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The Syntax of Cantonese

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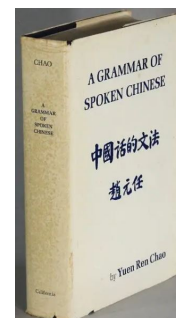
1 Cantonese syntax and parametric variation

1.1 Introduction

1.1.1 Syntactic variation in Sinitic languages

- A famous quote by Yuen Ren Chao, the father of modern Chinese linguistics:

- (1) “Third, it is in matters of grammar that the greatest degree of uniformity is found among all the dialects of the Chinese language. Apart from some minor divergencies, such as indirect object before direct object in the Wu dialects and Cantonese—for which Mandarin (like English) has the opposite order, and slight differences in the order of the negative in potential complements in some of the southern dialects, and so on, and apart from differences in suffixes and particles for which, however, fairly close equivalents can be set up between dialects, one can say that there is practically one universal Chinese grammar.” (Chao 1968:41)



- Is it really the case?

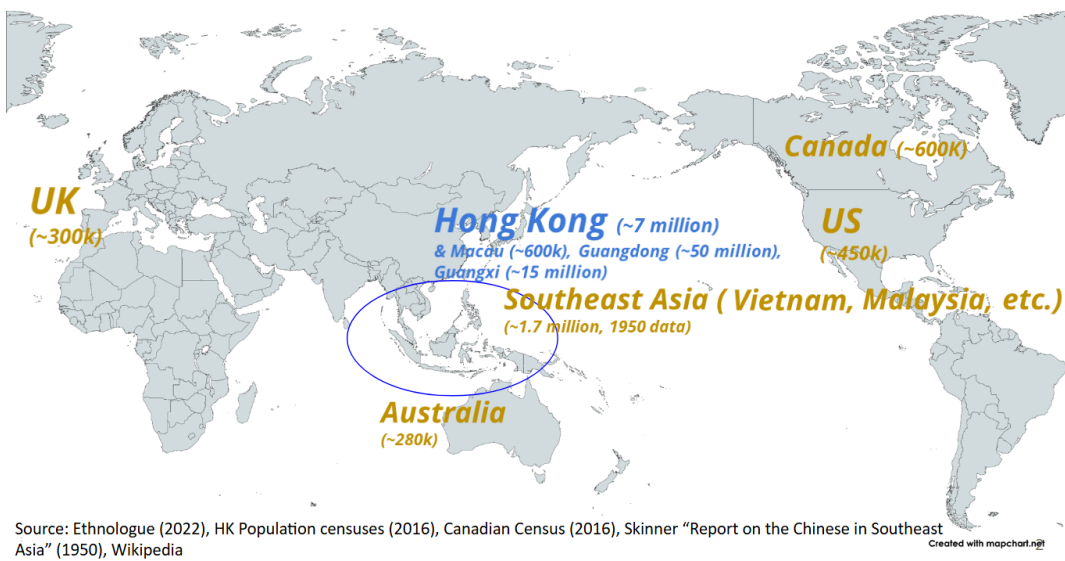
- **Game**: Guess whether the following examples are grammatical or not in Cantonese (• = grammaticality not revealed)¹

- (2) a. •Ngo bei nei cin (· 我畀你錢) b. •Ngo bei cin nei (· 我畀錢你) [Cantonese]
 Wo gei ni qian (我給你錢) *Wo gei qian ni (*我給錢你) [Mandarin]
 1sg give 2sg money 1sg give money 2sg
 ‘I give you money.’ Int.: ‘I give money (to) you.’
- (3) a. •Ngo bei keoi naau (· 我畀佢鬧) b. •Ngo bei naau-zo (· 我畀鬧咗) [Cantonese]
 Wo bei ta ma (我被他罵) Wo bei ma-le (我被罵了) [Mandarin]
 1sg PASS 3sg scold 1sg PASS scold-PFV
 ‘I got scolded at by him/her.’ ‘I got scolded at.’
- (4) a. •Gau mgin-zo (· 狗唔見咗) b. •Zek gau mgin-zo (· 隻狗唔見咗) [Cantonese]
 Gou bujian-le (狗不見了) *Tiao gou bujian-le (*條狗不見了) [Mandarin]
 dog disappear-PFV CL dog disappear-PFV
 ‘The dog disappeared.’ ‘The dog disappeared.’

- As it turns out, Cantonese does exhibit significant grammatical variation from Mandarin
 → Applies to other Sinitic languages too
- Recognized early in traditional dialectal grammar: Yuan (1960, 2001), Zhu (1961), Cheung (1972, 2007), Gao (1980), and Li et al. (1995), etc.
- The emphasis on such variation enters generative syntax in the past few decades: Cheng, Huang, and Tang (1997), Cheng and Sybesma (1999), Tang (1998, 2003a, 2011a, 2011b), and Lee and Yip (2026), among others

1. Grammaticality: (2): a. */ b. OK; (3): a. OK/ b.*; (39): a. */ b. OK.

- Narrowly defined: Sinitic > Yue > Gwongfupin 廣府片 > Guangzhou/Hong Kong/Macau, etc.
- Broadly defined: Yue languages
 - 📌 There are 10 major Sinitic sub-branches: Mandarin (官話), Yue, Min, Wu, Hakka, Gan, Xiang, Jin, Pinghua, Hui
- Also spoken all around the world



1.2 Morphemic variation (in the functional lexicon)

- Overt variation on the morphemic level
- (5) From a comparative perspective ...
 - a. **One-to-many**: one form in Mandarin but distinct forms in Cantonese for different functions
 - b. **Many-to-one**: Distinct forms in Mandarin but “mapped” onto one form in Cantonese
 - c. **None-to-one**: Unique functional items in Cantonese without appropriate Mandarin counterpart

1.2.1 Structural particles

- The seminal work by Zhu (1961) on how the structural particle *de* 的 is realized in different Sinitic languages (Zhu 1980: Beijing, Guangzhou, Wenshui and Fuzhou dialects)
- Three functions by the same particle (may be partly distinguished by orthography)
 - Adnominal modification marker (adjectives, possessive, relative clauses, ...) & nominalizer 的
 - Adjectival suffix (for reduplication) 的
 - Adverbial marker 地 (but also often written as 的)

(6) Structural particles in Mandarin (Tang and Cheng 2014:602)

- a. Xinxian-**de** ye you.
fresh-DE also have
'There is also something fresh.'
- b. Zhe duo hua honghong-**de**.
this CL flower red-DE
'This flower is a bit red.'
- c. Ta zhengtian buting-**de** shuo
3SG all-day non-stop-DE speak
'S/he speaks non-stop all day.'

- Cantonese: the three functions are marked by different particles
 - Nominal *ge3* 嘅, Adjectival *dei2* 㗎, and Adverbial *gam2* 㗎

(7) Structural particles in Cantonese (Tang and Cheng 2014:602–603)

- a. Sansin-**ge** dou jau.
fresh-GE also have
'There is also something fresh.'
- b. Ni do faa hunghung-**dei**.
this CL flower red-DEI
'This flower is a bit red.'
- c. Keoi sengjat mting-**gam** gong.
3SG all-day non-stop-GAM speak
'S/he speaks non-stop all day.'

1.2.2 (Additive) focus particles

- The famous *dou* ‘all, each’ in Mandarin: universal quantification
- Additive focus particle *ye* ‘also’
- Seems to related: general interchangeability in *lian* ‘even’ focus (leading to M. Liu 2017’s approach where universal *dou* is also analyzed as a focus particle; cf. Yang 2020, 2025; Hole 2026 for how *dou* and *ye* differ in total/partial orders of alternatives)

- (8) a. Mei ge xuesheng **dou** lai-le b. Ta shenme **dou** bu hui
 every CL student all come-PFV 3sg what all not know
 ‘Everyone student came.’ ‘S/he knows nothing.’

- (9) Zhangsan lai-le. Lisi {**ye**/ ***dou**} lai-le.
 Zhangsan come-PFV Lisi also all come-PFV
 ‘Zhangsan came. Lisi also came.’

- (10) Lian Lisi {**ye**/ **dou**} lai-le.
 even Lisi also all come-PFV
 ‘Even Lisi came.’

- Cantonese: Both universal and additive uses are expressed by the same particle *dou* 都 (no 也 at all!)

- (11) a. Mui go hoksaang **dou** lai-zo b. Keoi matje **dou** m-sik
 every CL student all come-PFV 3sg what all not-know
 ‘Everyone student came.’ ‘S/he knows nothing.’

- (12) Aafan lai-zo. Aaming **dou** lai-zo.
 Fan come-PFV Ming also come-PFV
 ‘Fan came. Ming also came.’

- (13) Lin Aaming **dou** lai-zo.
 even Ming also come-PFV
 ‘Even Ming came.’

- A reverse case: particle *haishi* 還是 in Mandarin has different functions (Rong He & Mingming Liu 2025 talk at Stuttgart “Haishi and alternative questions in Mandarin.”)
 - Additive ‘also, still’
 - Settling on ‘still’
 - Disjunctive ‘or’ (for questions; cf. Erlewine 2025)
- ➔ Expressed by different particles in Cantonese:
 - Additive *zung6hai6* 仲係 ‘also, still’
 - Settling on *dou1hai6* 都係 ‘still’
 - Disjunctive *ding6/ding6hai6* 定/定係 ‘or’

(14) [Mandarin]

- a. Ta zuotian **haishi** zai tushuguan.
3SG yesterday still at library
'S/he was still at the library yesterday.'
- b. Women **haishi** qu Bolin ba.
1PL still go Berlin SFP
'Let's still go to Berlin.'
- c. Ni chi fan **haishi** chi mian?
2SG eat rice or eat noodles
'Do you eat rice or noodles?'

(15) [Cantonese]

- a. Keoi camjat **zung hai** hai tousyugun.
3SG yesterday still at library
'S/he was still at the library yesterday.'
- b. Ngodei **dou hai** heoi paklam laa3.
1PL still go Berlin SFP
'Let's still go to Berlin.'
- c. Nei sik faan **ding(hai)** sik min?
2SG eat rice or eat noodles
'Do you eat rice or noodles?'

1.2.3 Verbal suffixes

- Progressive suffix *-gan* 緊 → No Mandarin counterpart (not *-zhe* 著, which corresponds to *-zyu6* 住)
- Preverbal aspectual marker: *haidou* 喺度, counterpart to Mandarin *zai* 在

(16) [Cantonese]

Keoi **haidou** tai-**gan** syu.
3SG PROG read-PROG book
'S/he is reading books.'

(17) [Mandarin]

Ta **zai** kan shu.
3SG PROG read book
'S/he is reading books.'

- A whole category: focus, modal, and quantificational suffixes (affixal quantifiers, P. P.-l. Lee 2012)
- Whose functions can only be performed by preverbal particles (quantifiers/modals) in Mandarin
 - E.g., exclusive focus suffix *-dak1* 得 (Tang 2002; Yip 2024)
 - E.g., epistemic necessity suffix *-ngaang6* 硬 (Tang 2003b)
 - E.g., the famous universal *-saai3* 晒 (T. H. T. Lee 1994; Tang 1996; P. P.-l. Lee 2012; Law 2019, a.o.)

(18) [Cantonese]

- a. Keoi tai-**dak** saam bun syu.
3SG read-only three CL book
'He read only *three* books.'
(Tang 2002:267)
- b. Keoidei bei-**ngaang** go A ngo.
3PL give-must CL A 1SG
'They will definitely give an A (to) me.'
(Tang 2003b:252)
- c. Keoi sik-**saai** go saam go pinggwo.
3SG eat-all that three CL apple
'S/he ate all the three apples.'
(Tang 2015:106)

(19) [Mandarin]

- a. Ta **zhi** kan-le san ben shu.
3SG only read-PFV three CL book
'S/he only read *three* books.'
- b. Tamen **yiding** gei wo A.
3PL definitely give 1SG A
'They will definitely give me A.'
- c. Ta ba na san ge pingguo **dou**
3SG DISP that three CL apple all
chi-le.
eat-PFV
'S/he ate all the three apples.'

1.3 Structural variation

- Overt structural variation mainly manifested as word order differences
- Also “covert” variation where word order remains similar but the underlying grammatical mechanism is different (wait until Day 5 ☺)

1.3.1 Comparatives

- Cantonese comparative word order: [X (subject) + adjective + *gwo* 過 ‘-er’ + Y (standard)]
- Mandarin comparative word order: [X (subject) + *bi* 比 ‘than’ + Y (standard) + adjective]

(20) [Cantonese]

Zoengsaam gou-**gwo** Leisei.
Zoengsaam tall-er Leisei
'Zoengsaam is taller than Leisei.'

(21) [Mandarin]

Zhangsan **bi** Lisi gao.
Zhangsan compare Lisi tall
'Zhangsan is taller than Lisi.'

- *Bei* 比 comparatives are only naturally used for verbs (and indeed *-gwo* comparatives cannot be used for verbs, like English *-er*)
- Adjectival comparatives with *bei* are unnatural and have the “Mandarin flavor” (Matthews and Yip 1994:167); but are becoming more acceptable (Tang 2015:189)

(22) [Cantonese]

- a. Ngo **bei** keoi ganggaa zungji nei.
1SG compare 3SG more like 2SG
'I like you more than s/he likes you.'
- b.(?) Zoengsaam **bei** Leisei gou.
Zoengsaam compare Leisei tall
'Zoengsaam is taller than Leisei.'

1.3.2 Directional verbs

- Directional verbs GO and COME: satellite-framed vs. verb-framed languages
- The “standard” way in Mandarin: *shang* ‘go up’ or *dao* ‘arrive’ as the main verbs, and *qu* ‘go’ and *lai* ‘come’ usually follow the object
 - ✎ *qu* ‘go’ and *lai* ‘come’ may be the main verbs too, but it is regarded as Southern influence in early traditional grammar (Yuan 1960, 2001)
- Cantonese: only *heoi3* ‘go’ and *lai4/lei4* ‘come’ as main verbs

(23) Directional verbs in Mandarin

(Tang and Cheng 2014:603)

- Wo **shang** Beijing **qu**.
1SG up Beijing go
‘I go to Beijing.’
- Wo jiejie shi zuotian **dao** Guangzhou **lai** de.
1SG sister be yesterday arrive Guangzhou come SFP
‘My elder sister came to Guangzhou yesterday.’

(24) Directional verbs in Cantonese

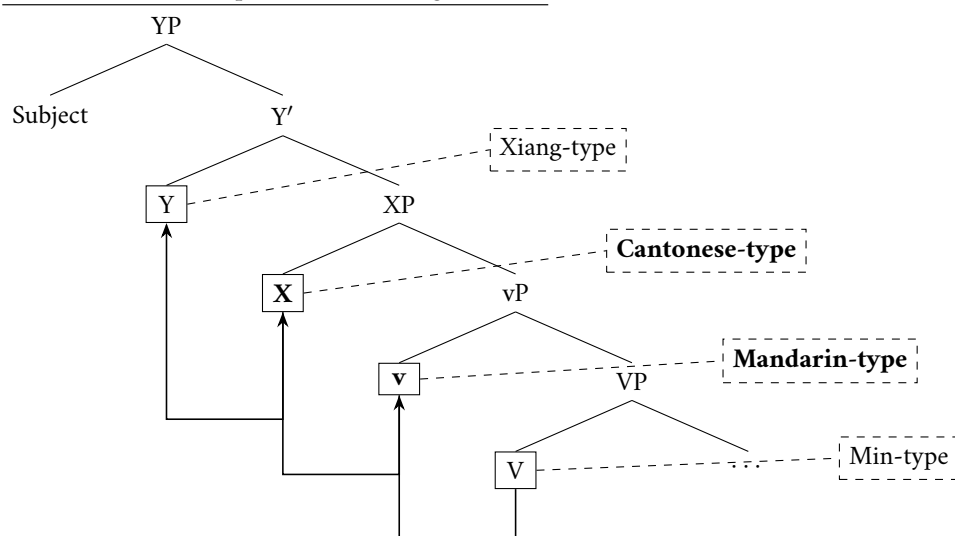
(Tang and Cheng 2014:603)

- Ngo **heoi** Bakging.
I go Beijing
‘I go to Beijing.’
- Ngo gaaze hai camjat **lei** Gwongzau ge.
I sister be yesterday come Guangzhou SFP
‘My elder sister came to Guangzhou yesterday.’

1.4 An illustration of parametric variation

- Parameters in the Principles-and-Parameters framework of generative grammar
 - E.g., head directionality, pro-drop, *wh*-movement, ...
 - **Correlation** of seemingly unrelated variations → determined by one parameter
- Tang (2003b, 2006): Verb movement parameter among Sinitic languages (see also Li and Wei 2019 for a discussion and how parameters may be reduced to prosody)
 - How high the verb moves to on the clausal spine
 - Cantonese-type: moves higher
 - Mandarin-type: moves lower

(25) The verb movement parameter in Tang (2006, 9)



1.4.1 Verb suffixation

- Verbal suffixes project a head on the clausal spine and attract verb movement (in Narrow Syntax)
- Mandarin: only aspectual suffixes (perfective *-le*, experiential *-guo*, durative *-zhe*)
→ verbs move up to *v* (in Tang's terms; may also be understood as Asp)
- Cantonese: quantificational/focus/modal suffixes: project higher than Asp, call it X
→ verbs move above *vP*
 - Evidence: universal *-saai* may stack with experiential *-gwo* and order after it
 - Baker (1985)'s Mirror Principle: suffix order mirrors syntactic position

- (26) a. Keoi sik-**gwo**-saai nidi daangou.
3SG eat-EXP-ALL these cake
'Each cake, s/he has tried some of it.'

(ALL > EXP)

- b. Keoi **si**-**gwo** sik-saai nidi daangou.
3SG once eat-ALL these cake
'S/he has eaten all the cake.'

[C]

(EXP > ALL)

- (27) i. [QP saai [_{AspP} sik_V-**gwo** [_{VP} sik_V]]] →

- ii. [QP sik_V-**gwo**-saai [_{AspP} sik_V-**gwo** [_{VP} sik_V]]]

1.4.2 The strength of SVO

- A generalization by D. Liu (2001):
Cantonese is a "strong" SVO language whereas Mandarin is a "mild" SVO language
- Whether unmarked preposing (inner topics) of definite objects is natural
 - Mandarin: commonly used even without a focus
 - Cantonese: usually not natural unless with strong contrastive focus

(28) [Cantonese]

- a. Ngo zungji [jyujinhok]
1sg like linguistics
'I like linguistics.'
- b. ?Ngo [jyujinhok] zungji
1sg linguistics like
Lit.: 'I, linguistics, like.'

(29) [Mandarin]

- a. Wo xihuan [yuyanxue]
1sg like linguistics
'I like linguistics.'
- b. Wo [yuyanxue] xihuan
1sg linguistics like
Lit.: 'I, linguistics, like.'

(30) [Cantonese]

- a. Ngo m jungyi [bun syu].
1sg not like CL book
'I don't like the book.'
- b. ??Ngo [bun syu] m jungyi
1sg CL book not like
Lit.: 'I, the book, don't like.'

(31) [Mandarin]

- a. Wo bu xihuan [zhe ben shu].
1sg not like this CL book
'I don't like this book.'
- b. Wo [zhe ben shu] bu xihuan.
1sg this CL book not like
Lit.: 'I, this book, don't like.'

- Assuming object preposing targets vP-internal projections (cf. Travis 2010) ...

