The mandatory presence of internal pause suggests that the wh-movement with **áh** (c) is syntactically different from the wh-movement without **áh** and with final-sentence **áh**.

3. Distribution

- **áh** generally occurs at the clause-final position of the wh-interrogatives.

- (50) a. John gave what to the student **áh**?
b. *John gave what **áh** to the student?
(a-b): 'What did John give to the student?'

- (51) a. John always do what on Sunday **áh**? (cf. Yeo 2010: 94)
b. *John always do what **áh** on Sunday?
(a-b): 'What does John always do on Sunday?'

My informant preferred (a) over (b). According to the same informant, (b) is only acceptable/natural with the reading that the PP-object 'to the student' (50) and the temporal adjunct 'on Sunday' (51) serve as an afterthought constituent. They are possibly derived from bi/multiple clausal structure.

- **áh** cannot occur inside the islands.

- (52) a. Adjunct Island
John was upset [_{Adjunct} because Mary invited who (***áh**) to the party] *()?
'For which person x, John was upset because Mary invited x to the party?'
- b. Complex NP Island
Mary admire [_{DP} the man who speak which language (***áh**) fluently] *(**áh**)?
'Which language X is such that Mary admires the man who speaks X fluently?'

The particle cannot immediately follow wh-phrases so the particle doesn't a constituent with wh-phrases.

4. Scope effects

- Evidence to show that **áh** is as structurally high as the matrix clause comes from the selectional requirements of the embedding predicates (Grimsaw 1979) and scope facts.

Just similar as Standard English, in Singlish ...

- 'wonder' and 'want to know' takes only interrogative complement clauses.
- 'think' takes only declarative complement clauses.

- (53) a. *John wonder they buy what **áh**.
b. *John wonder what they buy **áh**.
c. *John wonder what **áh** they buy.
(a-c): 'John wonder what they bought.'

- (54) a. You think I buy what **áh**?
b. ?You think what I buy **áh**?
c. What **áh** you think I buy?
d. What you think I buy **áh**?
(a-d): 'What do you think I bought?'

- 'know' takes both interrogative and declarative complement clauses.

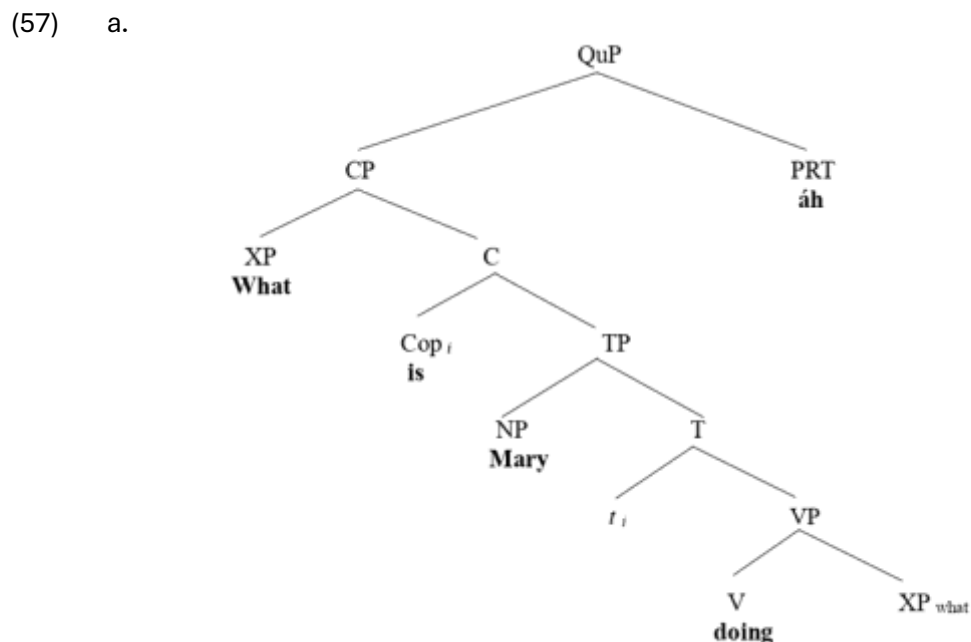
- (55) a. You know they buy what **áh**?
 Embedded scope: ≠ 'You know what they bought.'
 Matrix scope: 'What do you know they bought?'
- b. You know what they buy **áh**?
 Embedded scope: ≠ 'You know what they bought.'
 Matrix scope: ?'What do you know they bought?'
- c. What you know what they buy **áh**?
 Embedded scope: ≠ 'You know what they bought.'
 Matrix scope: 'What do you know they bought?'

