A conjunction approach to phrasal *wh*-doublets in Cantonese

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Table of contents

Introduction: Object of study

- *Wh*-expressions in Cantonese can be reduplicated to convey a non-interrogative, existential meaning.

(1) Bare *wh*-doublets (Wong 2018)

    a. 阿明話 [佢喺自助餐食咗 乜野乜野] ，幾巴閉。

    b. 陳師奶話 [邊度邊度 買餸平]，唔買就走寶喇。

- As with other attested forms of *wh*-doublets, only the *wh*-expressions are reduplicated, i.e., *wh-wh*.

  - Japanese & Yaeyaman (Sudo 2008, 2013; Davis 2016)
  - Korean (Chung 1999; Kim 1999)
  - Mongolian (Jang and Lim 2024)

Introduction: Object of study

- We report a related, but less discussed, form of *wh*-doublets in Cantonese, namely, **clausal *wh*-doublets**.

(2) Clausal *wh*-doublets

    a.   阿明話 [佢喺自助餐 食咗乜野食咗乜野]，幾巴閉。

    b.   陳師奶話 [邊度買餸平邊度買餸平]，唔買就走寶喇。

- While this phenomenon has received little attention in Cantonese, it has not been reported in other languages allowing *wh*-doublets so far.

Introduction: Object of study

- Some more naturally occuring data:

(3) a. 成班衝出黎話 邊個黎邊個黎

  b. 減肥最重要唔係限制 食乜食乜

  c. 大肚嘅時候成日都講話遲啲要同豬仔去 邊度玩邊度玩

- Clausal *wh*-doublets are as productive as bare *wh*-doublets.

Road map

- The plan for today:

  1. Brief comparison between bare and clausal *wh*-doublets
  2. Licit forms of clausal *wh*-doublets
  3. Plural readings of clausal *wh*-doublets
  4. A non-uniform approach to bare and clausal *wh*-doublets

Table of contents

Bare vs. clausal wh-doublets: Similarities

- Both types of *wh*-doublets share similar productivity and are attested in all kinds of *wh*-expressions.

   (4) Arguments

      a. 乜／乜野／咩

      b. 邊個／乜水

      c. 邊度

      d. 邊樣（野）

   (5) Adjuncts

      a. 幾

      b. 點樣

      c. 幾時

      d. 點解／做乜

Bare vs. clausal wh-doublets: Similarities

- Both convey an existential interpretation, instead of an interrogative one.

(6) Incompatibility with interrogative embeddings

    a.   *阿明頭先問／想知道 邊樣好邊樣好 。
         阿明頭先話 邊樣好邊樣好 。

    b.   *唔知阿明講到佢 幾勁幾勁 呢
         阿明頭先講到佢 幾勁幾勁 。

(7) Compatibility with polarity question particles
    阿明唔係話佢尋晚 食咗乜野食咗乜野 咩？

Introduction
00000

Basic properties
00000

Size
0000000

Plurality
0000000

Derivation
000000000

Conclusion
00

References

Bare vs. clausal wh-doublets: Similarities

- In most cases of *wh*-doublets, a quotative context is preferred.
- But strictly speakering, it is not a hardwired requirement.

(8) Quotative implication (Wong 2018)
The use of a *wh*-doublet implies a quotative context such that the corresponding information has been received in another discourse by any means.

(9) a. 減肥最重要唔係限制 食乜食乜 。

b. 達斯拿根本唔差，你覺得桑尼會好過佢？就因為佢踢英超 點勁點勁 ？

c. 手語老師教我隻手要 點樣郁點樣郁 先打到手語。

Bare vs. clausal wh-doublets: Differences

Type	**Bare *wh*-doublets**	**Clausal *wh*-doublets**
Form	*wh* + *wh*	V + *wh, wh* + V, ...
Interpretation	Existential	
Presupposition	Source known to the speaker	
➔ Plurality	number-neutral	plural only
➔ Derivation	Reduplication morpheme	Phrasal Conjunction

- Before we talk about **plurality** and **derivation**, we first discuss how long a *wh*-string can be doubled in the clausal case.

Table of contents

1 Introduction

2 Basic properties

3 Size

4 Plurality

5 Derivation

6 Conclusion

Introduction
00000

Basic properties
00000

Size
○●○○○○○

Plurality
0000000

Derivation
000000000

Conclusion
○○

References

Size: Upper bound (CP)

- The size of doubled *wh*-string can be as large as CP.