- The lack of unmarked object preposing in Cantonese is because V move above the preposed Obj
- Unlike in Mandarin where the verb moves *below* the preposed object

(32) [Cantonese]

- a. [TP Subj [XP X [vP v [VP V Obj]]]] (Baseline)
- b. [TP Subj [XP X [vP **Obj** v [VP V t_{Obj}]]] (Movement of definite objects)
↑
- c. [TP Subj [XP **V+v+X** [vP Obj t_{V+v} [VP t_V t_{Obj}]]] (Verb movement)
↑ ↑
- d. Word order: SVO

(33) [Mandarin]

- a. [TP Subj [vP [VP V Obj]]] (Baseline)
- b. [TP Subj [vP **Obj** v [VP V t_{Obj}]]] (Movement of definite objects)
↑
- c. [TP Subj [vP Obj **V+v** [VP t_V t_{Obj}]]] (Verb movement)
↑
- d. Word order: SOV

1.4.3 Other word order differences

① Object preposing by *ba/zoeng* disposal constructions

- Common in Mandarin but very limited in Cantonese (restricted “disposal”/patient uses and no causative uses at all)

→ Verb movement in Cantonese and no movement in Mandarin

(34) [Cantonese]

- a. ?**Zoeng** [fung seon] gaau-zo
 DISP CL letter submit-PFV
 ‘submitted the letter’
- b. ***Zoeng** [di geiseot] hoksik-zo
 DISP CL.PL skill acquire-PFV
 ‘acquired the skills’

(35) [Mandarin]

- a. **Ba** [xin] jiao-le
 DISP letter submit-PFV
 ‘submitted the letter’
- b. **Ba** [jishu] xue-dao-shou
 DISP skill acquire
 ‘acquired the skills’

(36) a. Gaau-zo [fung seon]
 submit-PFV CL letter
 ‘submitted the letter’

b. Hoksik-zo [di geiseot] [Cantonese]
 acquire-PFV CL.PL skill
 ‘acquired the skills’

(37) ***Zoeng** [pat maa] gui-dou sengsandaaihon [Cantonese]
 DISP CL horse tired sweat.all.over.the.body
 Int.: ‘Caused the horse to be tired to sweat all over the body’

(38) **Ba** [zhe ma] lei-de hunshendahan [Mandarin]
 DISP this horse tired sweat.all.over.the.body
 ‘Caused the horse to be tired to sweat all over the body’

→ Verb movement in Cantonese and no movement in Mandarin (the higher head realized as *ba*)

(39) a. [V [Disp. Obj.] *t*] [Cantonese]
 ↑

b. [*ba* [Disp. Obj.] V] [Mandarin]

② Difference in **directional verbs** COME/GO

→ Obligatory verb movement in Cantonese and no movement in Mandarin
(Mandarin influenced by Southern varieties → optional movement)

- (40) a. [*heoi/lai* [Locative-NP] *t*] [Cantonese]

 b. [*shang/dao* [Locative-NP] *qu/lai*] [Mandarin]

③ Difference in **adjectival comparatives**

→ Adjective movement in Cantonese and no movement in Mandarin

- (41) a. [Subj [*A-gwo* [Standard-NP] *t*]] [Cantonese]

 b. [Subj [*bi* [Standard-NP] *A*]] [Mandarin]

• Evidence: suffix *saai* can be used only in -*gwo* comparatives but not *bei* comparatives

- (42) a. Ngo gou-gwo-**saai** neidei
 1SG tall-er-all 2PL
 'I'm taller than all of you.' (Tang 2003a:124)
- b. *Ngo *bei* neidei gou-**saai**
 1SG compare 2PL tall-all
 Int.: 'I'm taller than all of you.' (Tang 2003a:124)
- c. *Ngo *bei-saai* neidei gou
 1SG compare-all 2PL tall
 Int.: 'I'm taller than all of you.' (Tang 2003a:124)

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2 Sentence-final particles

2.1 Introduction

- **Sentence-final particles (SFPs)** are bound morphemes (enclitics) occurring at the end of a clause/sentence to indicate certain grammatical functions
 - ✎ Also known as “final particles”, “sentence particles”, “utterance particles”, “discourse particles”, “particles”; often referred to as “語氣詞 (mood/force particles)” in Chinese
- Rich inventory: **Over 40** SFPs (e.g., 45 in Tang 2015), or even **nearly 100** SFPs when variants with different tones and/or functions are counted (e.g., 95 in Leung 2005)

(1) Inventory from Leung (2005)

				P47 jāak (親自嘗試), P48 jē (辯解/說明), P49 jē (追查),
				P50 jēh (提點舊事), P51 jēk ₁ (否定), P52 jēk ₂ (遊說),
				P53 jēk ₃ (喜訊), P54 lā ₂ (可能性), P55 lā ₃ (明顯),
				P56 lā ₄ (條件/準則), P57 lā ₅ (結束話題), P58 lā ₆ (寬讓),
				P59 lā ₇ (建議), P60 lā ₈ (挑剔缺點), P61 lā ₉ (提議),
				P62 lahch (辯證), P63 lawēi (洋洋得意), P64 lē ₂ (遲疑),
				P65 lē ₃ (期許), P66 lē ₄ (問主題所在), P67 lē ₅ (問主題情況),
				P68 lē (親切提醒), P69 lēh (提點嘗試), P70 lēh (強調意願/情況),
				P71 lēh ₁ (正如所料), P72 lēh ₂ (求証), P73 lē ₁ (順然事理),
				P74 lē ₂ (勉強), P75 lo (感慨), P76 lēh ₁ (主觀見解), P77 lēh ₂ (原因),
				P78 lok ₁ (駁斥), P79 lok ₂ (強調原先的話), P80 ma (詢問),
				P81 mē (求証), P82 wā (要求描述), P83 wo ₁ (不平), P84 wo ₂ (責怪),
				P85 wo ₃ (簡語), P86 wo ₄ (新訊息), P87 wēh (意料外), P88 wēh (轉述);

I. 出現於非句子的語助詞			
P1 ā ₁ (貶斥主題), P2 ā ₂ (坦誠), P3 ā ₃ (諷刺), P4 ah (猶豫),			
P5 ǝ (轉折), P6 jē (轉折), P7 lā (臆測), P8 lē ₁ (強調主題);			
II. 出現於句子的語助詞			
1. 音節性的			
P9 lēh (確認), P10 jyuh (暫緩);			
P11 tim ₁ (額外), P12 sin (現時);			
P13 ge (實情);			
P14 jē ₁ (低級), P15 la ₁ (改變);			
P16 tim ₂ (新現象), P17 āma (原著);			
P18 ā ₂ (難以言喻), P19 ā ₃ (抗議), P20 ā ₄ (無從置喙),			
P21 ā ₅ (期待回應), P22 ā ₆ (追查), P23 ā ₇ (追查), P24 ā ₈ (值得注意),			
P25 ā ₉ (厭煩), P26 ā ₁₀ (柔和), P27 ā ₁₁ (垂點提示), P28 āh ₁ (懇求),			
P29 āh ₂ (求証), P30 āh ₃ (求証), P31 āh ₄ (提示), P32 ālāh ₁ (印証),			
P33 ālāh ₂ (提議), P34 ālāh ₃ (提示過失), P35 ālāh ₄ (提請注意),			
P36 hāh ₁ (新建議), P37 hāh ₂ (新決定), P38 beh (不念), P39 bo ₁ (商議),			
P40 bo ₂ (新訊息), P41 gē ₁ (埋怨), P42 gē ₂ (靜白), P43 gē ₃ (問原因),			
P44 gwa (猜測), P45 hāilā ₁ (堅持), P46 hāilā ₂ (無奈).			
2. 非音節性的			
(i) 音段成分			
P89 -k (加強),			
(ii) 非音段成分			
P90 ↗ (疑惑), P91 ↘ (推測結果), P92 ↖ (強調)			
P93 ↙ (堅決), P94 → (未完結), P95 ↗ (中性)			

(2) Seven Types of Cantonese Sentence-Final Particles in Tang (2015)

- Event: *sin 1, tim 1, mat 1zai 6, lei 4, faat 3, haa 5*
- Temporal: *zyu 6, gam 3zai 6, lei 4, laa 3*
- Modality: *zaa 3, ne 1, lo 1, aa 1maa 3, laa 1maa 3*
- Interrogative: *ze 1, zi 1maa 3, gwaa 3, tim 1, gaa 3laa 1, dak 1gaa 2, ding 2laa 1*
- Imperative: *laa 1, le 4, wo 5, bo 3, sin 1, baa 2laa 1, hou 2gwo 3, hou 2wo 3, hai 2laa 1, aa 1naa 4, laa 3wei 3, aa 3haa 2*
- Emotion: *aa 3, -k*

(3) Cantonese sentence-final particles (SFPs) (cf. Tang 2015's classification)

- a. *Event* (e.g., event order *sin1* 'first')
 Keoi se man **sin1**.
 3sg write paper SFP
 'S/he writes papers first.' (Tang 2015:194)
- b. *Temporal* (e.g., recent past *lai4*)
 Keoi sai ce **lai4**.
 3sg wash car SFP
 'S/he has washed car recently.' (Tang 2015:203)
- c. *Focus* (e.g., exclusive *zaa3* 'only')
 Keoi tai-zo jat-bun syu **zaa3**.
 3sg read-PFV one-CL book SFP
 'S/he read only one book.' (Tang 2015:206)
- d. *Modality* (e.g., epistemic uncertainty *gwaa3*)
 Keoi heoi **gwaa3**!
 3sg go SFP
 'Perhaps s/he will go!' (Tang 2015:220)
- e. *Question* (e.g., yes-no question *aa4* with negative bias)
 Nei heoi **me1**?
 2sg go SFP
 'You will go? (I don't believe it.)' (Tang 2015:233)
- f. *Imperative* (e.g., suggestive *le4*)
 Nei heoi **le4**.
 2sg go SFP
 'How about you go?' (i.e., I suggest that you go.) (Tang 2015:252)
- g. *Emotion* (e.g., tone strengthening *-k*)
 Zanhai leonzeon **laak3**! (vs. Zanhai leonzeon **laa3**!)
 really careless SFP really careless SFP
 With *-k*: 'I'm really careless!' (stronger tone) (Tang 2015:280)
 Without *-k*: 'I'm really careless.' (weaker tone)

- Research on Cantonese SFPs has largely shaped our understanding on ...
 - **The (right) periphery**: how are functional projections above CP organized? 📖 today
 - **Decomposition of SFPs**: how does intonation interact with SFPs? 📖 today
 - **The syntax-pragmatics interface**: how are discourse functions encoded in syntax (“syntacticized”)?
 - **Discontinuous constructions**: how do SFPs interact with adverbs, in relation to a Cinque-Rizzian adjunct-as-specifier view?
 - **Head directionality**: Are SFPs head-final or head-initial? Do they violate the Final-over-final condition (FOFC)?
 - ⚠️ We will not engage in this debate; see Simpson and Wu (2002), L. Y.-L. Cheung (2009), and Pan (2020) a.o. for discussion.
 - **Compound SFPs**: How are compound SFPs different from clusters? Are they derived by head movement, and in which grammatical module (lexicon vs. syntax)?
 - ...
- (4) Some early and influential work on Cantonese SFPs
 H.-n. S. Cheung (1972, 2007), Kwok (1984), Law (1990), Luke (1990), Leung (1992, 2005), Tang (1998), and Fung (2000)

2.1.1 Sentence-final positions

- SFPs are located at the clause/sentence-final positions, after any postverbal materials (objects, duration phrases, frequency phrases)

- (5) a. Event SFP *tim1* (additive)
 Ngo bei-zo (***tim1**) [ni-bun syu] (***tim1**) [keoi] (**tim1**).
 1SG give-PFV SFP this-CL book SFP 3SG SFP
 'I also gave this book to him/her.'
- b. Temporal SFP *laa3* (perfect, indication of new situation)
 Ngo heoi-zo (***laa3**) [Dakkwok] (***laa3**) [saam-ci] (**laa3**).
 1SG go-PFV SFP Germany SFP three-time SFP
 'I already went to Germany for three times.'

⚠ Except in right dislocation (L. Y.-L. Cheung 2009; Lee 2017; Yip 2025a):

- (6) Loeng-go zungtau **laa3** keoi zau-zo (L. Y.-L. Cheung 1997 via L. Y.-L. Cheung 2009:198)
two-CL hour SFP he leave-PFV
'He has left for two hours.'

- Differentiation from verbal suffixes: some SFPs are homophonous with verbal suffixes
 - Verbal suffix *-zyu6*: durative aspect
 - SFP *zyu6*: temporal ('for now, yet')
 - ➔ a NPI (negative polarity item): must be licensed by a clausemate negation (Tang 2009)

- (7) a. Ngo (m-)pou-**zyu6** [keoi].
1SG NEG-hug-DUR 3SG
'I (do not) keep hugging him/her.'
- b. Ngo *(m-)pou [keoi] **zyu6**.
1SG NEG-hug 3SG SFP
'I do not hug him/her yet.'

- Similar to Mandarin: le_1 (了₁) vs. le_2 (了₂)
- Although Cantonese differentiates between perfective -zo2 (= le_1) and temporal SFP *laa3* (= le_2) in form

(8) [Mandarin]

- a. Ni shi-bu-shi chi-**le₁** fan **le₂**?
 2SG be-not-be eat-PFV rice SFP
 ‘Have you already eaten?’
- b. Shi, wo chi-**le₁₌₂**.
 be 1SG eat-LE
 ‘Yes, I’ve eaten.’

(9) [Cantonese]

- a. Nei hai-mai sik-**zo2** faan **laa3**?
 2SG be-not.be eat-PFV rice SFP
 ‘Have you already eaten?’
- b. Hai, ngo sik-**zo2** **laa3**.
 be 1SG eat-PFV SFP
 ‘Yes, I’ve eaten.’

2.1.2 Rigid ordering in clusters

- SFPs may stack at the right of sentences.
 - Up to 5! — a naturalistic example from Leung (2005, 280)

(10) (你話最多拖多個月添嘅咁嘅)

Nei waa zeoido to-do go leng jyut **tim1 ge3 zaa3 aa1 maa3**
 you say at.most delay-more CL about month SFP SFP SFP SFP SFP
 ‘You said it can only be delayed for one more month or so.’

- The order is rigid, e.g., event SFPs must be ordered before modality SFPs
 - serves as basis for the cartography of peripheral structure

(11) a. Keoi gong **sin1 gwaa3** (佢講先啲)

3SG say SFP SFP
 ‘I guess s/he say (it) first.’

b. *Keoi gong **gwaa3 sin1** (*佢講啲先)

3SG say SFP SFP

- Notice that some SFPs may have “high” and “low” uses, as shown by the ordering
- The positions are correlated with their functions
 - E.g., *sin1*: event vs. interrogative; *tim1*: event vs. mirative

(12) a. Keoi gong **sin1** mei6? (佢講先未?)

3SG say SFP SFP
 ‘Has s/he said it first?’

b. Keoi gong mei6 **sin1**? (佢講未先?)

3SG say SFP SFP
 ‘Tell me, has s/he started talking?’

c. Keoi gong **sin1** mei6 **sin1**? (佢講先未先?)

3SG say SFP SFP SFP
 ‘Tell me, has s/he said it first?’

2.1.3 Highly specified functions

- When compared to Mandarin, Cantonese SFPs are much more specified in functions
- E.g., yes-no question particles
 - Mandarin *ma*: underspecified for bias
 - Cantonese *maa3*, *me1*, *(o3)ho2*, *aa4*: all specified for bias

(13) Zhangsan hui lai **ma?** (張三會來嗎?) [Mandarin]
 Zhangsan will come SFP
 ‘Will Zhangsan come?’

(14) a. Aaming wui lai **maa3?** (阿明會嚟嗎?) [Cantonese]
 Ming will come SFP
 ‘Will Ming come?’ (neutral/anti-biased)

b. Aaming wui lai **me1?**
 Ming will come SFP
 ‘Ming won’t come, will he?’ (negative-biased)

c. Aaming wui lai **o3ho2?**
 Ming will come SFP
 ‘Ming will come, won’t he?’ (positive-biased)

d. Aaming wui lai **aa4?**
 Ming will come SFP
 ‘Ming will come? (is that true?)’ (confirmational: with positive evidential bias)

- We may use contexts to test the bias requirements of each SFP

(15) Neutral context without bias

Scenario: Ming has just opened a Kinder Surprise Egg. You are guessing what kind of toy is in it. You ask Ming:

Leoimin jau ce {**maa3**, #me1, #o3ho2, #aa4}?
 inside have car SFP SFP SFP SFP
 ‘Is there a car inside?’

(Yip 2025b, ex.23, adpated)

(16) Negative bias (epistemic: belief states)

Scenario: You and Fan are discussing who you should invite to tomorrow’s party. Fan is listing your common friends: Lok, Ming, ... When you hear Ming, you remember that he is an introvert who never goes to any social event. You stop Fan, and say:

Haa2? Aaming wui heoi {#maa3, **me1**, #o3ho2, #aa4}?
 INTERJ Ming will go SFP SFP SFP SFP
 ‘What? Ming won’t go, will he?’ (We don’t need to invite him.)

(Yip 2025b, ex.28, adpated)

(17) Positive bias (epistemic: belief states)

Scenario: Ming knows that lobsters are your favorite food. Today, Ming has gone to a seafood store with Fan. You think that he will probably buy lobsters for you and are excited. You call Fan, and ask:

Aaming maai-zo lunghaa {#maa3, #me1, **o3ho2**, #aa4}?

Ming buy-PFV lobster SFP SFP SFP SFP

‘Ming bought lobsters, didn’t he?’

(Yip 2025b, ex.24, adapted)

(18) Positive evidential bias (contextual evidence)

*Scenario: Earlier today, Ming has gone to a seafood store with Fan. Ming comes back, **holding a bag in which there seems to be a red claw**, but you cannot see it very clearly. You’re not sure what that is and ask Fan:*

Aaming maai-zo mat? Aaming maai-zo lunghaa {**maa3**, #me1, #o3ho2, **aa4**}?

Ming buy-PFV what Ming buy-PFV lobster SFP SFP SFP SFP

‘What did Ming buy? Did Ming buy lobsters?’

(Yip 2025b, ex.25, adapted)

- E.g., imperative particles

- Mandarin: *ba*

- Cantonese: *laa1*, *le4*, *wo5*, *bo3*, *sin1*, *baa2laa1*, *hou2gwo3*, *hou2wo3*, *hai2laa1*, *aa1naa4*, *laa3wei3*, *aa3haa2*

- E.g., *laa1* for imperatives in general

- *le4* for advice

- *baa2laa1* for “settling on” commands and advice

- *aa1naa4* for threatening

(19) Ni qu **ba!**

[Mandarin]

you go SFP

‘You go!’

(20) a. Nei heoi **laa1!**

[Cantonese]

you go SFP

‘You go!’

b. Nei heoi **le4?**

you go SFP

‘Maybe you go?’

c. Nei heoi **baa2laa1!**

you go SFP

‘(Let’s settle on this—)you go! (It’s the end of the discussion.)’

d. Nei heoi **aa1naa4?!**

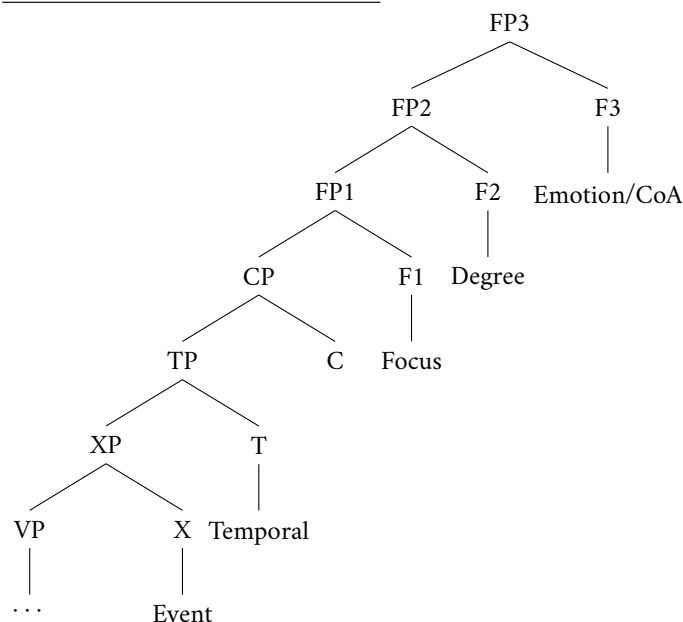
you go SFP

‘You (try to) go (and you know the consequences).’

