

Focus Intervention Effects of verb movement in Cantonese

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Introduction

- The empirical goal of this talk is to report a novel type of Focus Intervention Effects (FIE)
- Typically, FIE are observed with configurations relating to *wh*-expressions (Huang 1982; Soh 2005; Kim 2006; Yang 2008, 2012; Li and Cheung 2012, 2015)
- A *wh*-expression cannot be preceded by a focused element

(1) Focus Intervention Effects in *wh*-questions

illustrated with Cantonese

a. *淨係阿明買咗邊本書？

*Zinghai [Aaming]_{Focus} maai-zo **bin-bun syu**?
only Aaming buy-PERF which-CL book

Int.: 'Which book is such that only Aaming bought it?'

b. 邊本書淨係阿明買咗？

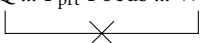
Bin-bun syu jinghai [Aaming]_{Focus} maai-zo?
what only Aaming buy-PERF


Int.: 'Which book is such that only Aaming bought it?'

Introduction

- Assuming *wh*-questions involve a licensing (null) question operator Q,


(2) FIE in *wh*-questions


a. *Q ... F_{prt} Focus ... WH


b.^{OK} Q ... WH ... F_{prt} Focus


- A similar pattern is observed with **verb doubling constructions** (cf. Cheng and Vicente 2013)

(3) FIE in verb doubling constructions

a. *V ... F_{prt} Focus ... V


b.^{OK} V ... V ... F_{prt} Focus


- In addition to *wh*-dependency, FIE are also observed with verb/head dependency

Introduction

- I argue for a **head movement analysis** of verb doubling constructions
- I propose an **Agree-based account** on the FIE pattern (Chomsky 2000, 2001), in a way similar to Li and Cheung (2012)
- The proposal further captures patterns in
 - (i) right dislocation of verbs, and
 - (ii) VP fronting
- Theoretical implications:
 - (i) Syntactic approaches to FIE
 - (ii) the locality conditions on head movement

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Verb doubling constructions

- In Cantonese (and many other Chinese languages), a verb can doubly appear in its **base** position and in the **periphery** position (Cheng and Vicente 2013).

- (4) **V S V O**: Contrastive verbal focus (cf. Matthews and Yip 2011)

買佢係想買呢本書，不過...

Maai keoi hai soeng **maai** ni-bun syu, batgwo ...

buy s/he COP want buy this-CL book but

'S/he wants to BUY this book (but s/he won't have time to READ it).'

- (5) *Lin*-**V S V O**: Additive verbal focus (cf. Badan 2007)

連睇佢都唔敢睇呢本書。

Lin-**tai** keoi dou m gam **tai** ni-bun syu.

even-read s/he also not dare read this-CL book

'S/he doesn't even dare to READ this book (let alone to REVIEW it).'

(i) Intervening focus associates

- These constructions become unacceptable if the subject is the associate of focus particles such as *zinghai* ‘only’, the copula *hai*, and *dak* ‘only’ (Tang 2002).

(6) *買，淨係／得佢係想買呢本書，不過...

* **Maai** zinghai/dak **keoi**_F hai soeng **maai** ni-bun syu, batgwo ...
 buy only/only s/he COP want buy that-CL book but
 Int.: ‘Only s/he wants to BUY this book, but ...’

(7) *連睇，係／得佢都唔敢睇呢本書。

* Lin-**tai** hai/dak **keoi**_F dou m gam **tai** ni-bun syu.
 even-read COP/only s/he also not dare read this-CL book
 Int.: ‘Only him/her is such that s/he doesn’t even dare to READ this book.’

(i) Intervening focus associates

- Verb doubling constructions are compatible with focused elements, if they do not intervene between the two verbs.
- E.g., if they are in the object position

(8) 買，佢係想買得一本書，不過...

Maai keoi hai **maai** dak jat-bun syu_F, batgwo ...

buy s/he COP buy only one-CL book but

'Aaming BOUGHT only one book (but it is the most valuable book).'

(9) 連睇，佢都淨係睇得一次。

Lin-**tai** keoi dou zinghai **tai** dak jat-ci_F.

even-read s/he also only read only one-CL

'Even for reading, s/he READ only once.'

- Note that focus particles like *zinghai* do not trigger FIE on their own

(ii) Intervening *wh*-expressions

- An identical pattern can be replicated with *wh*-expressions, which bear inherent focus interpretation (Rochemont 1986; Shi 1994; Kim 2006)
- When they intervene between the two verbs, the sentences are degraded

(10) *買，邊個係想買呢本書？

* **Maai** bingo_F hai soeng **maai** ni-bun syu?

buy who COP want buy that-CL book

‘Who wants to BUY this book?’