(10) a. Manner + VP:
      每次開飯，佢都催我 快啲食乜野快啲食乜野 。

     b. SVO:
      阿明成日話 邊個食素邊個食素 ，搞到冇晒營養。

     c. Evaluative adverbs + TP:
      阿明成日強調 好在邊個有黎好在邊個有黎 ，
      如果唔係就大件事喇。

Introduction
00000

Basic properties
00000

Size
0000000

Plurality
0000000

Derivation
000000000

Conclusion
00

References

Size: Lower bound (*v*P)

- To test the lower bound, the double object construction is used.
- From VP Shell Hypothesis (Larson 1988), double object constructions are regarded as vP.
- The size of doubled *wh*-string can be as small as vP, but not any internal structure.

Size: Lower bound (*v*P)

- The size of doubled *wh*-string can be as small as vP.

(11)   <u>DO-IO</u>

    a.   *VP in *v*P: *阿明成日都話
       阿媽畀咗 乜野佢乜野佢／本書邊個本書邊個 。

    b.   *v*P shell: 阿明成日都話
       阿媽 畀咗乜野佢 畀咗乜野佢／畀咗本書邊個 畀咗本書邊個

(12)   <u>IO-DO</u>

    a.   ??VP in *v*P: ??阿明成日同人講
       佢教過 阿芬乜野阿芬乜野／邊個數學邊個數學 。

    b.   *v*P shell: 阿明成日同人講
       佢 教過阿芬乜野 教過阿芬乜野／教過邊個數學 教過邊個數

Size: Lower bound (*v*P)

- The size of doubled *wh*-string can be as small as vP.

(13)　DO-P-IO

    a.　??VP in *v*P shell: ??阿明成日同人講
       佢送咗 乜野畀老師乜野畀老師 。

    b.　*v*P shell: 阿明成日同人講
       佢 送咗乜野畀老師送咗乜野畀老師 。

    c.　?V' in *v*P shell: ?阿明成日同人講
       佢送咗啲書 畀邊個畀邊個 。

    d.　*VP in *v*P shell: *阿明成日同人講
       佢送咗 啲書畀邊個啲書畀邊個 。

    e.　*v*P shell: 阿明成日同人講
       佢 送咗啲書畀邊個送咗啲書畀邊個 。

Introduction
00000
Basic properties
00000
Size
0000000
Plurality
0000000
Derivation
000000000
Conclusion
00
References

Size: Lower bound (*v*P)

- Coverbs are VP modifiers of VPs (Francis and Matthews 2006).
- We distinguish two prepositions from coverbs in terms of their suffix-taking ability. Only the latter can partake in clausal *wh*-doublets, agreeing with vP being the lower bound.

(14) <u>Coverbs in clausal *wh*-doublets</u>

    a. 個同事話上星期 喺邊度喺邊度 食龍蝦。total 食咗三餐咁多。

    b. 細佬話哥哥上星期 用乜野用乜野 打佢。

(15) <u>Prepositions in clausal *wh*-doublets</u>

    a. * 將乜野將乜野 放入垃圾筒   *我將過乜野放入垃圾筒

    b. ?? 由邊度由邊度 起行   *我由過邊度起行

Introduction
00000
Basic properties
00000
Size
0000000●
Plurality
0000000
Derivation
000000000
Conclusion
00
References

Size: Constituency

- It is important to maintain constituency when doubling the
  wh-string.

(16) Non-constituents

   a. *阿明成日都同我講 邊個去邊個去 日本。

   b. *阿明成日叫人 點樣整點樣整 芝士蛋糕。

(17) Constituents

   a. 阿明成日都同我講 邊個去日本邊個去日本 。

   b. 阿明成日叫人 點樣整芝士蛋糕點樣整芝士蛋糕 。

Table of contents

Introduction
00000
Basic properties
00000
Size
0000000
Plurality
0●00000
Derivation
000000000
Conclusion
00
References

Co-occurrence with frequency adverbs

- Given clausal *wh*-doublets usually co-occur with verbs of thinking/saying, they are most natural in contexts where there are multiple thinking/saying events, especially with the presence of frequency adverbs.

(18) a. 阿明<u>成日</u>話佢 邊度買衫邊度買衫

  b. 阿明<u>不斷</u>投訴 邊個嘈邊個嘈

  c. 阿明<u>喺噉</u>讚 邊間餐廳好食邊間餐廳好食

Obligatory plurality

- There is an obligatory plural reading on clausal *wh*-doublets.