2.2 On the right periphery

- A hierarchy by Tang (2020)
 - Minimally different from Tang 2015 in the labeling of the highest layer: Emotion vs. Call-on-addressee (CoA)
- 📎 Degree: a cover term for modality, interrogative and imperative
 - originally used by Li (2006): degree of “illocutionary force”, can be understood as degree of speaker’s commitment in declaratives

(21) The right periphery in Cantonese (Tang 2026, adapted from Tang 2020)



2.2.1 Inner vs. outer particles

- One of the earliest syntactic proposals of SFPs on different positions: Tang (1998), for both Cantonese and Mandarin (See also Law 1990 and Leung 2005 (originally 1992))
 - Inner particles at T: *laa3, lei4*, etc.²
 - Outer particles at C (or above C): *maa3, me1, aa3, ne1, bo3*, etc.
- Evidence from **ordering**
- Inner particles are ordered before outer particles

- (22) a. Keoi se leonman **laa3 me1**?
 s/he write paper SFP SFP
 ‘Did s/he start write a paper?’
- b. *Keoi se leonman **me1 laa3**?
 s/he write paper SFP SFP

2. Tang (1998) also claims that exclusive focus particle *zaa3* is located at T, but as shown by Yip (2026) it should be located higher than C.

- Evidence from **embeddability**

(23) a. Relative clauses

[Sik-jyun faan **lai4**] ge tunghok beigaau syufuk. (食完飯嚟嘅同學比較舒服)
eat-finish rice SFP MOD student more comfortable
'The students who have finished their meals are more comfortable.'

b. Subject clauses

[Lok-gwo jyu **lai4**] hai jat go hou siusik. (落過雨嚟係一個好消息)
fall-EXP rain SFP be one CL good news
'That it has just rained is good news.'

c. Adverbial clauses

[Jyugwo lok-gwo jyu **lai4**], hunghei wui beigaau hou. (如果落過雨嚟，空氣會比較好)
if fall-EXP rain SFP air will more good
'If it has just rained, the air quality will be better.'
(Tang 2015:289)

(24) a. Relative clauses

*[Se-jyun man **gwaa3**] ge tunghok beigaau dakhaan (*寫完文嘅同學比較得閑)
write-finish paper SFP MOD student more free
Int.: 'The students who have perhaps finished writing papers are freer.'

b. Subject clauses

*[Keoi se-jyun man **gwaa3**] hai jat go hou siusik. (*佢寫完文嘅係一個好消息)
3SG write-finish paper SFP be one CL good news
Int.: 'That s/he has perhaps finished writing papers is good news.'

c. Adverbial clauses

*[Jyugwo se-jyun **gwaa3**], zau tungzi ngo (*如果寫完嘅，就通知我)
if write-finish SFP then inform 1SG
Int.: 'If you've perhaps finished writing papers, let me know.'
(Tang 2015:290)

- Limitation of the embeddability test

- *laa3* composes of two parts: *l-* and *aa3*
- only *l-* is located in the TP layer
- *aa3* is higher up
- *laa3* cannot be embedded

(25) a. Relative clauses

*[Sik-jyun faan **laa3**] ge tunghok beigaau syufuk. (*食完飯喇嘅同學比較舒服)
eat-finish rice SFP MOD student more comfortable
Int.: 'The students who have finished their meals are more comfortable.'

b. Subject clauses

*[Lok-gwo jyu **laa3**] hai jat go hou siusik. (*落過雨喇係一個好消息)
fall-EXP rain SFP be one CL good news
Int.: 'That it has rained is good news.'

c. Adverbial clauses

- *[Jyugwo lok-gwo jyu **laa3**], hunghei wui beigaau hou. (*如果落過雨喇，空氣會比較好)
 if fall-EXP rain SFP air will more good
 Int.: 'If it has rained, the air quality will be better.' (Tang 2015:289)

2.2.2 Finer-distinction: event vs. temporal layers

- Event SFPs may be ordered before temporal SFPs, but not the other way around.

- Event SFP: *sin1* 先
- Temporal SFP: *gam3zai6* 咁滯 'almost', usually for temporal approximation

- (26) a. Keoi se man **sin1**.
 3SG write paper SFP
 'S/he writes papers first.' (Tang 2015:194)

- b. Keoi se-jyun pin man **gam3zai6**.
 3SG write-finish CL paper SFP
 'S/he almost finished writing papers.' (Tang 2015:281)

- (27) a. Ngo se man **sin1 gam3zai6**
 1SG write paper SFP SFP
 'I almost first write papers.'

- b. *Ngo se man **gam3zai6 sin1**
 1SG write paper SFP SFP

- Another event SFP *faat3* 法 for manner

- Also found in Mandarin, but with more nominal properties: usually co-occurs with the classifier *ge* 個

- (28) Keoi dim coeng go **faat3?** (佢點唱歌法?)
 3SG how sing song SFP
 'How does s/he sing?' (Tang 2019:41)

- (29) (哼，我在這裡等著，看他怎麼個吃飯法。)
 heng, wo zai zheli deng-zhe, kan ta zenme ge chi fan **fa**.
 INTERJ 1SG at here wait-DUR see 3SG how CL eat rice SFP
 'I'll just wait here and see how s/he eats the rice.' (Tang 2019:41)

- Also ordered before temporal SFPs, e.g., recent past *lai4* 嚟

- (30) a. Keoi dim coeng go **faat3 lai4?**
 3SG how sing song SFP SFP
 'How did s/he just sing?'

- b. *Keoi dim coeng go **lai4 faat3?**
 3SG how sing song SFP SFP

- Let's turn to embedding
 - Zhang (2019): SFPs like *le* (change of situation) and *laizhe* (recent past) indicate finiteness
 - Eight syntactic contexts:
The complement of (i) a control verb, (ii) a raising verb, (iii) *lai* 'come' and *qu* 'go', (iv) root modals, (v) the V-even-not-V adverbials, (vi) small clauses, (vii) gapless relative clauses, (viii) The complement clause of *dui* 'to'
- (31) a. The complement of a control verb (Zhang 2019:10)
 (*阿傑沒試圖明天中午(就)訂好票了)
 *Ajie mei shitu [mingtian-zhongwu (jiu) ding-hao piao **le**].
 Ajie mei try tomorrow-noon then order-ready ticket SFP
 Int.: 'Ajie didn't try to have already ordered the ticket at tomorrow noon.'
- b. (我沒聽說[阿傑訂好票了].)
 Wo mei tingshuo [Ajie ding-hao piao **le**].
 I not hear Ajie order-ready ticket SFP
 'I did not hear that Ajie had finished ordering of the ticket.'
- (32) a. The complement of a raising verb (Zhang 2019:11)
 (*雨水開始一方面[影響農作物了],另一方面[也影響交通了].)
 *Yushui kaishi yifangmian [yingxiang nongzuowu **le**], lingyifangmian [ye yingxiang
 rain start and affect crop SFP and also affect
 jiaotong **le**].
 traffic SFP
 Int.: 'The rain begins to have affected crops, and it also begins to have affected traffic.'
- b. (我聽說一方面[雨水影響農作物了], 另一方面[雨水也影響交通了].)
 Wo tingshuo yifangmian [yushui yingxiang nongzuowu **le**], lingyifangmian [yushui ye
 I hear and rain affect crop SFP and rain also
 yingxiang jiaotong **le**].
 affect traffic SFP
 'I heard that the rain has affected crops, and it has also affected traffic.'
- (33) a. The complement of a non-epistemic modal (Zhang 2019:13)
 (*阿傑必須[明天中午訂票呢].)
 *Ajie bixu [mingtian-zhongwu ding piao **ne**].
 Ajie must tomorrow-noon order ticket SFP
 Int.: 'Ajie must be ordering the ticket at tomorrow noon.'
- b. (我估計阿傑應該[明天中午在訂票呢].)
 Wo guji Ajie yinggai [mingtian-zhongwu zai ding piao **ne**].
 I guess Ajie should tomorrow-noon PROG order ticket SFP
 'I guess that Ajie must be ordering the ticket at tomorrow noon.'

- **Non-finite clauses** may allow **event** SFPs but not **temporal** SFPs

- (34) a. Keoi soengsi [sai sau **sin1**]. (佢嘗試[洗手先])
 3SG try wash hand SFP
 ‘S/he try to [first wash hands].’
- b. Hoseoi hoici [dimjoeng soengzoeng **faat3**?] (河水開始[點樣上漲法]?)
 river.water begin how rise SFP
 ‘How does the river level begin to rise?’
- c. Aaming bitseoi [maai fei **sin1**] tungmaai [cekjin **sin1**] (阿明必須[買飛先]同埋[check-in先])
 Ming must buy ticket SFP and check.in SFP
 ‘Ming must first buy tickets and first check-in.’
- (35) a. *Keoi soengsi [sai sau **lai4**]. (佢嘗試[洗手嚟])
 3SG try wash hand SFP
 Int.: ‘S/he try to [have just washed hands].’
- b. *Hoseoi hoici [dimjoeng soengzoeng **lai4**?] (河水開始[點樣上漲嚟]?)
 river.water begin how rise SFP
 Int.: ‘How does the river level begin to have recently risen?’
- c. *Aaming bitseoi [maai fei **laa3**] tungmaai [cekjin **laa3**] (阿明必須[買飛喇]同埋[check-in喇])
 Ming must buy ticket SFP and check.in SFP
 Int.: ‘Ming is obligated to have bought tickets and have checked-in.’

- We can conclude:

- (36) The hierarchy of SFPs (version 1)
 Event < Temporal

2.2.3 Finer-distinction: focus vs. “Degree” layers

- Focus SFPs such as exclusive focus *zaa3*.
- “Degree” SFPs such as modality *gwaa3* (uncertainty).

- (37) a. *Focus* (e.g., exclusive *zaa3* ‘only’)
 Keoi tai-zo jat-bun syu **zaa3**.
 3SG read-PFV one-CL book SFP
 ‘S/he read only one book.’ (Tang 2015:206)
- b. *Modality* (e.g., epistemic uncertainty *gwaa3*)
 Keoi heoi **gwaa3**!
 3SG go SFP
 ‘Perhaps s/he will go!’ (Tang 2015:220)

- *Zaa3* has to **precede** *gwaa3*

(38) *zaa3* can only precede DegreeP SFPs

- a. Keoi sik-zo jat wun **zaa3** **gwaa3**. (zaa3 < gwaa3)
 3SG eat-PFV one CL SFP.only SFP
 'I guess s/he only ate one bowl.'
- b. *Aaming sik-zo jat wun **gwaa3** **zaa3**. (*gwaa3 < zaa3)
 3SG eat-PFV one CL SFP SFP.only

- We can conclude:

(39) The hierarchy of SFPs (version 2)

Focus < Degree

☞ But how about focus SFPs and temporal SFPs?

- Even when *zaa3* precedes *gwaa3*, *zaa3* still can only **follow** temporal SFPs such as *gam3zai6*, but not otherwise.

(40) *zaa3* can only follow TP SFPs

- a. Dak keoi jatgo lai **gam3zai6** **zaa3** gwaa3. (gam3zai6 < zaa3)
 only 3SG one come SFP SFP.only SFP
 'I guess only almost s/he alone come.'
- b. *Dak keoi jatgo lai **zaa3** **gam3zai6** gwaa3. (*zaa3 < gam3zai6)
 only 3SG one come SFP.only SFP SFP

- An Internet example is given below, where *zaa3*, while preceding evidential SFP *wo3*, follows *gam3zai6*:

- (41) a. Nidaan je zanhai seon-faasang **gam3zai6** **zaa3** wo3. (gam3zai6 < zaa3)
 this thing really pure-peanut SFP SFP.only SFP
 'This is really only almost purely gossips (lit.: peanut).' (Internet)
- b. *Nidaan je zanhai seon-faasang **zaa3** **gam3zai6** wo3. (*zaa3 < gam3zai6)
 this thing really pure-peanut SFP.only SFP SFP

- Crucially, the ungrammaticality (40b) and (41b) is unlikely to be due to semantic conflict.
 - As shown in (42), adverbial *geifu* 'almost', which co-occurs with *gam3zai6*, may take wide scope over exclusive *zinghai* 'only'
 - indicating the failure of the order *gam3zai6* < *zaa3* in the above two examples is syntactic.

(42) **Geifu** **zinghai** keoi jatgo lai **gam3zai6**.

almost only 3SG one come SFP
 'Almost only s/he alone come.'

- The same ordering restriction applies to other TP-level SFPs such as *zyu6* (NPI 'yet') and *lai4* (recent past):

- (43) a. Keoi mei hoici tai [nibun syu]_F **zyu6** **zaa3** gwaa3. (zyu6 < zaa3)
 3SG not.yet begin read this book SFP SFP.only SFP
 'I guess it's only that s/he hasn't started reading this book yet.'
- b. *Keoi mei hoici tai [nibun syu]_F **zaa3** **zyu6** gwaa3. (*zaa3 < zyu6)
 3SG not.yet begin read this book SFP.only SFP SFP

- (44) a. Keoi tausin sei-zo saamgaa_F ce **lai4** **zaa3** gwaa3. (*lai4 < zaa3*)
 3SG just.now wash-PFV three car SFP SFP.only SFP
 ‘I guess s/he only washed three cars just now.’ (modified from Cheng 2015:165)

- b. *Keoi tausin sei-zo saamgaa_F ce **zaa3** **lai4** gwaa3. (**zaa3 < lai4*)
 3SG just.now wash-PFV three car SFP.only SFP SFP

- We can conclude:

- (45) The hierarchy of SFPs (version 3)
 Event < Temporal < Focus < Degree

- Notice that *zaa3* cannot co-occur with another FocusP SFP *lo1*, in both orders:

- (46) *zaa3* is incompatible with other FocusP SFPs

- a. *[Nigo jan]_F wui lai **zaa3** **lo1**. (**zaa3 < lo1*)
 this person will come SFP.only SFP
 Int.: ‘Obviously it’s only this person who will come.’

- b. *[Nigo jan]_F wui lai **lo1** **zaa3**. (**lo1 < zaa3*)
 this person will come SFP SFP.only
 Int.: ‘It’s just that obviously this person will come.’

2.2.4 The highest layer: Emotion/Call-on-Addressee

- *-k* is regarded as an SFP, parasitic to other SFPs
- After *aa3*: the highest layer Emotion

- (47) Zanhai leonzeon **laak3**! (vs. Zanhai leonzeon **laa3**!)
 really careless SFP really careless SFP
 With *-k*: ‘I’m really careless!’ (stronger tone) (Tang 2015:280)
 Without *-k*: ‘I’m really careless.’ (weaker tone)

- Tang (2020): Relabels Emotion to CoA, and regards a rising intonation H% as a member of it.

- (48) Keoi heoi H%?
 s/he go SFP
 ‘S/he goes?’ (Tang 2020)

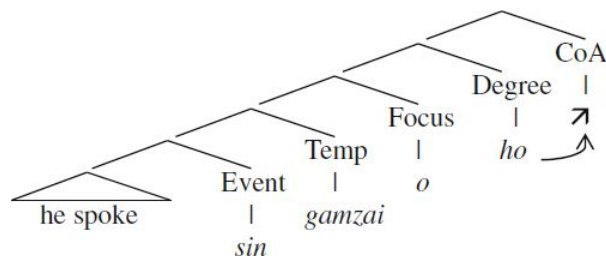
- The *ho2* we saw earlier: question uses with rising tone 2
- May co-occur with focus SFP *ne*; but not higher than that

- (49) a. Keoi jam matje ***(ne1)** **ho2**?
 3SG drink what SFP SFP
 ‘What does he drink?’ (Tang 2020:6)

- b. *Lok jyu **gwaa3** **(o3)ho2**?
 fall rain SFP SFP
 ‘I guess it rains. Right?’ (Tang 2020:7)

- Tang (2020): *ho2* decomposed
 - The segment *ho* is at Degree
 - The rising tone is regarded as the question intonation (Zhang Ling and Tang 2016) at CoA

(50) Movement of *ho2* in Tang (2020)



2.3 The decompositional approach to SFPs

- **Question:** Look at the set of examples below. What did you notice?

(51) a. Keoi hai Hoenggongjan **aa3**.
3SG be Hong Konger SFP
'S/he is a Hong Konger.'

b. Keoi heoi-zo Dakgwok **laa3**.
3SG go-PFV Germany SFP
'S/he already went to Germany.'

c. Keoi wui lai **gaa3**.
3SG will come SFP
'(I tell you,) s/he will come.'

d. Keoi tai-zo jat-bun syu **zaa3**.
3SG read-PFV one-CL book SFP
'S/he only read one book.'

(52) a. Keoi hai Hoenggongjan **aa4?**
3SG be Hong Konger SFP
'Is s/he a Hong Konger?'

b. Keoi heoi-zo Dakgwok **laa4?**
3SG go-PFV Germany SFP
'Did s/he already go to Germany?'

c. Keoi wui lai **gaa4?**
3SG will come SFP
'Is it true that s/he will come?'

d. Keoi tai-zo jat-bun syu **zaa4?**
3SG read-PFV one-CL book SFP
'Did s/he only read one book?'

2.3.1 Separating tones from segments

- Law (1990)'s proposal: Tonal particles: SFP with only tones
 - Strengtheners: a low tone without specification of register [L]
 - Weakeners: a higher tone without specification of register [H]

- (53) A background on the phonological analysis of lexical tones (Law 1990:85)

High-level ('55')	[+ Upper] H
Mid-level ('33')	[+ Upper] L
High-rising ('35')	[+ Upper] LH
Mid-low-level ('22')	[- Upper] H
Low-level ('11')	[- Upper] L
Low-rising ('13')	[- Upper] LH

- Three minimal pairs:

- *Ge3* vs. *Ge2*
- *Wo4* vs. *Wo5*
- *Aa4* vs. *Aa5*

- *ge3* vs. *ge2*

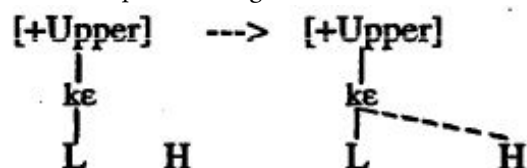
- → *ge2* expresses a sense of reservation or uncertainty → “weaker”

▲ Law (1990)’s *ge2* should actually have the tone [353] instead of [35]

- (54) a. Keoi wui bong nei **ge3**^[33]
s/he will help you SFP
(‘The situation is that) s/he will help you.’ (you don’t have to worry about anything)
- b. Keoi wui bong nei **ge2**^[353]
s/he will help you SFP
(‘S/he will (probably) help you.’

(Law 1990:96)

- (55) The decomposition of *ge2*

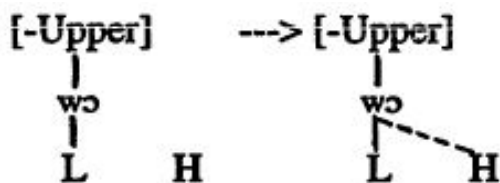


- *wo4* vs. *wo5*
- The two particles differ in the degree of disbelief or doubt expressed
 - *wo4*: what is said in the sentence is unexpected from the point of view of the speaker
 - *wo5*: quoted speech → device for disclaiming responsibility → “weaker”

- (56) a. Jat go sin dou m-sai **wo4**^[11]
 one CL cent all not-necessary SFP
 ‘(Surprisingly), I didn’t have to pay even one penny.’
- b. daijat nin jiu gaau jat cin man **wo5**^[13]
 first year need pay one thousand dollar SFP
 ‘I have been told that he will need to pay one thousand dollars in the first year.’

(Law 1990:99)

- (57) The decomposition of *wo5*



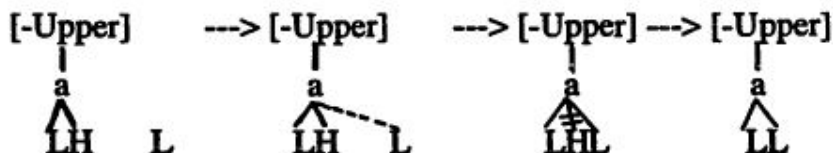
- *aa5* vs. *aa4*
- Both are question particles
 - *Aa4*: more blunt or less polite → “stronger”

- (58) To make sure that what the other person meant was the living room, the speaker says:

- a. Go teng **aa5**^[13]?
 CL living.room SFP
 ‘(You mean) the living room?’
- b. Go teng **aa4**^[11/21]?
 CL living.room SFP
 ‘(You mean) the living room? (are you sure?)’