(11) *連行，邊個都行唔到十分鐘？

*Lin- **haang** bingo_F dou **haang** -m-dou sap fanzun?

even-walk who also walk-not-able ten minute

‘Who cant even WALK for ten minutes?’

(ii) Intervening *wh*-expressions

- The sentences improve if the *wh*-expressions are in the object position.

(12) 買，佢係想買乜野？

Maai keoi hai soeng **maai** **matje**_F?

buy s/he COP want buy what

'What does s/he want to buy?'

(13) 連行，阿明都行唔到幾多分鐘？

Lin- **haang** Aaming dou **haang** -m-dou **geidou fanzung**_F?

even-walk Aaming also walk-not-able how.many minute

'For how many minutes does Aaming even fail to WALK?'

Non-intervening quantificational elements

- In languages like German and Korean (Beck 1996; Beck and Kim 1997), quantificational elements may trigger intervention effects in *wh*-questions
- They do not trigger intervention effects in verb doubling constructions

(14) Non-intervening quantifiers and modals in verb doubling constructions

- a. 想，全部學生都應該係想去美國嘅。



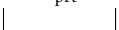
Soeng cyunbou hoksaang dou jinggoi hai **soeng** heoi Meigwok ge2.
 want every student all should cop want go US SFP
 ‘Every student probably WANTS to go to the US (but ...).’

- b. 連行，好多人都可能行唔到十分鐘。

Lin-**haang** houdou jan dou honang **haang**-m-dou sap fanzung.
 even-walk many person also possible walk-not-able ten minute
 ‘Many people cannot even WALK for ten minutes.’

Interim summary

- **Focus Intervention Effects** in verb doubling constructions

- (15) a. *V ... (F_{pvt}) Focus ... V

- b. ^{OK}V ... V ... F_{pvt} Focus

- c. ^{OK}V ... F_{pvt} ... V ... Focus


- No **Quantifier Intervention Effects**

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Proposal

- I propose an Agree-based account for FIE in verb doubling constructions (cf. Li and Cheung 2012)
 - (i) **a head movement analysis** of verb doubling constructions (Vicente 2007; Cheng and Vicente 2013, i.a.), and
 - (ii) **the minimality condition on Agree** (Chomsky 2000, 2001).
- In a nutshell, the base verb in verb doubling constructions moves to the CP periphery for **focus interpretations** (with doubling effects, see Lee (2021))
- Such movement is interrupted by intervening focused elements along its path.
- I briefly replicate the evidence for head movement in verb doubling constructions, as discussed in Cheng and Vicente (2013) and Lee (2022)
 - including Island effects, Lexical Identity Effects, and Idiom chunks

Evidence for verb movement I

- **Island Effects:** the two verbs cannot span across **syntactic islands** (Ross 1967, *et seq.*).

(16) *Adjunct islands

*睇, [喺阿明係睇完本書之後], 我先返到屋企。

* tai [hai Aaming hai tai -jyun bun syu zihau], ngo sin faan-dou ukkei.
 read at Aaming COP read-finish CL book after I first return home
 ‘As for reading, I was back after Aaming has already finished reading the book.’

(17) Complex NP islands

*連走, 我今日都聽到 [阿明走得慢過人嘅消息]

* Lin- zau ngo gamjat dou tingdou [Aaming zau -dak maan-gwo jan ge
 even-leave I today also hear Aaming leave-RES slow-than person MOD
 siusik].
 rumor

Int.: ‘Today I hear that rumor that Aaming is slower than others even in LEAVING.’

Evidence for verb movement II

- **Lexical Identity Effects:** the verb in the periphery must be lexically identical to the base verb
i.e., synonyms do not work

(18) Lexical identity, but not semantic equivalence, is crucial

- a. 查 / * check , 我係 查 過呢個人。
 { Caa / * cek } ngo hai caa -gwo ni-go jan.
 check/ check I COP check-EXP this-CL person
 'As for checking, I have checked this person.'
- b. 連 keep / * 保管 , 阿明都唔想 keep 。
- Lin- { kip / * bougun } Aaming dou m-soeng kip .
 even- keep keep Aaming also not-want keep
 'Aaming doesn't even want to KEEP (it).'