(19) Incompatibility with singular contexts - sole referent

    a. 新聞有提到最受歡迎男歌手金獎係 邊個邊個 拎。
    （但我唔記得咗佢講邊個。）

    b. #新聞有提到最受歡迎男歌手金獎係 邊個拎邊個拎 。
    （但我唔記得咗佢講邊個。）

    c. 阿明有提到嗰個同學姓 乜野乜野 。
    （但個姓太難讀我就唔重覆喇。）

    d. #阿明有提到嗰個同學 姓乜野姓乜野 。
    （但個姓太難讀我就唔重覆喇。）

Introduction
00000

Basic properties
00000

Size
0000000

Plurality
0000●000

Derivation
000000000

Conclusion
00

References

Obligatory plurality

- There is an obligatory plural reading on clausal *wh*-doublets.

(20) Incompatibility with singular contexts - one-time event

    a. 阿明喺佢既遺言透露咗佢既親生父親係 幾時幾時 死。

    b. #阿明喺佢既遺言透露咗佢既親生父親係 幾時死幾時死 。

    c. 份攻略講咗呢把劍只可以 點樣點樣 拎。

    d. #份攻略講咗呢把劍只可以 點樣拎點樣拎 。

Introduction
00000
Basic properties
00000
Size
0000000
Plurality
0000●00
Derivation
000000000
Conclusion
00
References

Obligatory plurality

- There is an obligatory plural reading on clausal *wh*-doublets.

(21)   Incompatibility with singular contexts - degree

    a.   阿明話扭計骰最少要扭到 幾快幾快 先破到世界紀錄。

    b.   #阿明話扭計骰最少要 扭到幾快扭到幾快 先破到世界紀錄

    c.   頭先把間尺度到阿明 幾高幾高 ，證明咗佢講大話。

    d.   #頭先把間尺 度到幾高度到幾高 ，證明咗佢講大話。

Introduction
00000
Basic properties
00000
Size
0000000
Plurality
0000000●0
Derivation
000000000
Conclusion
00
References

Nature of plurality: Distributivity

- Clausal *wh*-doublets allow a distributive interpretation over plural subjects.

(22) a. 新聞有提到最受歡迎男歌手<u>金銀銅獎</u>係 邊個拎邊個拎 。
（我就唔逐一講喇。）

b. 政府文件有紀錄<u>歷屆</u>六合彩係 邊個一注中邊個一注中 。

c. 阿明喺佢既遺言透露咗佢嘅<u>親生父母</u> 幾時死幾時死 。
（實際係幾時我就唔方便透露。）

d. 份攻略講咗呢<u>幾把劍</u>只可以 點樣拎點樣拎 。

- This property can be handled by the distributive operator proposed by Lasersohn (1998).

Nature of plurality: Event plurality

- Crosslinguistically, an event plurality marker shows an effect of distributivity over various dimensions (e.g. time, space, and participants to the events) (Hofherr and Laca 2012).

- For Cantonese wh-doublets, the dimenion of distributivity is contingent on the choice of the *wh*-expression.

  - e.g. 幾時 - time, 邊度 - location, 邊個/乜嘢 - participants.

Table of contents
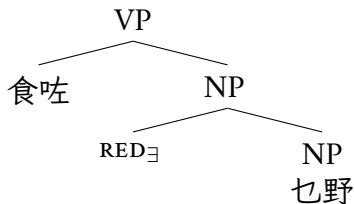
Derivation

- Bare *wh*-doublets, as in many languages, arguably involve a reduplication morpheme (i.e., RED) in the syntax.

- It applies to *wh*-expressions, resulting in doublets.

- An illustration (Lee and Wong 2018)

(23) Bare *wh*-doublets

```
            VP
          /    \
     食咗        NP
              /    \
         RED∃       NP
                    乜野
```

Introduction
○○○○○
Basic properties
○○○○○
Size
○○○○○○○
Plurality
○○○○○○○
Derivation
○○●○○○○○○
Conclusion
○○
References

Derivation

- Given that bare and clausal doublets differ in plurality, we argue that they are derived differently, depiste surface similarities.
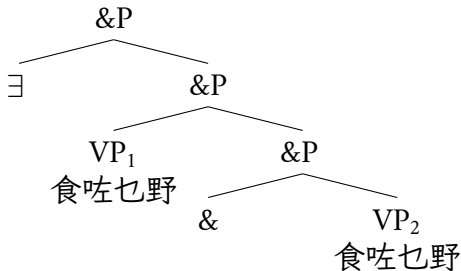
(24) **Bare *wh*-doublets**:

    a. A RED morpheme that is phonological dependent on the adjacent *wh*-expressions.

    b. It imposes no restriction/requirement on plurality.