(Law 1990:101)

- (59) The decomposition of *aa4*



- The exact inventory of tonal particles is subject to debate, but the paradigm is large enough to warrant a compositional analysis
 - It is also important that not all combinations are allowed
 - ➔ Some tonal particles/“intonation” are parasitic on SFPs and cannot be used on lexical words (vs. question H%)

(60) Segment-tone combination of SFPs (from Lau 2019:50)

	kɛ:	a:	tɕɛ:	tɕa:	la:	wɔ:	mɛ:	lɔ:	le:
T1 (55)	*	㗎	㗎	*	㗎	*	㗎	㗎	呢
T2 (35)	㗎	*	*	*	*	*	*	*	*
T3 (33)	㗎	啊	*	㗎	㗎	㗎	*	咯	*
T4 (21)	*	㗎	*	㗎	㗎	㗎	*	咯	㗎
T5 (13)	*	㗎	*	㗎	㗎	㗎	*	*	㗎
T6 (22)	*	*	*	*	*	*	*	*	*

2.3.2 Separating onsets from nucleus

- Fung (2000): The *l*-, *g*-, *z*- onset groups
- Tang (2020): The *h*- family (*ho2*, *he2*, *haa2*)
- *l*- SFPs related to realization:
 - *lei4*, *laa3*, *laa1*, *laa4*, *laak3*, *lo3*, *lo1*, *lo4*, *lok3*, *le5*, *le3*, *le4*
 - E.g., *lei4*: aspectual / recent past
 - E.g., *laa3*: realization of states
 - E.g., *lo3* realization of states (intensified)

- (61) a. Keoi sai ce **lai4**.
 3SG wash car SFP
 ‘S/he has washed car recently.’ (Tang 2015:203)
- b. Ngo heoi-zo [Dakkwok] [saam-ci] **laa3**.
 1SG go-PFV Germany three-time SFP
 ‘I already went to Germany for three times.’
- c. Keoi zau-zo **lo3**.
 3SG leave-PFV SFP
 ‘S/he’s gone.’ (Fung 2000:107)

• **g- SFPs** related to assertiveness (or givenness):

- *ge3, ge2, gaa3, gaa2, gaak3, gaa4*
- *ge3*: marks a high level of commitment on the part of the speaker to the proposition conveyed by the utterance, asserting the certainty of the proposition without any doubts; usually for given information
- *gaa3*: a fusion of *ge3* and *aa3*; not limited to background information

- (62) Aa-ji-suk {jatding/ ?daaigoi} wui lukjuk gei-faanlei **ge3**.
 second-uncle sure/ probably will continue mail-back SFP
 ‘Second uncle sure/?probably will continue to send (them to us).’ (Fung 2000:158)

- (63) Nei tai, ceot-min lok-gan yu {**gaa3**/ ***ge3**}.
 you see outside fall-PROG rain SFP SFP
 ‘Look at that, it’s raining outside.’ (Fung 2000:170)

• **z- SFPs** related to restriction:

- *ze1, zek1, zaa3, zaa4, zaa5, zaak1, ze4*
- E.g., *zaa3*: exclusive focus with scalar requirements
- E.g., *ze1*: downplaying readings

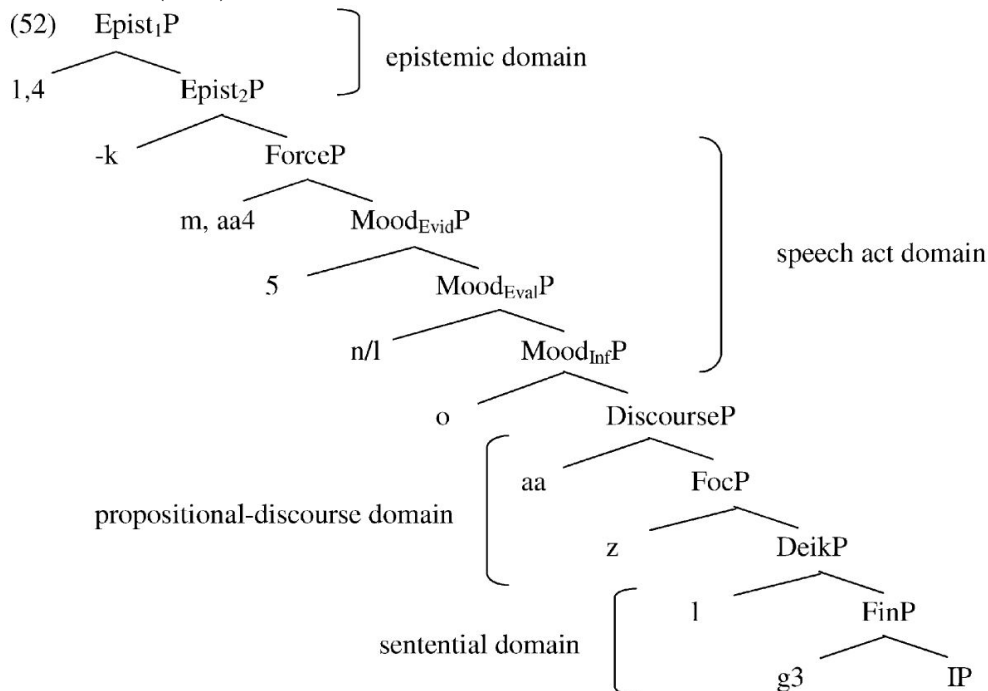
- (64) Keoi tai-zo jat-bun syu **zaa3**.
 3SG read-PFV one-CL book SFP
 ‘S/he read only one book.’ (Tang 2015:206)

- (65) *Ming wants to buy a watch that is \$100. He complains about it all day to you that it is too expensive. You calm him down and say:*

- a. Gwai hai gwai, daan dou m-dou 200, 100 {**ze1**/ #**zaa3**}.
 expensive be expensive but still not-reach 200 100 SFP.just SFP.only
 ‘Yeah it is expensive, but it is still not as expensive as 200, just 100 bucks.’ (not a big number)
- b. <average (e.g., \$50), **\$100**, \$200>price of a watch

2.3.3 A radical cartography

(66) Sybesma and Li (2007)'s dissection of SFPs



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3 Variation in the clausal domain³

- Cantonese differs from Mandarin in a number of constructions in the clausal domain:
 - **Double object constructions** (DOCs)
 - **Dative constructions**
 - **Comparatives**
 - **Passives**
 - **Disposal constructions**
 - ...
 - A famous difference between Cantonese and Mandarin: the so-called “inverted” doubled object constructions (IDOCs)
 - With [Direct Object (DO) - Indirect Object (IO)] word order
 - The canonical word order [IO-DO] is degraded (and usually not regarded “native”)
- (1) a. “Inverted” double object constructions
- | | |
|---|---------------------------|
| Ngo bei-zo [DO jat zi bat] [IO keoi]. (我畀咗一支筆佢)
*Wo gei-le [DO yi zhi bi] [IO ta]. (*我給了一支筆他)
1SG give-PFV one CL pen 3SG
‘I gave a pen (to) him/her.’ | [Cantonese]
[Mandarin] |
|---|---------------------------|
- b. Double object constructions
- | | |
|--|---------------------------|
| ?Ngo bei-zo [IO keoi] [DO jat zi bat]. (?我畀咗佢一支筆)
Wo gei-le [IO ta] [DO yi zhi bi]. (我給了他一支筆)
1SG give-PFV 3SG one CL pen
‘I gave him a pen.’ | [Cantonese]
[Mandarin] |
|--|---------------------------|
- The inverted word order only exists in dative/GIVE-type DOCs
- (2) a. Ngo man-zo [keoi] [jat tiu mantai]. (我問咗佢一條問題) [Cantonese]
 1SG ask-PFV 3SG one CL question
 ‘I ask him/her a question.’
- b. *Ngo man-zo [jat tiu mantai] [keoi]. (*我問咗一條問題佢)
 1SG ask-PFV one CL question 3SG
 Int.: ‘I ask him/her a question.’

3. The content is largely based on Tang (1998) and Tang (2003a):\$4,\$6.

3.1 “Inverted” double object constructions

- Five types of ditransitive verbs by their syntactic and semantic properties
 - GIVE-type, SEND-type, FRY-type, PLUCK-type, and ASK-type
- Three dative patterns to test:

(3) Three dative constructions

- Prepositional dative constructions (PDC):** V DO dative marker IO
E.g., I gave [a pen] [to Alex].
- Inverted double object constructions (IDOC):** V DO IO
E.g., I gave [a pen] [Alex]. (ungrammatical in English)
- Double object constructions (DOC):** V IO DO
E.g., I gave [Alex] [a pen].

3.1.1 Type I: prototypical GIVE verbs

- IO is the intended possessor of the DO
 - E.g., *bei2* 畀 ‘to give’, *sing2* 醒 ‘to give (as a present)’, *sung3* 送 ‘to give (a present)’, and *zoeng2* 獎 ‘to award’.
- ✓ PDC; ✓ IDOC; ✗ DOC
- The verb *bei* is special
 - Other verbs in IDOC are regarded as slightly unnatural by some speakers
 - *Bei* is also the prepositional dative marker: sounds “repetitive” in PDC with the verb *bei*

- (4)
 - a. (?)Ngo **bei**-zo [jat zi bat] [bei keoi]. (PDC)
1sg give-PFV one CL pen to 3sg
‘I gave a pen to him/her.’
 - b. Ngo **bei**-zo [jat zi bat] [keoi]. (IDOC)
1sg give-PFV one CL pen 3sg
‘I gave a pen (to) him/her.’
 - c. ?Ngo **bei**-zo [keoi] [jat zi bat]. (DOC)
1sg give-PFV 3sg one CL pen
‘I gave him/her a pen.’
- (5)
 - a. Ngo **sung**-zo [jat bun syu] [bei keoi]. (PDC)
1sg give-PFV one CL book to 3sg
‘I gave a book to him/her.’
 - b. (?)Ngo **sung**-zo [jat bun syu] [keoi]. (IDOC)
1sg give-PFV one CL book 3sg
‘I gave a book (to) him/her.’
 - c. ?Ngo **sung**-zo [keoi] [jat bun syu]. (DOC)
1sg give-PFV 3sg one CL book
‘I gave him/her a book.’

- The availability of DOC depends on the prosodic weight of the DO
- Even in PDC: heavy DO may be placed after the prepositional IO

→ The canonical [IO-DO] DOC order is likely to be derived by heavy NP shift

- (6) a. Ngo bei-zo [syu/ bun syu/ jat bun syu/ jat bun ngo hou zungji ge syu] [keoi].
1sg give-PFV book CL book one CL book one CL 1sg very like MOD book 3sg
'I gave [books/ the book/ a book/ a book that I like] (to) him/her.' (IDOC)
- b. Ngo bei-zo [keoi] [*syu/ ??bun syu/ ?jat bun syu/ jat bun ngo hou zungji ge syu].
1sg give-PFV 3sg book CL book one CL book one CL 1sg very like MOD book
'I gave him/her [books/ the book/ a book/ a book that I like].' (DOC)
- (7) a. Ngo sung-zo [syu/ bun syu/ jat bun syu/ jatbaak bun syu] [bei keoi].
1sg give-PFV book CL book one CL book one.hundred CL book to 3sg
'I gave books/ the book/ a book/ one hundred books to him.' (PDC)
- b. Ngo sung-zo [bei keoi] [*syu/ ??bun syu/ ?jat bun syu/ jatbaak bun syu].
1sg give-PFV to 3sg book CL book one CL book one.hundred CL book
'I gave to him books/ the book/ a book/ one hundred books.' (PDC)
- (8) Heavy NP shift in dative constructions
- a. I gave [the book that I bought last week] [to Mary].
- b. I gave [to Mary] [the book that I bought last week].
- (9) Heavy NP shift with locatives (Wasow 1997:83)
- a. You'll find [a copy of Hemispheres] [in your seat pocket].
- b. You'll find [in your seat pocket] [a copy of Hemispheres].

3.1.2 Type II: SEND verbs

- The DO is transferred to the IO
 - E.g., *bun1* 搬 'to move', *daai3* 帶 'to bring', *dai6* 遞 'to hand to', *gei3* 寄 'to send', *ling1* 拎 'to carry with hand', *lo2* 攞 'to bring', *maai6* 賣 'to sell', *paai3* 派 'to deliver', ...

- ✓ PDC; ✗ IDOC; ✗ DOC

- (10) a. Siuming **gei**-zo [jat fung seon] [bei ngo]. (PDC)
Ming send-PFV one CL letter to 1sg
'Ming sent a letter to me.'
- b.*/? Siuming **gei**-zo [jat fung seon] [ngo]. (IDOC)
Ming send-PFV one CL letter 1sg
Int.: 'Ming sent a letter (to) me.'
- c. *Siuming **gei**-zo [ngo] [jat fung seon]. (DOC)
Ming send-PFV 1sg one CL letter
Int.: 'Ming sent me a letter.'

3.1.3 Type III: FRY verbs

- Verbs of creation; the IO is the beneficiary
 - E.g., *caau2* 炒 ‘to fry’, *jing2* 影 ‘to photocopy’, *sai2* 洗 ‘to wash’, *waak6* 畫 ‘to draw’, *zik1* 織 ‘to knit’, *zing2* 整 ‘to make’, *zyu2* 煮 ‘to cook’, ...

- ✓ PDC; ✗ IDOC; ✗ DOC

 Although the patterns are the same as Type II SEND verbs, these verbs are inherently transitive verbs and may take *for*-PP instead of *to*-PP in English ditransitive uses

- (11) a. Lingling **caau**-zo [jat dip coi] [bei ngo]. (PDC)
 Ling-Ling fry-PFV one CL vegetable to 1sg
 ‘Ling-Ling fried a plate of vegetable for me.’
- b*/? Lingling **caau**-zo [jat dip coi] [ngo]. (IDOC)
 Ling-Ling fry-PFV one CL vegetable 1sg
 Int.: ‘Ling-Ling fried a plate of vegetable (for) me.’
- c. *Lingling **caau**-zo [ngo] [jat dip coi]. (DOC)
 Ling-Ling fry-PFV 1sg one CL vegetable
 Int.: ‘Ling-Ling fried me a plate of vegetable.’

3.1.4 Type IV: PLUCK verbs

- Verbs of obtaining; the IO is the beneficiary
 - E.g., *coeng2* 搶 ‘to snatch’, *gaan2* 揀 ‘to choose’, *lo2* 攞 ‘to get’, *tau1* 偷 ‘to steal’, *zaak6* 摘 ‘to pluck’, ...

- ✓ PDC; ✗ IDOC; ✗ DOC (under intended reading)

- DOC only gives a source-IO reading (see Type V)⁴

- (12) a. Ngo **zaak**-zo [sapjat zi muigwaifaa] [bei keoi]. (PDC)
 1sg pluck-PFV eleven CL rose to 3sg
 ‘I plucked eleven roses for him/her.’
- b*/? Ngo **zaak**-zo [sapjat zi muigwaifaa] [keoi]. (IDOC)
 1sg pluck-PFV eleven CL rose 3sg
 Int.: ‘I plucked eleven roses for him/her.’
- c. # Ngo **zaak**-zo [keoi] [sapjat zi muigwaifaa]. (DOC)
 1sg pluck-PFV 3sg eleven CL rose
 ONLY: ‘I plucked his/her eleven roses.’
 NOT Int.: ‘I plucked eleven roses for him/her.’

4. It may have a non-DOC parse—a possessive marker *ge* can be added after the IO:

- (i) Ngo **zaak**-zo [[keoi]-**ge**] [sapjat zi muigwaifaa].
 1sg pluck-PFV 3sg-MOD eleven CL rose
 ‘I plucked his/her eleven roses.’

3.1.5 Type V: ASK verbs

- Verbs of obtaining; the IO is the source
 - Type Va: acquisition of information/ideas: *haau2* 考 ‘to test’, *kau4* 求 ‘to request’, and *man6* 問 ‘to ask’, ...
 - Type Vb: acquisition of objects: *coeng2* 搶 ‘to snatch’, *lo2* 攞 ‘to get’, *tau1* 偷 ‘to steal’, ...
- A** Type Vb overlaps with Type IV PLUCK verbs, but the thematic role of IO is different
- X** PDC (under intended reading for Type Vb); **X** IDOC; **✓** DOC

- (13) a. *Ngo **man** [mantai] [bei keoi]. (PDC)
 1sg ask question to 3sg
 Lit.: ‘I ask questions to him/her.’
- b. *Ngo **man** [mantai] [keoi]. (IDOC)
 1sg ask question 3sg
 Lit.: ‘I ask questions him/her.’
- c. Ngo **man** [keoi] [mantai]. (DOC)
 1sg ask 3sg question
 ‘I ask him/her questions.’
- (14) a. #Ngo **tau-zo** [jat bun syu] [bei keoi]. (PDC)
 1sg steal-PFV one CL book to 3sg
 ONLY: ‘I stole a book for him/her.’
 NOT Int.: ‘I stole a book from him/her.’
- b. *Ngo **tau-zo** [jat bun syu] [keoi]. (IDOC)
 1sg steal-PFV one CL book 3sg
 Int.: ‘I stole a book from him/her.’
- c. Ngo **tau-zo** [keoi] [jat bun syu]. (DOC)
 1sg steal-PFV 3sg one CL book
 ‘I stole a book from him/her.’

3.1.6 Interim summary

Constructions	Type I _{GIVE}	Type II _{SEND} , III _{FRY} , IV _{PLUCK}	Type V _{ASK}
PDC (V-DO- <i>bei</i> -IO)	✓	✓	X
IDOC (V-DO-IO)	✓	X	X
DOC (V-IO-DO)	X ⁵	X	✓

Table 1: Classification of Cantonese ditransitive verbs

- Question** What are the analytical options for IDOC?

5. Unless with heavy NP shift.

3.2 Variation in the PF component

3.2.1 IDOC as PDC with null dative markers

- Tang (1998): The inverted DOC is a prepositional dative construction with a null dative marker (otherwise pronounced as *bei*)

→ PDCs are more “basic”/“primitive”

→ Cantonese lacks GIVE-type DOCs

- (15) a. V [NP DO] [PP [P *bei*] [NP IO]] (PDC)
 b. V [NP DO] [PP [P $\emptyset$] [NP IO]] (IDOC)
 c. V [NP IO] [NP DO] (DOC)

- What’s so special about the IO of Type I GIVE-verbs?
- Thematic role:

- (16) a. I gave a book [to Bill]. (Goal (Ownership transfer))
 b. I sent/brought a letter [to Bill]. (Goal/Location)
 c. I fried a plate of rice [for Bill]. (Beneficiary)
 d. I pluck roses [for Bill]. (Beneficiary)
 e. I stole a book [from Bill]. (Source)

- *Bei* can be used to mark three thematic roles (i.e., when PDCs are allowed): Goal, Location (Goal of locative transfer), and Beneficiary (but not Source)
- Null dative marker: only allowed with pure Goal

- (17) **Generalization** An ‘inverted’ double object construction is grammatical only if the dative verb assigns only the thematic role Goal to the indirect object.

- Evidence for null dative markers
 - Improvement of *bei*-PDC when the verbal *bei* and dative *bei* are distant from each other
- Phonological reasons to use a null marker instead of an overt marker

- (18) a. Ngo **bei**-zo [bun jung Zungman se ge jyufaat syu] [**bei** keoi]
 1SG give-PFV CL use Chinese write MOD grammar book to 3SG
 ‘I gave a/the grammar book written in Chinese to him/her.’
- b.(?) Ngo **bei**-zo [bun syu] [**bei** keoi]
 1SG give-PFV CL book to 3SG
 ‘I gave a/the book to him/her.’
- c. ?[Go bun syu], ngo **bei**-zo __ [**bei** keoi].
 that CL book 1SG give-PFV to 3SG
 Int.: ‘That book, I gave to him/her.’
- d. *[Go bun syu], ngo wui **bei** __ [**bei** keoi].
 that CL book 1SG will give to 3SG
 Int.: ‘That book, I will give to him/her.’