Evidence for verb movement III

- **Separability of idiomatic expressions:** an idiomatic expression must form a constituent, either in the lexicon (Jackendoff 1997) or in a local domain in the course of derivation (Marantz 1997)

(19) 潑，我係可能潑咗你冷水。不過我只係想激勵你啫。

Put ngo hai honang **put-zo** nei laang sei. Batgwo ngo zihai soeng
pour I COP possible spill-PERF you cold water but I only want
giklai nei ze1.
encourage you SFP

Idiomatic reading: 'I may have spoiled your pleasure, but I only want to encourage you.'

(20) 連吹，阿明都唔同我吹吓水。唔好話傾正經野。

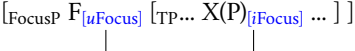
Lin-**ceoi** Aaming dou m-tung ngo **ceoi**-haa sei. M-hou waa king zingging
even-blow Aaming also not-with me blow-HAA water let.alone discuss serious
je.
thing

Idiomatic reading: 'Aaming didn't even CHIT-CHAT with me, not to mention discuss serious things.'

Implementation

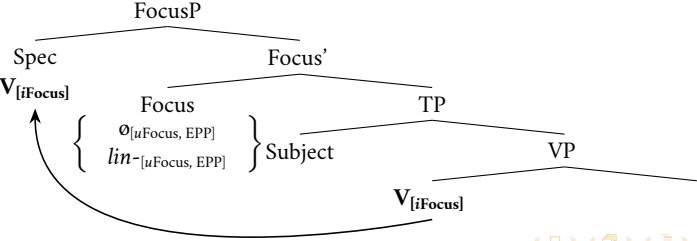
- I assume that the focus particles bear a [*uFocus*] feature, and they agree with a [*iFocus*] feature in their domain (cf. Li and Cheung 2012)

(21) Association with focus



- In verb doubling constructions, the verb bears the [*iFocus*] and moves to Spec FocusP (i.e., head-to-specifier movement, Matushansky 2006)

(22) A schematic representation of the proposed head-to-specifier movement



Implementation

- I suggest that FIE are a natural consequence of the locality condition of Agree (Chomsky 2000, 2001)
- **Agree** is subject to the locality condition of closest c-command
- Substantially, if the subject bears a [*i*Focus] feature, it blocks verb movement to FocusP, as it is closer to the Focus head

(23) Deriving FIE in verb doubling constructions

[_{FocusP} \emptyset /*lin*-_[*u*Focus] ... [_{TP} Subject_[*i*Focus] ... V_[*i*Focus] ...]]

The diagram shows a horizontal line with an arrowhead pointing left towards the Focus head. A large 'X' is drawn over the line, indicating that the movement is blocked. The arrow originates from the subject position and points to the Focus head.

- Focused elements in the object position do not induce FIE, because they are structurally lower than the verb and their [*i*Focus] feature does not interrupt verb movement

Implementation

- This explanation predicts that in a configuration like (24), a focused subject will move instead of the verb, as it is closer.

(24) [FocusP *o/lin*_[uFocus] ... [TP Subject_[iFocus] ... V_[iFocus] ...]]

- This is borne out: a *wh*-subject can be targeted by the focus head *lin*, and undergoes (string-vacuous) focus movement.

(25) 連邊個都唔睇呢本書？
 Lin- **bingo**_F dou m tai ni-bun syu?
 even-who also not read this-CL book
 ‘Even WHO didn’t read this book?’

(26) A schematic representation of (25)
 [FP *lin*-_[uF] ... [TP Subject_[iF] ... V_[iF] ...]]
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(i) On non-focus-related verb movement

- FIE arise because the focus movement of a verb is intervened by a **focus** feature
- If verb movement is triggered by (discourse) features other than focus, FIE are predicted to be absent.
- A case in point is the **right dislocation (or dislocation copying) of verbs** in Cantonese, discussed in Lee (2017) and Lai (2019)

(27) Dislocation copying of verbs

Subject ... **V** ... Object SFP **V**



- They independently suggest that the dislocated verb is interpreted as **defocused or given information**, i.e., it is not related to focus

(i) On non-focus-related verb movement

- The modal verb *hoji* ‘may’ is right-dislocated and doubled in the right periphery.

(28) 阿明可以睇書呀可以。

Aaming **hoji** tai syu aa3 **hoji**.

Aaming may read book SFP may

‘Aaming may read books.’

- However, the sentence in (29) shows that there is no FIE.