(25) **Clausal *wh*-doublets**:

    a. A covert conjunction morpheme that conjoins two clauses.

    b. It conveys plural readings by virtue of the general nature of conjunction.

Introduction
00000

Basic properties
00000

Size
0000000

Plurality
0000000

Derivation
000●00000

Conclusion
00

References

Derivation

(26)   Clausal *wh*-doublets

&P
├── ∃
└── &P
    ├── VP₁
    │   食咗乜野
    └── &P
        ├── &
        └── VP₂
            食咗乜野

- The plural reading comes from the two VPs denoting different events.
- Conjunction applies to constituents (hence *Adv-V Adv-V O)

Introduction
00000
Basic properties
00000
Size
0000000
Plurality
0000000
Derivation
000000000
Conclusion
00
References

Derivation

- The proposed covert conjunction morpheme applies to clauses, not PPs.

(27) a. 將：*我將呢本書將嗰本書都拎走咗。

     b. 由：*今屆委員會由阿明由阿芬做委員。

     c. 從：*各位選手從香港島從九龍出發去新界。

(28) a. 幫：你呢幾年幫阿明幫阿芬做咗咁多野，無功都有勞。

     b. 喺：阿明喺小學喺中學都教過幾年書。

     c. 對：你對住大海對住天空大叫都冇所用架。

A detour: Pluractionality marker?

- Note that verbal/event plurality can be contributed by pluractional markers (Lasersohn 1995; Hofherr and Laca 2012).

(29) The marker in ǂHoan distributes the events over *places*

Titi	i-	**kí-**'am-**q‖o**	*(ki	ci	mϴun)
Titi	PAST	kí[pl] eat-**around**	(PREP	place	one)

'Titi eats <u>around</u> *(in one place).'
(Collins 2001:467, ex 31a)

(30) <u>The marker in West Greenlandic distributes the events over *times*</u>

Nuka	ullaa-p	tunga-a	tama-at	saniuqqut-**tar**-puq
N.ABS	morning-ERG	direction-SG.ABS	all-3SG	go.by-**repeatedly**-IND.[−TR].3SG

'Nuka went by <u>repeatedly</u> for the whole morning.'
(Van Geenhoven 2004: 146, ex 27)

Introduction
00000

Basic properties
00000

Size
0000000

Plurality
0000000

Derivation
000000●00

Conclusion
00

References

A detour: Pluractionality marker?

- We suggest that event plurality is not (yet) grammaticalized in Cantonese.

    - = no covert pluractionality marker in Cantonese

- The dimension over which the plural events are distributed is fully transparent in clausal doublets.

    - ***Wh*-expressions specify the relevant dimensions.**
    - The range of dimension is equivalent to the range of *wh*-expressions.

A prediction

- Compared to a reduplication approach, a conjunction approach allows more flexibility of the two conjuncts.
- There are cases where the the two conjuncts are non-identical lexically.

(31) a. 阿明話佢 想食龍蝦食乜 ，但佢邊有錢。

　　 b. 阿明講過話呢把劍可以 抽獎拎點樣拎 ，有心一定拎到。

- But they are still syntactically identical, and semantically coherent, following general contioins on conjunction.

A prediction

- The more specific conjunct must precede the one containing *wh*-expressions.

(32) a. *阿明話佢 食乜食龍蝦 ，但佢邊有錢。

  b. *阿明講過話呢把劍可以 點樣拎抽獎拎 ，有心一定拎到。

- We are not sure from what this follows for now.

Table of contents

Conclusion

- A novel form of existential *wh*-expressions
- Clausal *wh*-doublets contrast with bare *wh*-doublets in plurality.
- They are derived differently, i.e., conjunction vs. reduplication.
- A covert clausal conjunction morpheme is also suggested.

  - Multiple sluicing(-like) constructions (Adams and Tomioka 2012)
  - Bi-clausal approaches to Right Dislocation (Yip 2024)

- We leave its distribution and precise nature to our future research.

Introduction
00000
Basic properties
00000
Size
0000000
Plurality
0000000
Derivation
000000000
Conclusion
00
References

References I

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Introduction
00000
Basic properties
00000
Size
0000000
Plurality
0000000
Derivation
000000000
Conclusion
00
References

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