- Why do only **Type I GIVE-verbs** allow null dative markers?

- ① Tang (1998): A formal explanation by ECP⁶
- ② Tang (2003a): A functional explanation by theta-role assignment ☞ Let's focus on this
 - For GIVE-type verbs, the IO is already marked by the *verb* as the Goal
→ no prepositional marker needed → *bei* may be null
 - For other verbs, the verbs does not mark the theta-role
(e.g., 'fry' itself is inherently transitive, but not ditransitive)
→ an overt marker is needed to mark Location/Beneficiary

3.2.2 IDOC as PDC with null dative markers

- Tang (2003a) proposes a feature [+OMIT]
 - "Instructs" the PF whether the marker can be omitted or not
- (19) a. Cantonese prepositional *bei* in the lexicon: [+OMIT]
 - b. Mandarin prepositional *gei* in the lexicon: [-OMIT]
- Beyond Cantonese: IDOC is found in a number of Sinitic languages too
- (20) The distribution of IDOC in Sinitic languages (Tang 1998, ex.24)

	<i>to give</i>	IDOC
Gan (Anyi)	t ^h au	*
Hakka (Huizhou)	pi	OK
Hakka (Meixian)	pun	OK
Hui (Xiuning)	te	*
Jin (Taiyuan)	gei	*
Mandarin (Beijing)	gei	*
Min (Fuqing)	khy?	*
Min (Leihua)	pun	OK
Min (Taiwanese)	ho	*
Wu (Shanghainese)	bo?	OK
Xiang (Changsha)	pa	OK
Yue (Cantonese)	bei	OK

- WHY would languages differ in whether the dative marker can be null?
- No clear answer, but there's a curious diachronic correlation offered by Tang (1998)
 - Dative markers that can be null: all derived from genuinely ditransitive verbs
(e.g., *bei2* 畀 in Cantonese)
 - Dative markers that cannot be null: historically from transitive verbs
(e.g., *gei* 給 < *qi* 乞 'to beg' in Mandarin)

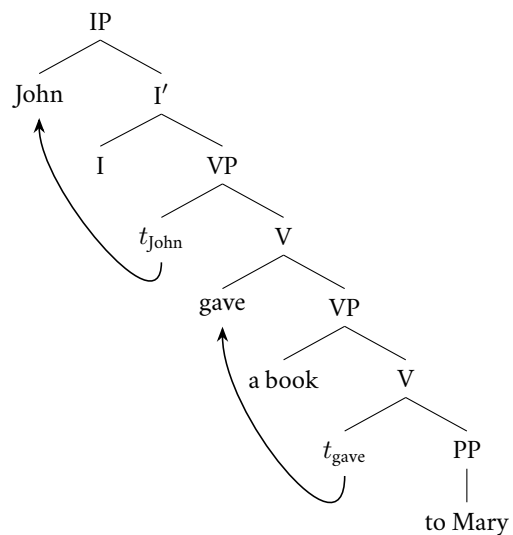
6. Empty Category Principle (ECP) refers to:

- (i) Empty categories must be properly governed.
 - a. A properly governs B iff A theta-governs B or A antecedent-governs B.
 - b. A theta-governs B iff A governs B and A theta-marks B.
 - c. A antecedent-governs B iff A governs B and A is coindexed with B.

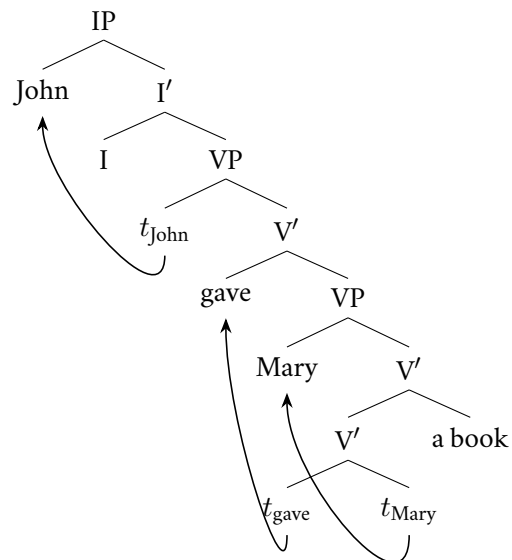
3.3 Variation in the lexicon: the lack of DOCs in Cantonese

- But WHY does Cantonese lack DOCs?
 - ☞ Not any DOCs—only GIVE-type DOCs; Cantonese does have OBTAIN-type DOCs (Type V verbs like ‘ask’ and ‘steal’)
 - Background on dative constructions and DOCs
 - Dative constructions are more “basic/primitive”
 - DOCs are derived from dative constructions → dative shift does not apply across-the-board
- (21) a. John gave the money to Mary.
 b. John gave Mary the money.
 c. John donated the money to charity.
 d. *John donated charity the money. (Larson 1988:369)
- Larson (1988)’s theory of DOCs:
 - A VP shell: hosting both DO (higher–specifier) and IO (lower–complement)
 - Dative constructions: The verb moves to the upper VP shell (now usually labeled as vP)
 - DOC: the DO is “demoted” to be an adjunct; the IO raises to the higher (specifier) position (for Case reasons, analogous to subject movement in passives)

(22) Dative: *John gave a book to Mary*

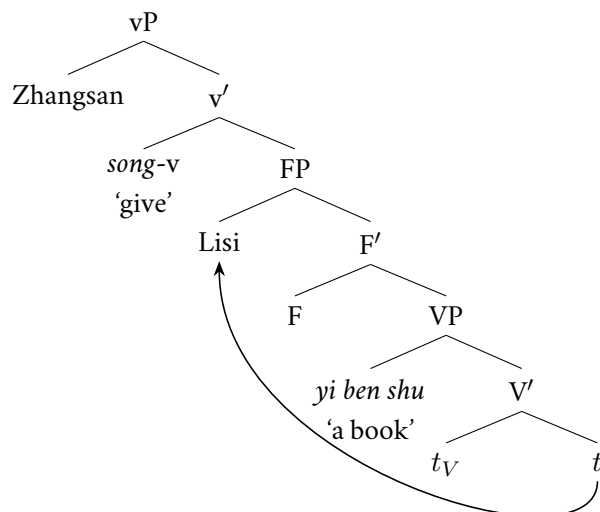


(23) DOC: *John gave Mary a book.*



- Tang (2003a): No demotion of DO; there is a higher functional projection for hosting IO movement
 - **F**: a head related to possession
(cf. for ownership transfer; give = cause to have; Harley 1997)
 - Requires animacy

(24) DOC: *Zhangsan song Lisi yi ben shu* 'Zhangsan gave Lisi a book.' (張三送李四一本書)



(25) The animacy restriction in DOCs (Green 1974:103 via Tang 2003a:148)

- He sent a letter to Bill.
- He sent Bill a letter.
- He sent a letter to New York.
- *He sent New York a letter.

- Two types of “F” (Tang 2003b, inspired by Niina Zhang 1998)

❶ HAVE in GIVE-type DOCs

→ realized as *gei* 給 in Mandarin

❷ LOSE (NOT HAVE) in OBTAIN-type DOCs

→ realized as *zou* 走 in Mandarin

(26) a. Zhangsan ji-**gei**-le [wo] [yi ben shu] [Mandarin]
 Zhangsan send-to-PFV 1SG one CL book
 ‘Zhangsan sent me a book.’ (Tang 2003a:150)

b. Zhangsan tou-**zou**-le [wo] [yi ben shu]
 Zhangsan steal-away-PFV 1SG one CL book
 ‘Zhangsan stole a book away from me.’

- Formed by rolled-up head movement

(27) a. [_{VP} le [_{FP} IO *gei/zou* [_{VP} V DO]]]
 b. [_{VP} le [_{FP} IO V-*gei/zou* [_{VP} t_V DO]]]
 ↑
 c. [_{VP} V-*gei/zou-le* [_{FP} IO t_{V-gei/zou} [_{VP} t_V DO]]]
 ↑

- Cantonese lacks F-HAVE → no GIVE-type DOCs
- However, Cantonese does have F-LOSE → OBTAIN-type DOCs exist
 - Supports from the overt realization of *bei* 畀 and *zau* 走:

- (28) a. *Ngo maai-**bei**-zo [keoi] [jat gaan uk] [Cantonese]
 1SG buy-to-PFV 3SG one CL house
 Int.: ‘I bought him/her a house.’ (Tang 2003a:155)
- b. Keoi tau-**zau**-zo [ngo] [jat go pinggwo]
 3SG steal-away-PFV 1SG one CL apple
 ‘S/he stole an apple away from me.’ (Tang 2003a:155)

- (29) Dative construction + heavy NP shift
 Ngo maai-zo [**bei** keoi] [*uk/ ?jat gaan uk]
 1SG buy-PFV to 3SG house one CL house
 ‘I bought for him/her a house.’

- The variation in DOC is reduced to the (functional) lexicon
- Whether F is available in the inventory or not

Languages	F-HAVE	F-LOSE
Mandarin	✓	✓
Cantonese	✗	✓

Table 2: Parametric setting of DOCs

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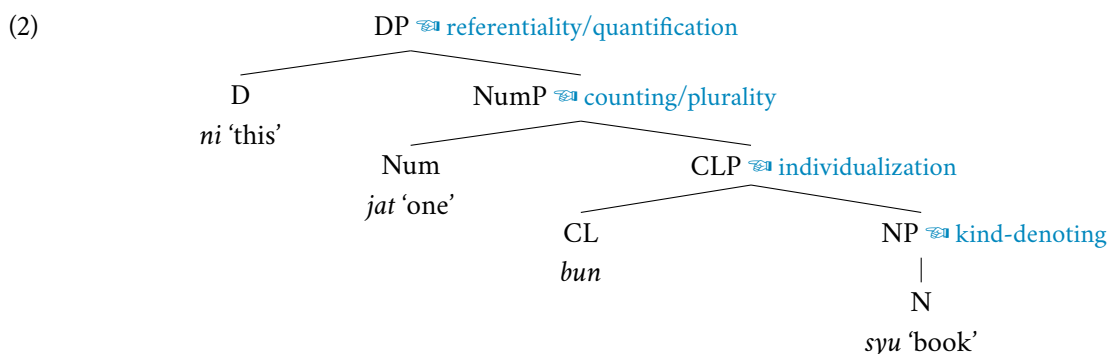
4 Variation in the nominal domain

- Both Cantonese and Mandarin are classifier languages

- Classifier: usually required for all nouns when counting with numerals
 - “make count nouns enumerable by individualizing and classifying them.” (Bisang 1999:113)

- (1) Ni jat bun syu (呢一本書) [Cantonese]
 Zhe yi ben shu (這一本書) [Mandarin]
 this one CL book
 ‘this (one) book’

- Nominal extended projections: D(eterminer) > Num(eral) > CL(assifier) > N(oun)
 (cf. C.-C. J. Tang 1990; Cheng and Sybesma 1999; Li 1999, among many others)
 - Each layer is assumed to associate with a certain semantic function
 (cf. Krifka et al. 1995; Chierchia 1998; Li 1999; Yang 2001; Borer 2005; Jiang 2020)



- Again, same but different!
 - **Bare classifier constructions** ☞ **The most studied and significant point of variations**
 - **Definite bare nouns**
 - **Proprial articles**
 - **The nature of demonstratives**
 - **Nominalization**
- We will focus on Bare CL, but let’s also have a taste of other points of variations (if we have time ☺)

4.1 Classifier-noun phrases

- Bare classifier constructions (Bare CL) (A term due to Simpson 2005):
 The use of a classifier and a noun without numerals (CL-N), usually for definite readings
 - Widely found in East and Southeast Asian languages (e.g., Wu, Vietnamese, Nung, etc.)
 - Cantonese: seminal work by **Cheng and Sybesma (1999)** (鄭禮珊, 司馬翎)
 (see also Simpson 2005; Wu and Bodomo 2009, among many others)
- (3) a. [Bun syu] m-houtai
 *[Ben shu] bu-haokan
 CL book not-good
 ‘The book is not good.’
- b. [Go bun syu] m-houtai [Cantonese]
 [Na ben shu] bu-haokan [Mandarin]
 that CL book not-good
 ‘That book is not good.’

- The interpretation of a [CL-N] phrase varies with its position
 - E.g., **Object**: definite and indefinite
 - E.g., **Subject**: definite only
- Definite [CL-N]: “true” Bare CL
- Indefinite [CL-N]: usually regarded as [one-CL-N] with the omission of numeral ‘one’

- (4) a. [Bun syu] m-houtai.
 CL book not-good
 ‘The book is not good.’
 NOT: *‘A/some book is not good’
- b. Ngo maai-zo [bun syu].
 1SG buy-PFV CL book
 ‘I bought the book.’
 OR: ‘I bought a book.’
- Mandarin also allows indefinite [CL-N] objects, but not definite [CL-N] as we’ve seen
 - Definite [CL-N] and indefinite [CL-N] are **grammatically different**, not a semantic “ambiguity”
- (5) a. *[Ben shu] bu-haokan
 CL book not-good
 Int.: ‘The book is not good.’
- b. Wo xiang kan [ben shu].
 I would.like read CL book
 ‘I would like to read a book.’
 NOT: *‘I would like to read the book.’
 ((b) from Cheng and Sybesma 1999:525)

4.1.1 Indefinite CL-N

- Indefinite [CL-N]: assumed to have an **empty numeral ‘one’** (C.-C. J. Tang 1990), **licensed** by:
 - An **overt D** head (including demonstratives and indefinite *mau* 某 ‘a certain, some’)
 - The **verb**
 - Existential *jau* ‘have’
 - **Prepositions**
- (6) a. **Mau** [(jat) bun syu]
 certain one CL book
 ‘A certain book’
- b. **Sik** [(jat) wun min]
 eat one CL noodles
 ‘eat one bowl of noodles’
- c. **Jau** [(jat) go jan] lai-zo.
 have one CL person come-PFV
 ‘There is a person who comes.’
- d. Kaukei sung-zo ni bun syu **bei** [(jat) go hoksaang].
 casually give-PFV this CL book to one CL student
 ‘(I) casually gave this book to a student.’

- Positions where an indefinite CL-N **cannot** occur in:
 - **Subjects** (▲ Numeral subjects are possible in some cases, but indefinite CL-N is still prohibited)
 - **Focus**
 - **Topics** (which bans indefinites independently)

- CL-N below only be interpreted as definite in Cantonese (and ungrammatical in Mandarin)

- (7) a. [#(Jat) gaan fong] jau loeng go jan.
 one CL room have two CL person
 Int.: 'There are two people per room.'/'One room for two.'(Lit.: one room has two people)
- b. Lin [(#(jat) bun syu)]_F keoi dou m-tai.
 even one CL book 3SG also not-read
 Int.: 'S/he doesn't read even one book.'
- c. *[Jat go hoksaang] ne, keoi m-zungji.
 one CL student TOP 3SG not-like
 Lit.: 'One student, s/he doesn't like.'
- d. [Go hoksaang] ne, keoi m-zungji.
 CL student TOP 3SG not-like
 ONLY: 'The student, s/he doesn't like.' (NOT: 'A student, s/he doesn't like.')

- Indefinite CL-N can only be interpreted as **non-specific** (Cheng and Sybesma 1999)

- ✎ An NP is interpreted as specific if the speaker has a particular entity in mind
- ✎ "Guess which NP" test: specific and indefinite
- ✎ "Any NP" test: non-specific and indefinite

- (8) a. Ngo soeng maai #(jat) bun syu. Nei gu-haa (hai) bin bun? (specific)
 1SG want buy one CL book 2SG guess be which CL
 'I want to buy a book. Guess which book?'
- b. Ngo soeng maai (jat) bun syu. Sidaan jat bun zau dak. (non-specific)
 1SG want buy one CL book any one CL then fine
 'I want to buy a book. Any book is fine.'

- In Chinese: specific readings can be enforced in certain constructions

→ **ban** indefinite CL-N (Cheng and Sybesma 1999:525-526)

- E.g., Bound predicates with resultatives
- E.g., Disposal constructions (i.e., *ba*-constructions in Mandarin)

- CL-N below only be interpreted as definite in Cantonese (and ungrammatical in Mandarin)

- (9) a. Ngo sik-jyun [(#(jat) faai kukkei]. [Cantonese]
 Wo chi-wan-le [(#(yi) kuai binggan]. [Mandarin]
 1SG eat-finish-PFV one CL cookie
 Int.: 'I finished eating a (particular) cookie.'
- b. Ngo zoeng [(#(jat) wun tong] jam-jyun. [Cantonese]
 Wo ba [(#(yi) wan tang] he-wan-le. [Mandarin]
 1SG DISP one CL soup drink-finish-PFV
 Int.: 'I finished drinking a (particular) bowl of soup.'

4.1.2 Definite CL-N (Bare CL)

- Bare CL may occur in **any syntactic positions**
 - Subjects, objects, focus, topics, ... (As we've seen above)
- Modifiers are allowed after the classifier

- (10) a. [Bun hou hau ge syu] mgin-zo
 CL very thick MOD book disappear-PFV
 'The thick book disappeared.'
- b. *Hou hau (ge) [bun syu] mgin-zo
 very thick MOD CL book disappear-PFV
 Int.: 'The thick book disappeared.'
- cf. Hou hau (ge) [go bun syu] mgin-zo
 very thick MOD that CL book disappear-PFV
 'That thick book disappeared.'

- **Numerals are banned**
- Obligatory singular reading with sortal/individual classifiers

- (11) [(*)jat bun (*)jat syu] m-houtai.
 one CL one book not-good
 Int.: 'The book is not good.'

- Plural classifier may participate in Bare CL (*di* 啲 in Cantonese, cf. *xie* 些 in Mandarin)
 - As well as other group classifiers (e.g., *deoi* 'pair', *baan* 'group')

- (12) a. Ngo maai-zo [(jat) di syu]. b. [Di syu] m-houtai.
 1SG buy-PFV one CL.PL book CL.PL book not-good
 'I bought several books.' 'The books are not good.'

4.2 Licensing empty heads in nominals

- Generalizing the patterns:

	Contexts	Definite CL-N	Indefinite CL-N	one-CL-N
Position	Topic	✓	✗	✗
	Focus	✓	✗	✓
	Subject	✓	✗	✓
	Object of V	✓	✓	✓
	Object of P	✓	✓	✓
Specific	Bound pred.	✓	✗	✓
	Disposal	✓	✗	✓

Table 3: Distribution and interpretation of CL-N (simplified)

- **Question** What is the formal licensing condition for **indefinite CL-N**?

4.2.1 Licensing empty Num

- Intuition: Empty Num comes from the deletion of unstressed *jat* ‘one’ (Cantonese) or *yi* ‘one’ (Mandarin)
 - Cheng and Sybesma (1999): Not phonological reduction, but empty **Num head** in the lexicon
 - Li (1998): Empty categories must be licensed by the **Empty Category Principle**

(13) Empty categories must be properly governed.

- A properly governs B iff A theta-governs B or A antecedent-governs B.
- A theta-governs B iff A governs B and A theta-marks B.
- A antecedent-governs B iff A governs B and A is coindexed with B.

(14) a. Licensing by D (e.g., indefinite *mau* 某 ‘certain’):

[_{DP} D-*mau* [_{NumP} **Num**- $\emptyset$ [_{CLP} CL-*bun* [_{NP} *syu* ‘book’]]]]

•-----•

b. Licensing by V (including existential verb *jau* 有 ‘have’)

[_{VP} V-*jau* [_{NumP} **Num**- $\emptyset$ [_{CLP} CL-*bun* [_{NP} *syu* ‘book’]]]]

•-----•

c. Licensing by P (e.g., dative *bei* 畀 ‘to’)

[_{PP} P-*bei* [_{NumP} **Num**- $\emptyset$ [_{CLP} CL-*bun* [_{NP} *syu* ‘book’]]]]

•-----•

- Subjects, topics, and focus: no heads properly govern the empty Num

(15) Empty Num failed to be licensed

a. Subjects:

*[_{TP} [_{NumP} **Num**- $\emptyset$ [_{CLP} CL-*bun* [_{NP} *syu* ‘book’]]] T [_{VP} V ...]]

b. Topics:

*[_{TopP} [_{NumP} **Num**- $\emptyset$ [_{CLP} CL-*bun* [_{NP} *syu* ‘book’]]] [_{TP} Subj T [_{VP} V ...]]]

c. Focus:

*[_{FocP} Lin- ‘even’ [_{NumP} **Num**- $\emptyset$ [_{CLP} CL-*bun* [_{NP} *syu* ‘book’]]] [_{TP} Subj T [_{VP} V ...]]]