5. Blocking of Cliticization

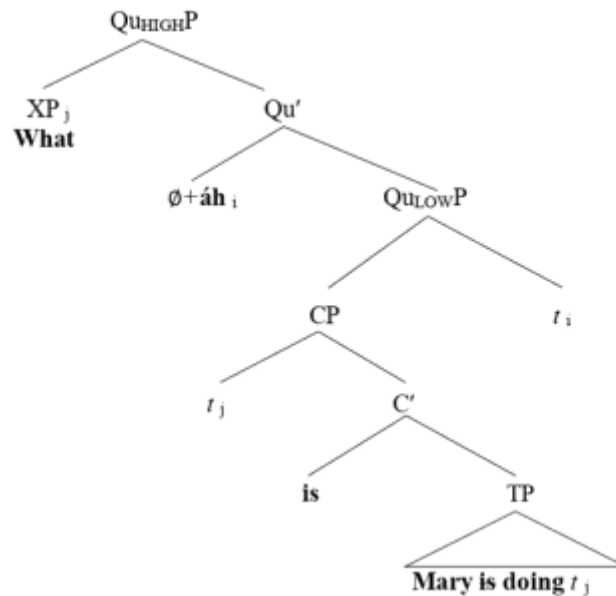
- The initial-sentence **áh** blocks cliticization of auxiliaries while the final-sentence **áh** allows cliticization of auxiliaries.

- (56) a. What's Mary doing?
 b. *What **ah**'s Mary doing?
 c. What's Mary doing **áh**?

The structure of (57) illustrates (56).



b.



The contrast of (56) tells us:

- Wh-phrases move to some higher position than Spec, TP. If they occupied Spec, TP, cliticization would be permissible (just like Standard English).
- The sentence-initial **áh** may be structurally higher than its sentence-final **áh**-counterpart.
- The trace of the moving head blocks cliticization of auxiliaries.

6.2 Singlish sluicing

Claim: Singlish sluices w/wo **áh** can be derived by A'-movement to the left periphery and E-Extension from either the moving head Q^0 or the targeted head Q^0 .

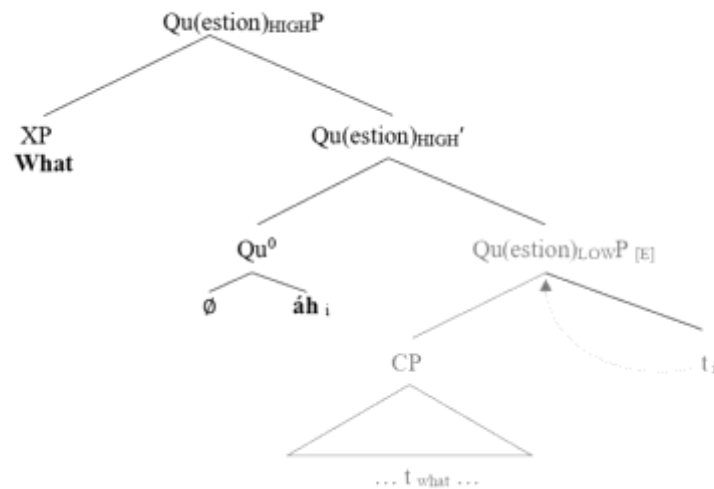
6.2.1 Matrix sluicing

- (58) A: John buy something yesterday.
 'John bought something yesterday.'
 B1: What **áh**?
 B2: What?
 'What <did John buy yesterday>?'