(29) a. 淨係／得阿明可以睇書咋可以。

Zinghai/dak Aaming_F **hoji** tai syu zaa3 **hoji**.

only/only Aaming may read book SFP may

‘Only Aaming may read books.’

b. 邊個可以睇書呀可以？

Bingo_F **hoji** tai syu aa3 **hoji** ?

who may read book SFP may

‘Who may read books?’

(i) On non-focus-related verb movement

- Following the leftward movement approach to right dislocation (Cheung 2009; Lee 2017; Wei and Li 2018; Lai 2019), these sentences involve a derivation step in (30)
- The counterpart of a Focus head, namely, the Defocus head (\emptyset) in the CP periphery attracts a [*i*Defocus] feature.

(30) The lack of FIE in (29):

[_{SFPP} aa3 [_{DefocusP} \emptyset _[*u*Defocus] ... [_{TP} Subject_[*i*Focus] ... V_[*i*Defocus] ...]]]

- Crucially, the focused subject does not interrupt the non-focus-related movement
- (The derivation proceeds with TP movement to Spec SFPP (not shown in (30))

(ii) On VP fronting

- The proposed analysis on FIE is not specific to head dependencies
- It is predicted that similar FIE show up in VP fronting as well, if the VP bears a similar [iFocus] feature
- To see some baseline examples of VP fronting,

(31) Examples of VP fronting in Cantonese

- a. 自己煮飯食，阿明係唔肯嘅。但佢肯幫手洗碗。
- [_{VP} **Zigei zyu faan sik**] Aaming hai m-hang Δ ge2. Daan keoi hang
 self cook rice eat Aaming COP not-willing SFP but he willing
 bongsau sai wun.
 help wash dish
- ‘Cooking on his own, Aaming is not willing to (do so). But he is willing to help wash dishes.’
- b. 連掂吓呢隻動物阿明都唔敢。
- Lin- [_{VP} **dim-haa ni-zek dungmat**] Aaming dou m-gam Δ.
 even- touch-DEL this-CL animal Aaming also not-dare
- ‘Aaming does not even dare to TOUCH THIS ANIMAL.’

(ii) On VP fronting

- These sentences become degraded if there is an intervening focused element.

(32) Focus Intervention Effects observed with verb phrases

a. *自己煮飯食，得阿明係唔肯嘅。

*[_{VP} **Zigei zyu faan sik**], dak **Aaming**_F hai m-hang Δ ge2.

self cook rice eat only Aaming COP not-willing SFP

‘Cooking on his own, only Aaming is not willing to (do so).’

b. ??連掂吓呢隻動物，我都覺得得阿明唔敢。

??Lin- [_{VP} **dim-haa ni-zek dungmat**], ngo dou gokdak dak **Aaming**

even- touch-DEL this-CL animal I also think only Aaming

m-gam Δ.

not-dare

‘I think that Aaming does not even dare to TOUCH THIS ANIMAL.’

(ii) On VP fronting

- FIE are observed with both verb movement and VP movement

(33) FIE in verb doubling constructions and VP fronting

*V/VP ... F_{prt} Focus ... V/VP



- FIE are observed with focus movement in general

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Concluding remarks

- A potential counter example (thanks to an anonymous reviewer)

(34) 睇就係得我敢睇。

Tai zau hai dak ngo gam **tai**.

read then COP only I dare read

‘Only me dare to read (it).’

- *Zau* ‘then’ signals the presence of a conditional clause, and the doubled verb may be a significantly reduced form of a conditional clause, conveying a non-contrastive topic reading (Liu 2004)

(35) No doubling effects with *zau* ‘then’

Context: in reply to the question of whether the speaker knows a lot of Chinese.

講就係，睇就唔係。

Gong zau hai. **Tai** zau m-hai. (Matthews and Yip 2011, p.88-89, adapted)

speak then be read than not-be

‘(If it is about) speaking, then yes. (If it is about) reading, then no.’

Concluding remarks

Open issues:

- On **Focus Intervention Effects**
→ Both FIE in verb doubling constructions and in *wh*-questions is syntactic by nature, rather than semantic (Li and Cheung 2012)
- On **the locality of head movement**
→ verb doubling constructions are not intervened by heads

(36) 買佢係想買呢本書，不過...

Maai keoi hai soeng **maai** ni-bun syu, batgwo ...

buy s/he COP want buy this-CL book but

‘S/he wants to BUY this book (but s/he won’t have time to READ it).’

- The Head Movement Constraint (Travis 1984) that forbids head movement skipping heads should be relaxed.

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