- Must be local to its licenser; cannot be intervened by other elements

- E.g., Adnominal modifiers
- E.g., Free choice marker *sidaan* ‘any’ (cf. T. T.-M. Lee 2025)⁷

(16) a. Keoi **kin-dou** baanfong leoimin ge [(jat) go hoksaang].

3SG saw classroom inside MOD one CL student
‘S/he saw a student in the classroom.’

b. Ngo **maai-zo** sidaan [(jat) bun syu].

1SG buy-PFV any one CL book
‘I randomly bought a book.’ (lit: I bought any book.)

7. Same for other free choice markers like *kaukei* ‘any’, *ceipin* ‘any’, and *jamho* ‘any’. *Jamho* ‘any’ has both NPI and FCI uses, similar to English *any*. It may also directly attach to nouns without numerals and classifiers: *jamho (jat go) hoksaang* ‘any (one CL) student’ vs. *sidaan/kaukei/ceipin *(jat go) hoksaang* ‘any *(one CL) students’.

- Explaining **specificity**: indefinite CL-N can only be non-specific
 - Taken by Cheng and Sybesma (1999) as arguments against a phonological reduction account of ‘one’-CL-N to CL-N
- Assumption: specificity involves scope-taking—derived by covert movement in the LF (Logical Form)
 - ➔ After movement, the null Num is not licensed (governed) by a higher head
 - ➔ NumP with a null Num (CL-N) can only have non-specific readings

(17) I want to buy a book.

a. **Specific:**

There is a book that I want to buy. (a > want)

b. **Non-specific:**

I want to buy a book—any book. (want > a)

(18) a. Syntax: [I want to [buy a book]].

b. LF: [a book [I want to buy *t*]]

↑

(19) Specific readings of CL-N

LF: *[[**NumP** Num- $\emptyset$ [_{CLP} CL [_{NP} N]]] [_{TP} Subj ... [_{VP} V *t*_{NumP}]]]

↑

- More variation: Indefinite CL-N is not always allowed in other Sinitic languages
- **Disallowed in Taiwanese** (Huang 2015; Li and Wei 2019)

(20) Gua xiunnbe be [*(**tsit**) pun tsheh] lai khuann

I want buy (one) CL book come read

‘I would like to buy a book to read.’

(Huang 2015:38; Li and Wei 2019:4)

- Some proposals to explain the differences
 - S.-W. Tang (2003): Empty Num is licensed by the verb (via Agree)
 - ➔ If verbs do not move at all, it cannot license the empty Num (recall in S.-W. Tang 2006 Min-type languages verbs stay at V)
 - Huang (2015): Empty Num is licensed by the classifier (via Agree)
 - ➔ In TSM [_{Num} one] is lexical and cannot be null
 - Li and Wei (2019): Prosodic conditioned—under certain environments indefinite CL-N is allowed

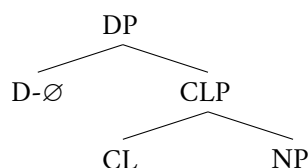
4.2.2 Licensing null D

- Assuming ...
 - ① All empty heads must be licensed (as we’ve seen for empty Num in indefinite CL-N)
 - ② Definiteness is always conveyed by D, overt or not
- **Question** How is the null D in Bare CL (definite CL-N) licensed?

(21) E.g., Subject-position Bare CL

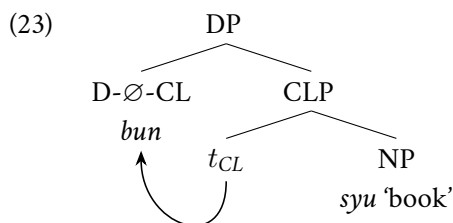
a. [_{TP} [**CL-N**] T [_{VP} V O ...]]

b.



- Simpson (2005) **CL-to-D movement** (see also Sio 2006)
- Null D: definite determiner (see Yip, Banerjee, and Lee 2023 for its semantics)

(22) **Bun syu** mgin-zo
 CL book disappear-PFV
 'The book disappeared.'



- Num is not projected → otherwise it would block head movement (cf. Head Movement Constraint, Travis 1984)
- No numeral can be spelt out in Bare CL
 - (Alternative: CL-to-Num-to-D movement when the Num is null, by Huang 2015)

(24) [(*)Jat] bun (*)jat syu] m-houtai.
 one CL one book not-good
 Int.: 'The book is not good.'

Ways to license (definite) D

- ❶ Overt D (e.g., English definite article *the*)
- ❷ CL-to-D movement (e.g., Cantonese, Vietnamese, etc.)

(25) [**Người** chồng] rất tốt [Vietnamese]
 CL husband very good
 'The husband was very good.' (Simpson 2005:823)

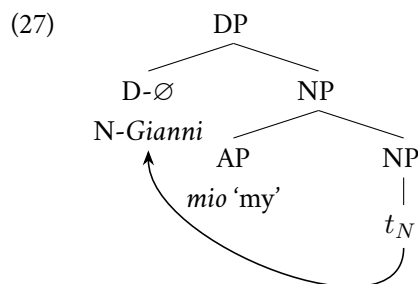
- ❸ N-to-D movement (e.g., Italian proper names, Longobardi 1994)

⚠ Claimed to exist in Mandarin (for definite bare nouns) but lacks syntactic support

(26) a. *(Il) mio Gianni
 the my Gianni
 'My Johnny'

b. Gianni mio
 Gianni my
 'My Johnny'

(adapted from Longobardi 1994:623)

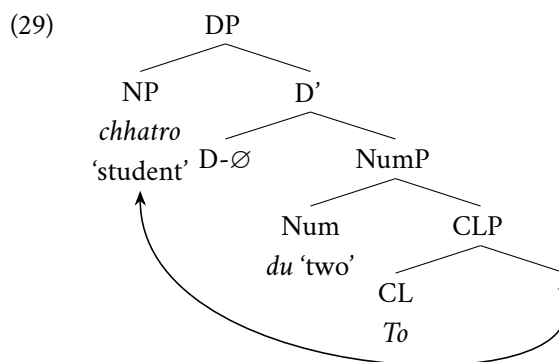


④ NP-to-SpecDP movement (e.g., Bangla, Bhattacharya 1999)

(28) a. du To chhatro
two CL student
'two students'

b. chhatro du To
student two CL
'the two students'

(adapted from Dayal 2012)



4.2.3 On sortal vs. mensural classifiers

- Chierchia (1998): All nouns in Chinese are mass nouns → classifiers are needed
- Cheng and Sybesma (1998): Count-mass distinction exists in Chinese, as manifested in the types of classifiers used
 - **Mensural classifiers**: for mass nouns → unit of measure
 - **Sortal classifiers**: for count nouns → individuate the atomic unit
- Differ in whether *de* 的 (=ge 嘅 in Cantonese) can be added
(but see Li 2013; T. T.-M. Lee 2026 for complications)

(30) [Mandarin]

a. Mass-classifiers
三磅 (的) 肉
san **bang** (de) rou
three CL_{pound} DE meat
'three pounds of meat'

b. Count-classifiers
八頭 (*的) 牛
ba **tou** (*de) niu
eight CL DE cow
'eight cows' (T. T.-M. Lee 2026:19)

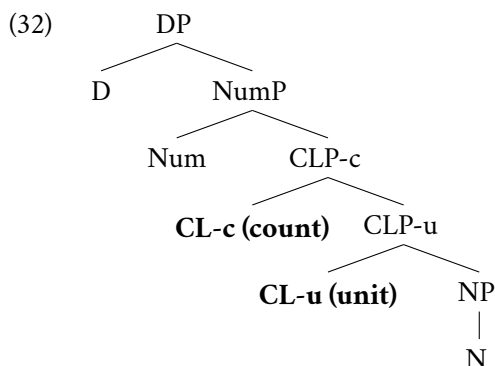
(31) [Cantonese]

a. Mass-classifiers
三磅 (嘅) 肉
Saam **bong** (ge) yuk
three CL_{pound} GE meat
'three pounds of meat'

b. Count-classifiers
八隻 (*嘅) 牛
baat **zek** (*ge) ngau
eight CL GE cow
'eight cows'

- Sybesma (2007): Classifiers are syntactically divided into two groups
(See T. T.-M. Lee 2026 for a third type CL-divider)

- ① **CL-c**: count-marking (measure words)
- ② **CL-u**: unit-marking (sortal)



- Interestingly, the two types of classifiers differ in whether **Bare CL** can be formed

- Sortal classifiers may form Bare CL
- Mensural classifiers cannot form Bare CL

- (33) a. {a. ??磅 / b. 隻} 象棋冇咗
 {a. ??**bong** / b. zek} zoengkei mou-zo
 CL_{pound} CL chess lost
 Int.: ‘The pound of/the} chess is lost.’ (T. T.-M. Lee 2026:26)
- b. *升水冇咗
 ***sing** seoi mou-zo
 CL_{liter} water lost
 Int.: ‘The liter of water is lost.’ (Cheng and Sybesma 2014:260)

- Cantonese also allows **classifier reduplication** for universal quantification (cf. P. P.-L. Lee 2020)
 - Restricted in Mandarin, but there is some residue

- (34) 個個學生都好聰明 [Cantonese]
Go-go hoksaang dou hou cungming
 CL-CL student all very clever
 ‘Every student is clever.’
- (35) a. 每個/*個個學生都很聰明 [Mandarin]
 {Mei ge/ ***ge-ge**} xuesheng dou hen congming
 every CL CL-CL student all very clever
 ‘Every student is clever.’
- b. 條條大道通羅馬 [Mandarin]
Tiao-tiao dadao tong Luoma
 CL-CL big.road lead.to Rome
 ‘All roads lead to Rome.’

- The mensural vs. sortal classifier distinction is also found in classifier reduplication

→ only the latter can be reduplicated in Cantonese

- (36) *Context: There is a quantity of cloth that is three feet long.*

{a. ??呎呎 / b. 每一呎} 布都好乾淨

{a. ??cek-cek / b. mui-jat-cek} bou dou hou gonzing

CL_{foot}-CL_{foot} every-one-CL_{foot} cloth all very clean

‘Every foot of cloth is very clean.’

(T. T.-M. Lee 2026:26)

- (37) *Context: There is a quantity of chess that weighs three pounds.*

{a. ??磅磅 / b. 隻隻} 象棋都好乾淨

{a. ??bong-bong / b. zek-zek} zoengkei dou hou gonzing

CL_{pound}-CL_{pound} / CL-CL chess all very clean

‘{Every pound of / every} chess is very clean.’

(T. T.-M. Lee 2026:26)

- However, not all sortal classifiers behave alike

E.g., the sortal classifier for human with politeness *wai2* 位

– We know it’s sortal because it bans *ge*-insertion

– But it cannot form Bare CL or be reduplicated

- (38) a. 三位(*嘅)老師

saam wai (*ge) lousi

three CL GE teacher

‘three teachers’

- b. {*位/個}老師嚟咗

{*Wai/ Go} lousi lai-zo

CL CL teacher come-PFV

‘The teacher came.’

- c. {*位位/個個}老師都嚟咗

{*Wai-wai/ Go-go} lousi dou lai-zo

CL-CL CL-CL teacher all come-PFV

‘Every teacher came.’

1

4.3 More variations in the nominal domain

4.3.1 Definite bare nouns

- Bare nouns in Mandarin may have definite readings
- But not in Cantonese

- (39) a. *Gau mgin-zo (*狗唔見咗)

[Cantonese]

- b. Gou bujian-le (狗不見了)

[Mandarin]

dog disappear-PFV

‘The dog disappeared.’

- There are several exceptions in Cantonese, but those cases all involve nouns that conventionally denote unique entities in a context
 - e.g., *haauzoeng* ‘principal’, *zungtung* ‘president’, *lousi* ‘teacher’
- Yip, Banerjee, and Lee (2023): They are **quasi-names** (similar to *Mom will come back tonight*), but not definite descriptions (see also Cheng and Sybesma 1999 who alluded to this idea)

(40) *Context: You have been teaching at a school for five years. A new colleague has joined, and you are responsible for guiding them. This morning, when you and a new colleague arrive at the school, you say to them:*

{#go-haauxeong/ **haauzoeng**} wui bei fan sigaanbiu nei
 CL-principal/ principal will give CL timetable 2sg
 ‘The principal will give you the timetable.’

[C]

4.3.2 Proprial articles

- Cantonese has a prefix **aa3-** [ʔ] that marks *polysyllabic* person names (Sio and Tang 2020; Yip, Banerjee, and Lee 2023), often with a close relation to the speaker
 - *Aa3-* attaching to a monosyllable is a phonological filler (e.g., *aa3-mui2* ‘younger sister’) (Yip 1992)
 - *Aa3-* there may be produced as the short *a* (open syllable) → only for forming prosodic foot

 Can be analyzed as **proprial articles**: articles that mark proper names (Muñoz 2019)

→ Mandarin does not seem to have a productive counterpart

(41) {Gaaming/ **aa**-Gaaming} lai-zo.
 Ka-Ming AA-Ka-Ming come-PFV
 ‘Ka Ming came.’

- *Aa-* makes names referential, which cannot be used as predicates

(42) HK jingsihyun jau loeng-go (***aa-**)**gaafai**: Zoenggaafai, Loenggaafai.
 HK show.biz. have two-CL **AA-Kafai** KF-Cheung KF-Leung
 ‘There are two Ka-Fai-s (i.e. two persons that have the name *Ka-Fai*) in the show business in Hong Kong: Ka-Fai Cheung and Ka-Fai Leung.’

4.3.3 Demonstratives

- Mandarin demonstratives may be used alone without classifiers/nouns (similar to English *this* and *that*)
- Impossible in Cantonese: demonstratives require classifiers

(43) 如果有人和你說你這也不好、那也不好 請果斷遠離他 (Internet) [Mandarin]
 Ruguo you ren he ni shuo ni **zhe** ye bu hao, **na** ye bu hao, qing
 if have person with 2sg say 2sg this also not good that also not good please
 guoduan yuanli ta
 decisively get.away 3sg
 ‘If someone says to you that you are not good in this and that, please keep a distance from him/her without hesitation.’

- (44) 呢*(個)又唔好，嗰*(個)又唔好 [Cantonese]
Ni *(go) jau m-hou, **go** *(go) jau m-hou
 this CL also not-good that CL also not-good
 ‘This is not good; that is also not good.’

- Mandarin demonstratives may modify the noun directly
 - more productive with *zhe* ‘this’ as compared to the restricted *na* ‘that’
- Cantonese: demonstratives must take a classifier for combining with nouns

- (45) a. 這書有毒！ (Internet) [Mandarin] (46) a. 呢*(本)書有毒！ [Cantonese]
Zhe shu you du!
 this book have toxic
 ‘This book is toxic!’
- b. 那書總不完結 (Internet) b. 嗰*(本)書點都唔完
Na shu zong bu wanjie
 that book always not end
 ‘That book still does not end.’
- b. 嗰*(本)書點都唔完
Go *(bun) syu dim dou m-jyun
 that CL book how all not-end
 ‘That book does not end forever.’

4.3.4 Nominalization

- S.-W. Tang (2008, 2009, 2011): Mandarin has robust Nominalization and enables a range of **gerundive nominals**
- All of which are not possible in Cantonese!

NOMINALIZATION	Mandarin	Cantonese
Genitive agents	✓	✗
Verbless <i>de/ge</i> nominals	✓	✗
Relativization of VO-idioms	✓	✗
Internal <i>de</i> expressions	✓	✗

- **Genitive agents** “syntax-semantics mismatch” (S.-W. Tang 2009; cf. Huang 2008)

- (47) Genitive agents in subject positions (S.-W. Tang 2011, p.150)
- [Ta **de** laoshi] dang-de hao. 他的老師當得好。 [Mandarin]
 * [Keoi **ge** lousi] zou-dak hou. *佢嘅老師做得好。 [Cantonese]
 3SG MOD teacher do-DES well
 ‘He serves well as a teacher.’

- The same patterns carry over to three other constructions with gerundive nominals
- See also Kwong and Tsou (2003) for the lower productivity of **deverbal nominals** in Cantonese (vs. Mandarin)

(48) Relativization of VO-idioms (S.-W. Tang 2011, p.153)

- a. [Ta chi **de** cu] bi shei dou da 他吃的醋比誰都大 [Mandarin]
 3SG eat MOD vinegar compare who all big
 'His jealousy is greater than anyone else's.'
- b. * [Keoi gaap **ge** cou] daaigwo sojau jan *佢哋嘅醋大過所有人 [Cantonese]
 3SG sip MOD vinegar bigger all person
 'His jealousy is greater than anyone else's.'

(49) Verbless *de/ge* nominals (S.-W. Tang 2011, p.154, modified)

- Zhe-chang hui shei **de** zhuxi? 這場會誰的主席? [Mandarin]
 *Ni-coeng wui bingo **ge** zyuzik? *呢場會邊個嘅主席? [Cantonese]
 this-CL meeting who MOD chairperson
 'Who served as the chairman at this meeting?'

(50) Internal *de* expressions (a clausal reading of V-*de*-O) (S.-W. Tang 2011, p.156)

- Ta zuotian da **de** dianhua 他昨天打的電報 [Mandarin]
 *Keoi camjat daa **ge** dinwaa *佢尋日打嘅電報 [Cantonese]
 3SG yesterday make MOD phone.call
 'The phone call he made yesterday.'

- Cf. Internal *de* expressions are sometimes referred to as cleft structures with the copula *shi/hai*.

(51) *Shi/hai...de/ge*-clefts (Tse 2019:70)

- a. Wo **shi** zuotian mai-**de** piao. 我是昨天買的票 [Mandarin]
 1SG COP yesterday buy-DE ticket
 'It was yesterday that I bought a ticket.'
- b. *Keoi **hai** kamjat maai-**ge** syu. *佢係琴日買嘅書 [Cantonese]
 3SG COP yesterday buy-GE book
 'It was yesterday that he bought a book.'

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5 Variation in the verbal domain⁸

5.1 Introduction

- In Sinitic languages, a predicate may appear as a discontinuous string, where two syllables are intervened by suffixes/adjuncts.⁹

✎ We refer to it as a **discontinuous predicate (D-Pred)** (aka. separable verbs 離合詞).

- like Mandarin (MC)’s VO compound in (1), (Chao 1968; Huang 1984; Packard 2000, *i.a.*)
- and Cantonese (CC)’s monomorphemic loanword in (2). (Chan and Cheung 2020; Lee and Yip 2025)

- **Blurring the syntax-morphology boundary:**

suffixation indicates *wordhood* (=a), whereas intervention suggests *phrasehood* (=b). Put differently, *discontinuous heads* are surprising under the Lexical Integrity Hypothesis.