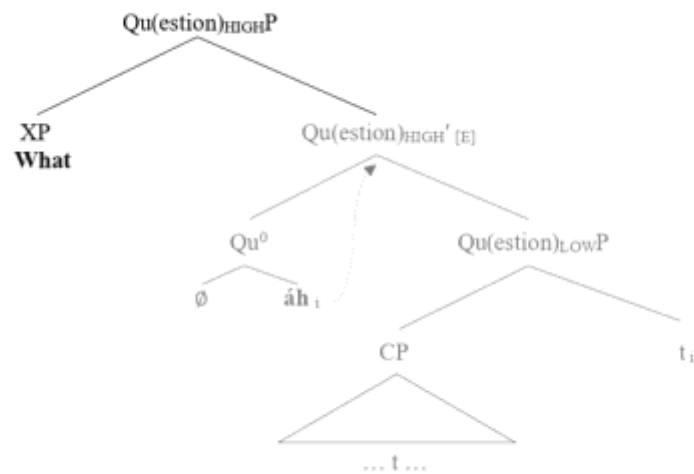
- (59) Non-elliptical variants of matrix sluicing in (58)
- John buy **what áh**?
 - What** John buy **áh**?
 - What áh**, John buy?
 - What áh** did John buy?

Assuming that Singlish sluicing is fed by wh-movement, our machinery of ellipsis operates E-Extension from the trace of the head Qu^0 :

- (60) a. The survival of **áh** in matrix sluicing (B1)



- b. The suicidal of **áh** in matrix sluicing (B2)



6.2.2 Embedded sluicing

- (61) Mary buy something yesterday. John wonder what (***áh**).
'Mary bought something yesterday. John wonders what.'

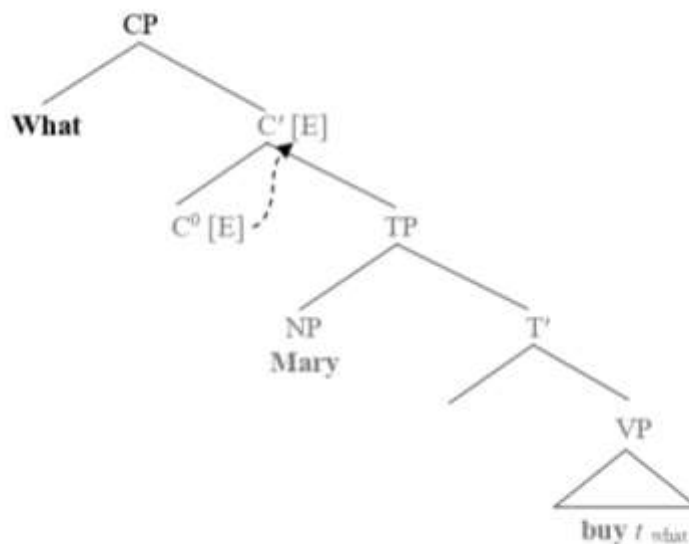
Non-elliptical variant of embedded sluicing in (61)

- (62) a. *John wonder what **áh** she buy.
a. *John wonder what she buy **áh**.
b. *John wonder she buy what **áh**.
(a-c): 'John wonders what.'

- (63) a. John wonder what she buy.
 b. John wonder she buy what.
 (a-b): 'John wonders what she bought.'

- Given that **áh** is incompatible with non-elliptical variants of (62), I postulate that the targeted C^0 bears [E] which undergoes E-Extension and silences itself and its selected complement.

(64)



7 Conclusion and implications

- Those discourse particles project **head-finality projections** due to their headedness properties
- Either the moving head or the targeted head** bears [E]-feature which licenses ellipsis. Only the final landing site can operate E-Extension cf. BE&P (2024).
- We derive the unification that the size of the E-site is **the intermediate projection of FocP/QuP** – a view that is consistent with the previous C'-deletion approaches e.g., Merchant 2001, Thoms 2012, Landau 2020a, Benbaji-Elhadad & Pesetsky 2024.
- A theoretical consequence that follows from this proposed analysis is **a three-way parameterization of licensing clausal ellipsis**.

Parameter settings of E-Extension

E-Extension from either **the moving head** or **its trace**:

Thai, Singlish

E-Extension from **the trace of the moving head**:

Korean

E-Extension from the **targeted head**:

Bahasa Indonesian, English

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