Bi-clausal Sluicing Approach to Dislocation Copying in Cantonese[1] [2]

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This article discusses a variant of Cantonese dislocation structures known as "dislocation copying" wherein a (non-)constituent string of the host clause gets copied at the right edge. Unlike some previous proposals, it is argued that the relationship between the host clause and the dislocated string cannot be explained purely on pragmatic grounds. Rather, a syntactic account is necessary to explain the dislocated string's sensitivity to structure. Adopting bi-clausal analysis, we propose that dislocation copying involves the fronting of a remnant containing an elided XP to the left periphery of the second clause, followed by the sluicing of the remainder of the clause. It is argued that the dislocation string gives rise to contrastive/emphasis interpretation. We have also compared similar dislocations in Dutch, German, Japanese and Korean with Cantonese. The findings suggest that sluicing in a bi-clausal structure is common to all of these dislocation structures. The typological variation arises mainly from the different types of phrasal fronting that feed sluicing.

Keywords: dislocation, fragment, parallel structure, ellipsis, sluicing, Cantonese

1. Introduction

Dislocation Copying (DC) is a lesser-studied word order phenomenon in Cantonese (and Mandarin), and is restricted to spontaneous spoken discourse. Although the sentence particle (SP) normally marks the very right edge of a sentence in Cantonese (and Mandarin), the string appended to the right of the SP is the repetition of part of the preceding clause, as in (1) and (2).

(1) 佢會去音樂會㗎，佢會。
Keoi wui heoi jamngokwui gaa, keoi wui. (DC / Cantonese)
he will go concert SP he will
'He will go to the concert.'

(2) 他其實不願意洗碗的，其實。
Ta qishi bu yuanyi xi wan de, qishi. (DC / Mandarin)
he in.fact not want wash dish SP in.fact
'In fact, he does not want to wash the dishes.'

The string after the SP (i.e. the underlined words in (1) and (2)) is referred to as the

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"dislocated string" or "dislocated copy". The clause (including the SP) preceding the dislocated string is the "host clause". The dislocated string is not followed by any other SP. DC resembles another more widely discussed dislocation structure, Right Dislocation (RD). Despite the similarity, the dislocated string in RD has no corresponding string in the host clause, as in (3) and (4).

(3) 去音樂會㗎，佢會。
Heoi jamngokwui gaa, keoi wui. (RD / Cantonese)
go concert SP he will
'He will go to the concert.'

(4) 他不願意洗碗的，其實。
Ta bu yuanyi xi wan de, qishi. (RD / Mandarin)
he not want wash dish SP in.fact
'In fact, he does not want to wash the dishes.'

DC and RD are schematized in (5) and (6). The boundary of the dislocated string is marked by ",". X could be a word, a phrase or a non-phrasal string. In DC, the copy of X in the host clause is referred to as the "correlate" of the dislocated copy.

(5) DC: [… X … SP] , X
host clause dislocated string

(6) RD: [… SP] , X

Past research focuses mostly on RD. In comparison, our understanding of DC is far more limited.

Two major issues will be tackled. The first concerns the grammatical status of the dislocated string. The dislocated string can potentially be analyzed in four ways: (a) conversation disfluency, (b) conversation increment, (c) a non-sentential base-generated fragment, and (d) bi-clausal analysis. This scrutiny will provide a solid foundation for the analysis of DC. Second, the available syntactic analysis of DC is rudimentary. Current accounts of Chinese RD are not applicable to DC because they have no built-in mechanism to generate repeated strings. Nor can we easily transplant analyses of dislocation in other languages to Cantonese DC because of the non-phrasal nature of many dislocated strings in Cantonese.

Here is the plan of this paper. Section 2 will provide a basic description of Cantonese DC. In Section 3, we will explore four potential options for analyzing DC. The discussion in Section 4 will argue for bi-clausal representation. Section 5 presents the proposal for deriving the host clause and the dislocated string. Section 6 discusses a few theoretical challenges the sluicing analysis presented. Last, Section 7 concludes the paper.

2. Basic Description of DC

2.1 Dislocatable Elements

Earlier studies pay much attention to the elements that can be dislocated to the right (Meng 1982; Shi 1992). Typical elements include subjects, pre-verbal adverbs, modals and V + *dak*.

(7) 你食過駝鳥肉咩，你？ (Subject)
Nei sik-gwo toliu-juk me, nei?
you eat-EXP ostrich-meat Q you
'You have eaten ostrich meat before?'