(1) a. 留學了三年 liuxue -le san-nian stay.school-PFV 3-year ‘studied abroad for three years’	b. 留了三年學 liu -le san-nian xue (D-Pred) [MC] stay-PFV 3-year school ‘studied abroad for three years’
(2) a. present咗三次 pisen -zo saam-ci present-PFV 3-times ‘presented for three times’	b. pre咗三次sent pi -zo saam-ci sen (D-Pred) [CC] present-PFV 3-times present ‘presented for three times’

- The majority of current analyses, which are largely based on Mandarin, involves a phrasal VO structure.
- Studies on other Sinitic languages are extremely and surprisingly rare. (except Cantonese; cf. Lee & Yip’s 2026 overview)
- **Goals**: Through a comprehensive study on **four** Sinitic languages, this paper uncovers significant variations in D-Preds despite the surface similarities in (1)-(2).
 - We propose that languages differ in the robustness of two operations/parameters:
① NOMINALIZATION and **② SYLLABLE SUBTRACTION**.
 - They give rise to differential properties of D-Preds, which are systemically correlated with independent constructions in the languages.
- This study implicates that:
 - ① Separation/Discontinuity may have **multiple sources**.
 - ② It should **not** be taken for granted that a given construction is uniform across Sinitic languages;
 - ③ Some variations are **micro-parametric** in nature. (Tang 1998, 2006; Huang 2015; cf. Kayne 2005)

8. Joint work with Tommy Tsz-Ming Lee (City University of Hong Kong).

9. There are other means of separation, including *wh*-intervention in the form of A-*wh*-B and focus movement in the form of EVEN-B...A. See the extensive discussion in Guo (2017) and Pan and Ye (2015) for Mandarin and Lee and Yip (2025) for Cantonese.

5.2 Variations in discontinuous predicates between Mandarin and Cantonese

5.2.1 Morphological structure of D-Preds

- In Cantonese, monomorphemic verbs and non-VO compounds are readily separable in addition to VO compounds (Chan and Cheung 2020; Yip, Lee, and Chan 2021)
- Non VO-compounds: Verb-Verb (VV), Verb-Resultative (VR), Modifier-Head (MH), and Subject-Predicate (SV).

(3) Various morphological types of D-Preds in Cantonese (+ percentage of separable Vs *within the type*)¹⁰

- | | |
|---|---|
| <p>a. <i>Monomorphemic verbs</i> (40%, n=24/60) (Yip et al. 2021)</p> <p>OT完/ O完T</p> <p>outi-jyun/ ou-jyun-ti</p> <p>OT-COMPL OT-COMPL-OT</p> <p>‘finished working overtime’</p> | <p>d. <i>VV compounds</i> (16%, n=18/111) (Chan & Cheung 2020)</p> <p>裝修緊/ 裝緊修</p> <p>zongsau-gan/ zong-gan-sau</p> <p>install.repair-PROG install-PROG-repair</p> <p>‘furnishing’</p> |
| <p>b. <i>VO compounds</i> (62%, n=543/878) (Chan & Cheung 2020)</p> <p>出版咗/ 出咗版</p> <p>ceotbaan-zo/ ceot-zo-baan</p> <p>out.plate-PFV out-PFV-plate</p> <p>‘published’</p> | <p>e. <i>MH compounds</i> (20 %, n=18/90) (Chan & Cheung 2020)</p> <p>自首咗/ 自咗首</p> <p>zisau-zo/ zi-zo-sau</p> <p>self.confess-PFV self-PFV-confess</p> <p>‘turned oneself in’</p> |
| <p>c. <i>VR compounds</i> (47%, n=82/175) (Chan & Cheung 2020)</p> <p>放大翻/放翻大</p> <p>fongdaai-faan/ fong-faan-daai</p> <p>zoom.big-AGAIN ZOOM-AGAIN-big</p> <p>‘enlarge again’</p> | <p>f. <i>SV compounds</i> (8%, n=2/26) (Chan & Cheung 2020)</p> <p>頭痛過/頭過痛</p> <p>tautung-gwo/ tau-gwo-tung</p> <p>head.hurt-EXP head-EXP-hurt</p> <p>‘had headache before’</p> |

- More monomorphemic verbs:

- (4) a. Loanword *ou lkei 1* ‘approve’ from English *okay* (A-SUFFIX-B; Forum)
- 佢地有新歌就O囉K
- Keoidei jau sango zau **ou**-saai-**kei**.
- 3PL have new.song then okay-ALL-okay
- ‘I would say yes as long as they have new songs.’
- b. Loanword *baai 1baai 3* ‘say goodbye’ from English *bye* (A-WH-B; Forum)
- 明明仲有得播，bye乜鬼bye
- Mingming zung jau-dak bo, **baai1**- mat-gwai -**baai3**?
- clearly still can stream bye what-INT bye
- ‘Clearly they are still streaming, bye for what?!’

10. Note that Chan and Cheung (2020) includes some VO phrases as VO compounds, such as *leifan* ‘divorce’, which resists suffixation in Cantonese: **leifan-zo* ‘divorced’. The actual percentage of separable VO compounds should be lower than 62%.

- c. Loanword *kit* 1si4 ‘kiss’ from English *kiss* (FOC-B ... A-; *Eight Taels of Gold* (1989))
 唔單知未mar過ry，連ss都未ki過
 Mdaanzi mei me-gwo-wi, lin-si dou mei kit-gwo.
 not.only not.yet marry-EXP-marry, even-kiss also not.yet kiss-EXP
 ‘Not only I haven’t been married, but I also haven’t even kissed someone before.’
- d. Native word *oi2mui6* 曖昧 ‘flirt/have chemistry’ (A-SUFFIX-B; [Forum](#))
 除非你已經曖緊昧or拍緊拖
 Ceoifei nei jiging oi-gan-mui or paak-gan to.
 unless 2SG already flirt-PROG-flirt or have-PROG relationship
 ‘Unless you’re already flirting with someone or you’re having a relationship.’

- Such cases are **rare** in Mandarin. Among all separable verbs in *Modern Chinese Dictionary*, **96-97%** are **VO** compounds (n=around 3500~3800). (Yao 2011; Jiang 2017)¹¹
- In particular, monomorphemic verbs are almost impossible to separate. Even for those early documented cases like *you-ta yi-mo* ‘make fun (lit. humor) of him’ (Chao 1968), they are frozen forms and lack productivity.

(5) Monomorphemic verbs cannot be discontinuous in Mandarin

- a. *這個報告我pre了三次sent b. *幽了張三三默
 *Zhe-ge baogao wo pre-le san-ci sent *you-le Zhangsan san mo
 this-CL report 1SG present-PFV 3-times present humor-PFV Zhangsan three humor
 Int.: ‘I presented this report for three times.’ Int.: ‘made fun of Zhangsan for three times’

→ **Morphologically**, Mandarin D-Preds are generally formed by **VO compounds**, whereas in Cantonese **all types** of verbs can be D-Preds regardless of the structure or number of morphemes.

5.2.2 The syntactic status of the separated syllables

- Syntactically, the 2nd syllable of D-Preds in Mandarin displays **nominal objecthood** (e.g., Pan and Ye 2015), whereas Cantonese D-Preds **lack** such properties for both VO and non-VO verbs.
- Evidenced by *modification* tests (for nominal property) and *displacement* tests (for objecthood):

Type	Test	Configuration	Mandarin	Cantonese
Adnominal modification	Individual classifiers	A-X CL -B	✓	✗
	Numerals	A-X NUM -B	✓	✗
	Adnominal marked <i>de/ge</i>	A-X MOD -B	✓	✗
A-movement (Obj)	Object fronting	[_{VP} ba/zoeng-B ... A-X -B]	✓	✗
	Passivization	-B ... bei [_{TP} ... A-X -B]	✓	✗
A'-movement (nominal)	‘only’-focus constructions	[_{FOCP} ONLY-B ... A-X -B]	✓	✗
	Object relativization	[_{RC} ... A-X -B ...] <i>de/ge</i> -B	✓	✗

→ **Syntactically**, Mandarin D-Preds have a **VO phrasal structure**, whereas Cantonese D-Preds do **not**: the second syllable **lacks independent word/phrasehood** even after separation (i.e., still part of a word).

11. It is difficult to count such a number in Cantonese, since the pioneer study Chan and Cheung (2020) only has a few monomorphemic verbs and moreover includes some VO phrases. A rough estimate of the percentage of VO compounds in all the separable verbs is around 77% (543/703, among 1340 disyllabic verbs), combining the numbers in Chan and Cheung (2020) and Yip, Lee, and Chan (2021).

(6) Syntactic tests to distinguish D-Preds from VO phrases[D-Preds A ... B] vs. [VP V ... NP_{Obj}]

- a. Examining whether the second syllable has nominal objecthood
- b. Examining whether the first syllable has full-fledged verbhood
- c. Examining whether the whole D-Preds behave like a VO phrase and fail to take another object

5.2.3 The second syllable and its nominal properties

5.2.3.1 Adnominal modification

(7) The second syllable resists adnominal modification

- (i) *Individual classifiers: *A-x CL -B
- (ii) *Numerals: *A-x NUM -B
- (iii) *Adnominal modification marker *ge*: *A-x MOD -B

- First, while nominal objects in VO phrases can be preceded by individual classifiers (=8), the second syllable *lou 1* of the discontinuous predicate *fei4lou 1* ‘fail’ in (9).

(8) VO phrases: ^{OK}Individual classifiers

佢睇咗三本書

keoi **tai**-zo saam bun **syu**
 3SG watch-PERF three CL book
 ‘He read three books.’

(9) Discontinuous predicates: *Individual classifiers

*佢肥咗三個佬

*keoi **fei**-zo saam go **lou**
 3SG fail-PERF three CL fail
 Int.: ‘He made three failures.’

- Second, direct modification by numerals is allowed in some VO phrases with a cognate object (unlike a thematic object).
- However, it is disallowed in discontinuous predicates, as shown in (11), speaking against the possibility that the second syllable is a cognate object.

(10) V + cognate object: ^{OK}Numerals

佢瞓咗一覺

keoi **fan**-zo jat **gaau**
 3SG sleep-PERF one nap
 ‘He took a nap.’

(11) Discontinuous predicate: *Numerals

*佢sor咗一ry

*keoi **so**-zo jat **wi**
 3SG sorry-PERF one sorry
 Int.: ‘He (said) sorry once.’

- Third, a duration or frequency phrase may optionally combine with the adnominal modification marker *ge3* to modify the event denoted by the VP in a pre-object position (Soh 1998; Huang, Li, and Li 2009), as shown in (12a) and (12b).

☞ Semantically, the duration/frequency phrase does not modify the object, but the presence of *ge3* is suggestive of a nominal structure in these sentences (Huang 1997; Tang 2008).

(12) Adnominal modification marker *ge3* (VO phrases)

- a. 佢睇咗成十幾次(嘅)戲喇
 keoi **tai**-zo [seng sapgei-ci (ge)] **hei** laa (thematic objects)
 3SG watch-PERF as.much.as ten.several-time MOD movie SFP
 ‘He has watched movies for a dozen times.’
- b. 佢瞓咗幾日嘅覺喇
 keoi **fan**-zo [gei-jat (ge)] **gaau** laa3 wo3 (cognate objects)
 3SG sleep-PERF several-day MOD nap SFP SFP
 ‘He has been sleeping for several days.’

- However, this contrasts with discontinuous predicate. For example, *ge3* cannot be present in (13), suggesting the incompatibility of the second syllable with *ge3*.

(13) Ban on adnominal modification marker *ge3* (discontinuous predicates)

- 我都搵人裝過幾次(*嘅)修
 ngo5 dou1 wan2 jan4 **zong1**-gwo3 [gei2 ci3 (*ge3)] **-sau1** (Forum; with *ge3* added)
 1SG also find person furnish-EXP several time MOD furnish
 ‘I also found people to furnish for several times.’

(14) Adnominal *de/ge* modification: Baseline: VO phrases

- a. 看了三年(的)小說 [MC]
kan-le san-tian (de) [**xiaoshuo**]_{Obj}
 read-PFV 3-day DE novel
 ‘read novels for 3 days’
- b. 睇咗三日(嘅)小說 [CC]
tai-zo saan-jat (ge) [**siousyut**]_{Obj}
 read-PFV 3-day GE novel
 ‘read novels for 3 days’

Adnominal *de/ge* modification: D-Preds: VO compounds

- c. 留了三年(的)學 [MC]
liu-le san-nian de **xue**
 stay-PFV 3-year DE school
 ‘studies abroad for 3 years’
- d. 留咗三年(*嘅)學 [CC]
lau-zo saan-nin (*ge) **hok**
 stay-PFV 3-year GE school
 ‘studies abroad for 3 years’

5.2.3.2 A-movement

(15) The second syllable resists A-movement

- (i) *Object fronting: *_[vP] -B ... A-x -B];
 (ii) *Passivization: *-B ... _[TP] ... A-x -B]

- First, (16) shows that the object in a VO phrase may be preposed to a vP-internal position in a disposal construction marked by *zoeng1* (cf. Mandarin *ba*-constructions, Huang, Li, and Li 2009).

(16) VO phrases: ^{OK}Object fronting

佢將(本)小說出咗喺網上

keoi5 _[vP] [zoeng1 (bun2) **siu2syut3**] **ceot1**-zo2 ~~siu2syut3~~ hai2 mong5 soeng6min6]
 3SG DISP CL novel release-PERF at Internet above
 'S/he released the book online.'

- This contrasts with the second syllable in D-Preds *baan2* in (17), which cannot be fronted.

(17) Discontinuous predicates: *Object fronting

*佢將(個)版出咗(喺網上)

*keoi5 _[vP] [zoeng1 (go3) -**baan2**] **ceot1**-zo2-~~baan2~~ (hai2 mong5 soeng6min6)]
 3SG DISP CL plate release-PFV at Internet above
 Int: 'S/he published the book (lit. released the plate) online.'

(18) Object fronting in *ba/zoeng*-disposal constructionsa. *Baseline: VO phrases in Mandarin*

Ta ba [**xiaoshuo**]_{Obj} dou **kan**-wan-le.
 3SG BA novel all read-COMPL-PFV
 'S/he finished reading all the novels.'

他把小說都看完了 [MC]

b. *Baseline: VO phrases in Cantonese*

Keoi zoeng [**di-siusyut**]_{Obj} dou **tai**-saai laa3
 3SG ZOENG CL.PL-NOVEL all read-ALL SFP
 'S/he finished reading all the novels.'

佢將啲小說都睇晒喇 [CC]

c. *D-Preds: VO compounds in Mandarin*

Ta ba (zhe santian de) **mang** dou **bang**-wan-le
 3SG BA this 3-day DE favor all help-COMPL-PFV
 'S/he finished all the helping (of these three days).'

他把(這三天的)忙都幫完了 [MC]

(adapted from Pan and Ye 2015:308)

d. *D-Preds: monomorphemic verbs in Cantonese*

*Keoi zoeng (di-)wɿ dou **so**-saai laa3
 3SG ZOENG CL.PL-SORRY all sorry-ALL SFP
 Int.: 'S/he finished doing all the apologies.'

*佢將(啲)ry都sor晒喇 [CC]

- Second, the object in a VO phrase may be passivized and move to the subject position of the passive verb *bei2* (cf. the raising analysis in Huang 2013), as in (19).
- However, passivization cannot target the second syllable *baan2* in (20).

(19) VO phrases: ^{OK}Passivization

只係(塊)板畀人拆咗啫

zi2hai6 [(faai3) **baan2**] bei2 [TP jan4 **caak3**-zo2 ~~baan2~~] ze1

only CL plate PSV person dismantle-PFV SFP

'It's just that the plate got dismantled.'

(20) Discontinuous predicates: *Passivization

*只係(塊/個)版畀人出咗啫

*zi2hai6 [(faai3/go3) **-baan2**] bei2 [TP jan4 **ceot1**-zo2-~~baan2~~] ze1

only CL plate PSV person release-PFV SFP

Int.: 'It's just that the book got publish (lit: the plate got released).'

5.2.3.3 A'-movement targeting NPs/DPs

(21) The second syllable resists A'-movement (that target nominals)

(i) **Dak*-focus constructions: *[_{FocP} ONLY-**B** ... **A-x** -**B**];(ii) *Object relativization: *[_{RC} ... **A-x** -**B** ...] MOD -**B**

- First, the adfocus *dak* 'only' triggers focus movement of a nominal to the left periphery (cf. Cheung 2015; Sun 2021), such as in (22a), but not verbal elements, as shown in (22b).¹²

(22) VO phrases: ^{OK}*Dak*-focus constructions (targeting nominal objects)

a. 得魚阿明冇食過咋

[_{FocP} **dak** [_{NP} **jyu**] [Aaming mou **sik**-gwo ~~jyu~~ zaa]] (nominal objects)

ONLY fish Aaming not.PFV eat SFP

'(It is) only fish that Aaming has never eaten (, but not something else).'

b. *[_{FocP} **dak** [_{V/VP} **maai (jyu)**] [Aaming m-soeng ~~maai (jyu)~~ zaa]] (verbal elements)

ONLY buy fish Aaming not-buy SFP

Int.: '(It is) only buying/buying fish that Aaming does not want (, but not something else).'

- The second syllable of D-Preds, however, cannot be targeted for focus movement triggered by *dak*.¹³

(23) Discontinuous predicates: **Dak*-focus constructions

*得首阿明冇自過咋，佢自過殺嘅

*[_{FocP} **dak1** [-**sau2**] [Aa3ming4 mou5 **zi6**-gwo3 -~~sau2~~] zaa3, keoi5 zi6-gwo3-saat3 ge3

only inform Ming not.PFV self-PFV SFP 3SG self-EXP-kill SFP

Int.: '(It is) only turning himself in that Ming never did. He did attempt suicide once.'

12. Even if the verb/VP in (22b) is doubled, the sentence is still ill-formed.

13. The sentence in (23) is constructed such that it favors an exclusive focus reading on the second syllable of discontinuous MV compound *zi6sau6* 'confess, (lit.) self + inform.' The second syllable *sau6* is intended to contrast with *saat3* in *zi6saat3* 'suicide, (lit.) self + kill'.

- The object in a VO phrase can be relativized, but not the second syllable of D-Preds.

(24) V + cognate object: ^{OK}Object relativization

[佢瞓] 嘅覺係不同凡響地長

[_{RC} keoi **fan** ~~gaau~~] ge [**gaau**] hai battungfaanhoeng-dei coeng
3sg sleep MOD nap be extraordinary-ly long

(Social media)

Lit.: 'The nap that she sleeps is extraordinarily long.'

(25) Discontinuous predicates: *Object relativization

*[依家小緊] 嘅息係不同凡響地長

*[_{RC} ji1gaal **siu2**-gan2-~~sik1~~] ge3 [-**sik1**] hai6 bat1tung4faan4hoeng2-dei6 coeng4
now small-PROG MOD rest be extraordinary-ly long

Int.: 'The break that we're having now is extraordinarily long.'

(26) Generalization on the syntactic properties of the second syllable

The second syllable of a discontinuous predicate cannot be preceded by an adnominal element or take part in constructions that target objects and/or nominal phrases.

- Unlike Cantonese, the second syllable of discontinuous predicates in Mandarin exhibits **nominal properties**:

(27) Nominal properties of the second syllable

(Mandarin, Pan and Ye 2015:308-309)

a. ✓ **Nominal modification**

告他一狀

gao ta yi **zhuang**
report 3sg one report
'Report him/her'

b. ✓ **Relativization**

幫[別人不願意幫]的忙

bang [bieren bu yuanyi **bang**] de
help others not willing help MOD
mang
help
'Do a favor that no ones want to do'

c. ✓ **Object fronting**

我把[這三天的忙]幫完了

Wo ba [zhe san tian de **mang**] **bang** wan-le
1sg DISP this three day MOD help help finish-PERF

'I've already done a three-day favor (i.e. I've already helped you for three days).'

5.2.4 The first syllable and its verbal properties

- *Lin* 'even' focus constructions can target a verb, rendering verb doubling (Cheng and Vicente 2013; Lee 2022, 2024).

(28) 連[食]阿明都有*(食)過呢碗飯

lin **sik** Aaming dou mou *(**sik**)-gwo ni wun faan
even eat Aaming also NEG sik-EXP this CL_{bowl} rice
'Aaming didn't even eat this bowl of rice.'

(cf. (??))

- The first syllable in D-Preds cannot fronted and doubled.

(29) Failure of *lin* ‘even’ verb doublinga. *連**so**阿明都**so**埋**ry**

*lin **so** Aaming dou **so**-maai **-wi**
 even sorry Aaming also sorry-ADD sorry
 ‘Aaming even also said sorry.’

b(?) 連**sorry**阿明都**so**埋**ry**

(?)lin **sowi** Aaming dou **so**-maai **-wi**
 even sorry Aaming also sorry-ADD sorry
 ‘Aaming even also said sorry. (What else do you want from him?)’

(30) a. *連自阿明都自埋首

*lin **zi** A. dou mou **zi**-maai
 even confess A. also not.have confess-ADD
-sau
 confess
 ‘Aaming didn’t even confess (his crime).’

b(?) 連自首阿明都自埋首

(?)lin **zisau** Aaming dou **zi**-maai **-sau**
 even confess Aaming also confess-ADD confess
 ‘Aaming even also confessed (his crime). (What else do you want from him?)’

- As a novel observation, the first syllable of discontinuous predicates in Mandarin displays **verbal properties** and can be fronted and doubled alone, different from Cantonese.

(31) Verbal properties of the first syllable

(Mandarin)

a. 連幫，張三都沒有幫這個忙！

Lian **bang**, Zhangsan dou meiyou **bang** zhe ge **mang**!
 even help Zhangsan also not help this CL help
 ‘Zhangsan even didn’t help me for this! (Not to say giving me gifts.)’

b. 連告，他都沒有告你一狀！

Lian **gao**, ta dou meiyou **gao** ni yi **zhuang**!
 even report 3SG also not report you one report
 ‘Zhangsan even didn’t report you! (He holds no grudge.)’

5.2.5 Object-taking ability

- If D-Preds were VO phrases in Cantonese, we expect it **not** to take another object, contrary to facts.

(32) D-Preds taking postverbal objects in Cantonese

a. 放翻大[咁人偶]

Fong-faan daai [di janngau]
 enlarge-again enlarge CL.PL doll
 ‘enlarge the dolls again’
 (Yip, Lee, and Chan 2021:98, from Internet)

b.?佢影咗印[呢份野]喇

?keoi jing<zo>jan [nei fan je] laa
 3SG photocopy<PERF> this CL thing SFP
 ‘He made a photocopy of this document.’

(33) D-Preds taking preposed objects in Cantonese

- | | |
|--|---|
| <p>a. 佢將[呢份野]影咗印喇
 keoi zoeng [nei fan je]
 3SG DISP this CL thing
 jing<zo>jan laa
 photocopy<PERF> SFP
 ‘He made a photocopy of this document.’</p> | <p>b. 佢連[呢份野]都影埋印喇
 keoi lin [nei fan je] dou
 3SG even this CL thing also
 jing<maai>jan laa
 photocopy<also> SFP
 ‘He even made a photocopy of this document.’</p> |
|--|---|

(34) True VO phrases cannot have an extra preposed object

- | | |
|---|--|
| <p>a. *佢將[呢齣戲]睇咗戲喇
 *keoi zoeng [nei ceot hei] tai-zo
 3SG DISP this CL movie watch-PERF
 hei laa
 movie SFP
 Int.: ‘He watched this movie.’</p> | <p>b. *佢連[呢齣戲]都睇埋戲喇
 *keoi lin [nei ceot hei] dou tai-maai
 3SG even this CL movie also watch-also
 hei laa
 movie SFP
 Int.: ‘He even watched this movie.’</p> |
|---|--|

- In contrast, D-Preds in Mandarin are primarily intransitive verbs, which Pan and Ye (2015) attributes to the cognate object analysis. Interestingly, D-Preds still take a thematic object as a *genitive* argument.

(35) D-Preds in Mandarin cannot take a postverbal object

- | | |
|--|--|
| <p>a. *告狀 [小顧]。
 *Gaozhuang [Xiaogu].
 report Xiaogu
 Int.: ‘Report Xiaogu.’</p> | <p>b. 那人威脅要告[小顧]的狀。
 Na ren weixie yao gao [Xiaogu] de zhuang.
 that person threaten will report Xiaogu DE report
 ‘That person threatens to report Xiaogu.’</p> |
|--|--|

5.3 Two sources of discontinuity

The differences call for a non-uniform treatment to D-Preds.

- D-Preds in Mandarin is derived syntactically → **Syntactic D-Preds**
- D-Preds in Cantonese is derived morphologically → **Morphological D-Preds**

5.3.1 Discontinuity due to syntactic nominalization

- We argue that the mechanisms deriving D-Preds in Cantonese and Mandarin are different.
- **Mandarin D-Preds** have a *syntactic* character, where **NOMINALIZATION** applies to the compound in the syntactic component in (37) (Pan and Ye 2015).

(36) (我) 幫他的忙

(Wo) bang ta-de mang

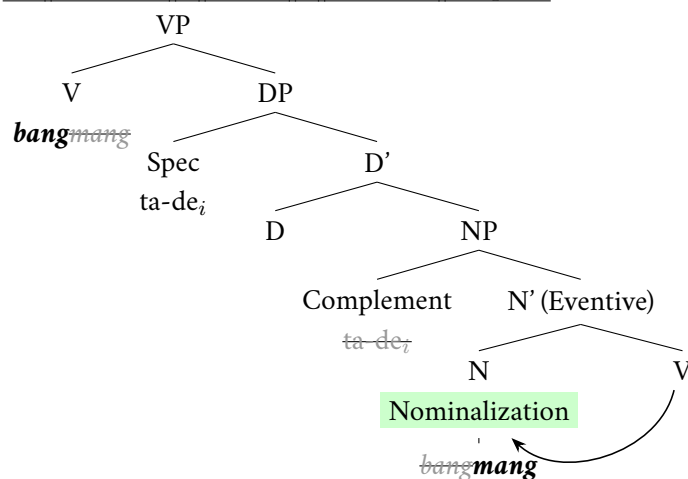
I help his help

‘(I) help him.’

(37) Mandarin *bangmang* ‘help’: Nominalization > Partial Deletion (Pan and Ye 2015)

- | | |
|---|---------------------------------|
| a. { bangmang , bangmang , ta, de} | (Numeration: copying) |
| b. [_N N [V- bangmang]] | (Syntax: nominalization) |
| c. [_N ta-de [_N N [V- bangmang]]] | (Syntax: taking theme) |
| d. [_{VP} V- bangmang [_{DP} ta-de ... [_N N [V- bangmang]]]] | (Syntax: taking cognate object) |
| e. [_{VP} V- bangmang [_{DP} ta-de ... [_N N [V- bangmang]]]] | (PF: Partial Deletion) |

(38) The derivation of D-Pred in Mandarin (adapted)



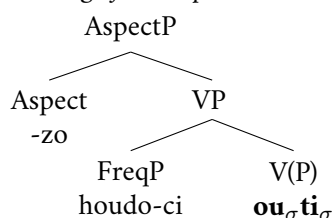
5.3.2 Discontinuity due to morphological deletion

- In contrast, **Cantonese D-Preds** exhibits a *morphological* character, where affixes may trigger a morphophonological operation **SYLLABLE SUBTRACTION** on the host in the post-syntactic component (42). (Lee and Yip 2025)

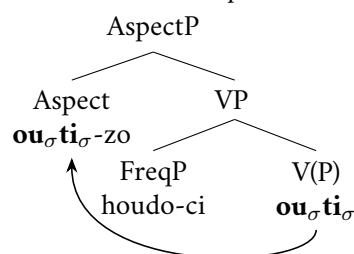
(39) Syllable Subtraction in Cantonese (as a morphophonological process in the PF)
Affixes may trigger deletion on the adjacent syllable of their host to form a foot.

- (40) 我O咗好多次T。
(Ngo) **ou**-zo hodo-ci **-ti**. (A-SUFFIX-FREQ-B)
1SG OT-PERF many-time OT
'(I) worked overtime many times.'
- (41) The derivational steps of (40) in the syntactic component (Lee and Yip 2025)

a. *Building of the AspectP*

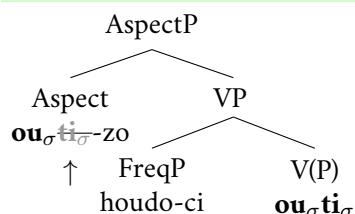


b. *Verb movement to Aspect head*

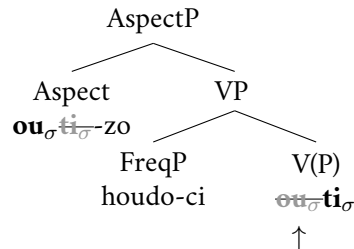


- (42) The derivational steps of (40) in the post-syntactic component (Lee and Yip 2025)

a. **Suffix-induced Syllable Subtraction**



b. *Partial CD*



- The superficial similarities in surface forms of the two languages are due to (distributed/scattered) Partial Deletion, which applies after both operation (cf. Fanselow and Ćavar 2002).

5.4 A parametric theory of discontinuous predicates

- We propose that NOMINALIZATION and SYLLABLE SUBTRACTION are **micro-parameters**.
- Their effects are not specific to D-Preds and can be observed independently in the language.

Language	① NOMINALIZATION	② SYLLABLE SUBTRACTION	Status of D-Preds
a. Mandarin	✓	✗	Syntactic (phrasal)
b. Cantonese	✗	✓	Morphological (word-like)

5.4.1 The NOMINALIZATION parameter

- Tang (2008, 2009, 2011): Mandarin has robust Nominalization and enables a range of **gerundive nominals**, all of which are not possible in Cantonese.
- Tang accounts for the variation by proposing that Cantonese lacks a Nom head that attracts V movement.

(43) The NOMINALIZATION parameter: **Nom**_[uV] vs. **Nom**_[]

a. [NomP Nom_[uV] [VP V (Obj)]] (Mandarin)

b. *_{[NomP Nom_[] [VP V (Obj)]]} (Cantonese)

NOMINALIZATION	Mandarin	Cantonese
Genitive agents	✓	✗
Verbless <i>de/ge</i> nominals	✓	✗
Relativization of VO-idioms	✓	✗
Internal <i>de</i> expressions	✓	✗

- **Genitive agents:** derived by movement of an empty verb DO to Nom (Tang 2009; cf. Huang 2008)
- Structure: [_{Nomp} 3sg-de [_{Nom-V_{DO}} [_{VP} t_V ‘teacher’]]]

(44) Genitive agents in subject positions (Tang 2011, p.150)

[Ta **de** laoshi] dang-de hao.

他的老師當得好。[MC]

*[Keoi **ge** lousi] zou-dak hou.

*佢嘅老師做得好。[CC]

3SG MOD teacher do-DES well

'He serves well as a teacher.'

- The same patterns carry over to three other constructions with gerundive nominals
- See also Kwong and Tsou (2003) for the lower productivity of **deverbal nominals** in Cantonese (vs. Mandarin)

(45) Relativization of VO-idioms (Tang 2011, p.153)

a. [Ta chi **de** cu] bi shei dou da

他吃的醋比誰都大[MC]

3sg eat MOD vinegar compare who all big

‘His jealousy is greater than anyone else’s.’

b. *[Keoi gaap **ge** cou] daaigwo sojau jan

*佢咁嘅醋大過所有人[CC]

3sg sip MOD vinegar bigger all person

‘His jealousy is greater than anyone else’s.’

(46) Verbless *de/ge* nominals (Tang 2011, p.154, modified)

Zhe-chang hui shei **de** zhuxi?

這場會誰的主席？[MC]

*Ni-coeng wui bingo **ge** zyuzik?

*呢場會邊個嘅主席？[CC]

this-CL meeting who MOD chairperson

‘Who served as the chairman at this meeting?’

(47) Internal *de* expressions (a clausal reading of V-*de*-O) (Tang 2011, p.156)

- Ta zuotian da **de** dianhua 他昨天打的電報 [MC]
 *Keoi camjat daa **ge** dinwaa *佢尋日打嘅電報 [CC]
 3SG yesterday make MOD phone.call
 ‘The phone call he made yesterday.’

Cf. Internal *de* expressions are sometimes referred to as cleft structures with the copula *shi/hai*.

(48) *Shi/hai...de/ge*-clefts (Tse 2019, p.70)

- a. Wo **shi** zuotian mai-**de** piao. 我是昨天買的票 [MC]
 1SG COP yesterday buy-DE ticket
 ‘It was yesterday that I bought a ticket.’
 b. *Keoi **hai** kamjat maai-**ge** syu. *佢係琴日買嘅書 [CC]
 3SG COP yesterday buy-GE book
 ‘It was yesterday that he bought a book.’

5.4.2 The SYLLABLE SUBTRACTION parameter

- We propose that Cantonese has robust Syllable Subtraction, as evidenced by a **monosyllabic preference** in a number of *affixed reduplication* phenomena, in contrast with Mandarin.
- Cf. Luke and Lau (2008) and Li et al. (2016), for a similar preference in lexical borrowing (from English)

SYLLABLE SUBTRACTION	Mandarin	Cantonese
A-one-AB	✗	✓
*AB-not-AB	✗	✓
*AB- <i>wh</i> -AB	✗	✓

(49) V-one-V reduplication

- a. ***chu-yi-chuli** *處一處理 [MC]
cyu-jat-cyulei 處一處理 [CC]
 tackle-one-tackle
 ‘try to tackle’
 b. ***chuli-yi-chuli** *處理一處理 [MC]
 ***cyulei-jat-cyulei** *處理一處理 [CC]
 tackle-one-tackle
 Int.: ‘try to tackle’

(50) A-not-A reduplication

- a. **xi-bu-xihuan** 喜不喜歡 [MC]
zung-m-zungji 中唔中意 [CC]
 like-not-like
 ‘like or not’
 b. **xihuan-bu-xihuan** 喜歡不喜歡 [MC]
 ??**zungji-m-zungji** ??中意唔中意 [CC]
 like-not-like
 ‘like or not’

(51) V-wh-V constructions (cf. Tsai 2021 for Mandarin)

- a. **man**-shenme-**yuan**? 埋什麼怨 [MC]
maai-matje-**jyun**? 埋乜野怨 [CC]
 grudge-what-grudge
 ‘What are you holding grudge about?’

- b. **manyuan**-shenme-**manyuan**?
 ***maaijyun**-matje-**maaijyun**?
 grudge-what-grudge
 ‘What are you holding grudge about?’

埋怨什麼埋怨 [MC]

*埋怨乜野埋怨 [CC]

5.4.3 Interim summary

The split between syntactic vs. morphological D-Preds in Mandarin and Cantonese is correlated with a range of phenomena pertaining to (i) gerundive nominals, and (ii) the monosyllabic preference.

- | | | |
|---------|---|------------------------------------|
| (52) a. | Syntactic D-Preds ↔ gerundive nominals | due to NOMINALIZATION |
| b. | Morphological D Preds ↔ monosyllabic preference | due to SYLLABLE SUBTRACTION |

5.5 The predicted typology

- The proposal also makes a typological prediction on two types of languages
 - Languages that *lacks* both operations (i.e., both parameter values set as negative)
 - D-Preds are highly restricted.
 - Languages that employ both operations (positive values for both parameters)
 - D-Preds are highly productive.

Language	❶ NOMINALIZATION	❷ SYLLABLE SUBTRACTION	Status of D-Preds
a. Mandarin	✓	✗	Syntactic (phrasal)
b. Cantonese	✗	✓	Morphological (word-like)
c. ?	✗	✗	None
d. ?	✓	✓	Syntactic / morphological

Table 4: The predicted typology of D-Preds

- Our preliminary findings suggest that **Fuzhounese** exemplifies the former and **Jing-le Jin** (靜樂晉語) the latter.

- **Fuzhounese** does not allow D-Preds with or without adnominal *ki* (=53) → lacks NOMINALIZATION
- AB-*wh*-AB forms are preferred over the subtracted A-*wh*-B forms (=54) → lacks SYLLABLE SUBTRACTION

(53) **Fuzhounese**: No syntactic D-Preds (unlike Mandarin): VO 留學 *lauoʔ*

- | | |
|---|--|
| a. * lau -lau saŋ-nien (<u>ki</u>) oʔ
stay-PFV 3-year KI study
Int.: 'studied abroad for three years.' | b. lauoʔ -lau saŋ-nien
stay.study-PFV 3-year
'studied abroad for three years.' |
|---|--|

(54) **Fuzhounese**: No morphological D-Preds (like Cantonese): VV 裝修 *tsouŋsieu*

- | | |
|---|---|
| a. ?? tsouŋ sieʔnoʔ sieu
furnish what furnish
'Why do you furnish (it)!' | b. tsouŋsieu sieʔnoʔ tsouŋsieu
furnish what furnish
'Why do you furnish (it)!' |
|---|---|

- **Jing-le Jin**, on the other hand, allows Nominalization in D-Preds but only for VO-compounds, but not non-VO D-Preds (=55). → patterning with Mandarin's NOMINALIZATION
- A-one-AB is possible, but not AB-one-AB. → Monosyllabic preference due to SYLLABLE SUBTRACTION

(55) **Jing-le Jin**: Both syntactic and morphological D-Preds are attested (with different compounds)

- | | |
|---|--|
| a. liu -lau saŋ-xui <u>tə</u> iaŋ .
stay-PFV 3-times MOD oversea
'studied abroad for three times.' | Syntactic D-Preds (VO compound 留洋 <i>liuiaŋ</i>) |
| b. lu -lau si-xui (*tə) iu .
travel-PFV 4-times MOD travel
'traveled for four times' | Morphological D-Preds (VV compound 旅遊 <i>liuiu</i>) |

- The typology is summarized in the table below:

	Language	❶ NOMINALIZATION	❷ SYLLABLE SUBTRACTION	Status of D-Preds
a.	Mandarin, ...	✓	✗	Syntactic (phrasal)
b.	Cantonese, ...	✗	✓	Morphological (word-like)
c.	Fuzhounese, ...	✗	✗	None
d.	Jing-le Jin, ...	✓	✓	Syntactic / Morphological

Table 5: The typology of D-Preds

5.6 Conclusion

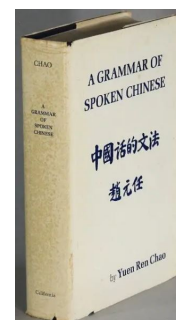
- **Summary:** There are **significant variations** in discontinuous predicates among Sinitic languages, despite surface similarities.
 - Two types of D-Preds: *syntactic* (like VO phrases) vs. *morphological* (like words/discontinuous heads)
 - Two sources of discontinuity:
 - by ❶ syntactic **NOMINALIZATION** vs. ❷ morphophonological **SYLLABLE SUBTRACTION**
 - A parametric theory: **correlated variations** in *gerundive nominals* and *monosyllabic preference* by ❶-❷
- **Implications**
 - ❶ Separation/discontinuity may have multiple sources in **different modules** of the grammar (syntax vs. PF)
 - ❷ It should **not** be taken for granted that a given construction is uniform across Sinitic languages
→ More attention should be paid to constructions with superficially similar word order
 - ❸ Some variations are systematic and **micro-parametric** in nature. (Tang 1998, 2006; Huang 2015; cf. Kayne 2005)

- **Prospects**

- A full examination on gerundive nominals and monosyllabic preference in Fuzhounese and Jing-le Jin
- Extension to other Sinitic languages; preliminary findings:
 - a. Mandarin-type: Ganzhou Hakka, Nanchang Gan (?), ...
 - b. Cantonese-type: Shantou and Shanwei Southern Min, ...
 - c. Fuzhounese-type: Shanghainese, Huzhou Wu, Jiaying Wu, ...
 - d. Jing-le Jin-type: ... (to be investigated)

- Recall:

- (56) “Third, **it is in matters of grammar that the greatest degree of uniformity is found among all the dialects of the Chinese language.** Apart from some minor divergencies, such as indirect object before direct object in the Wu dialects and Cantonese—for which Mandarin (like English) has the opposite order, and slight differences in the order of the negative in potential complements in some of the southern dialects, and so on, and apart from differences in suffixes and particles for which, however, **fairly close equivalents can be set up between dialects**, one can say that **there is practically one universal Chinese grammar.**” (Chao 1968:41, emphasis mine)



- **Sinitic languages do not share “one universal grammar”, even when “fairly close equivalents” are found.**
 - Clausal domain
 - Nominal domain
 - Verbal domain

→ “Overt” vs. “covert” variation (terms due to Prof. Benjamin K. Tsou 鄒嘉彥)

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