(8) 我哋已經出咗本雜誌喇，已經。 (Adverb)
Ngodei jiging ceot-zo bun zaapzi laa, jiging.
we already publish-PERF CL magazine SP, already.
'We have already published a magazine.'

(9) 餓得他暈了，餓得。 (V + *de* / Mandarin)
E-de ta yun le, e-de.
hungry-DE he faint SP hungry-DE
'(He was) so hungry that he fainted.'

The dislocated strings in (7) to (9) are elements whose syntactic position is otherwise rather fixed. For example, *jiging* 'already' and *zinghai* 'only' generally occur in the pre-verbal position.

Descriptively, more than one element can be dislocated simultaneously. Typical sequences cited include subject + adverb (10), subject + *shi* (11), and the matrix clause (12).

(10) 我又答啱喇，我又。
Ngo jau daap ngaam laa, ngo jau.
I again answer correct SP I again
'I got it right again.'

(11) 這是什麼呀，這是？
Zhe shi shenme ya, zhe shi? (Mandarin / Meng 1982: 175)
this be what SP this be
'What is this?'

(12) 佢話我錯喎，佢話。
Keoi waa ngo co wo, keoi waa.
he say I wrong SP he say
'He said I was wrong.'

Dislocated strings can be non-phrases, such as heads (e.g. modals) or non-phrasal strings (e.g. subject + *hai* 'be' or temporal adverb + modal). Non-constituent dislocated strings are a unique feature of Chinese dislocation. Right-dislocated elements in other languages generally must be phrases.

2.2 Imperfect Copying

A dislocated string is not necessarily an exact copy of the correlate in the host clause. This can be seen in the following two examples.

(13) 咁佢走唔走好呢，法國佬？ (Cantonese / from the corpus in §2.4)
Gam keoi zau-m-zau hou ne, Faatgwok-lou?
so he leave-not-leave good Q France-man
'So is it better for the French guy to retreat?'

(14) 他來了嗎，他現在？ (Mandarin / Shi 1992: 176)
Ta lai-le ma, ta xianzai?
he arrive-PERF Q he now

'Has he arrived now?'

In (13), *keoi* 'he' and *Faatgwok-lou* 'French guy' are co-referential but are not identical. When the copy is not exact, the dislocated string tends to be more complicated and specific than the correlate in the host clause[3]. In (14), the dislocated string is only a partial copy of the correlate. The dislocated string is *ta xianzai* 'he now' but *xianzai* is not found in the host clause.

2.3 Heaviness Constraint

The dislocated string of DC tends to be relatively short, typically ranging from one to three words. Longer dislocated strings, measured in number of words or syllables, are not necessarily ungrammatical but have become far less preferred[4].

(15) 佢星期日都一定會去睇戲㗎，…
Keoi singkeijat dou jatding wui heoi tai hei gaa,
he Sunday also definitely will go watch movie SP

a. 佢
keoi.

b. 星期日
singkeijat.

c. 都
dou.

d. 一定
jatding.

e. 佢星期日
keoi singkeijat.

f. (?)佢星期日都
(?) keoi singkeijat dou.

g. ? 佢星期日都一定
? keoi singkeijat dou jatding.

h. ?? 佢星期日都一定會
?? keoi singkeijat dou jatding wui.

The acceptability of (15) progressively degrades as the dislocated string gets longer. Most dislocated strings in the corpus data consist of no more than three words.

2.4 Corpus Findings

To confirm the generalizations above, a small corpus study of DC was conducted. The corpus[5] is based on spontaneous dialogues from 14 Cantonese Internet radio talk shows[6] produced in 2010 and 2011. There are a total of 17 Cantonese speakers in these programs. Each talk show feature two to three hosts discussing topics ranging from currents affairs (Hong Kong, Taiwan and mainland China), reviews of digital products, travel to movie reviews. The total length of the 14 programs is 872 minutes. Forty-one DC examples were collected. Ten of these sentences are given in the Appendix. Table 1 shows the variety of dislocated elements.

[3] Comparable tendency is found in dislocation in English and German.

[4] Similar 'heaviness' constraint is observed in Chinese RD (Cheung 2009).

[5] The corpus used in this study is based on a bigger Cantonese spoken corpus. I want to thank the following assistants for efforts in transcription and analysis.

- Margaret Chan, Chi-Fung Cheng, Carrie Cheung, Wilson Leung, Oscar Wong (transcription of dialogues), and
- Crono Tse and Jackie Lai (data analysis).

[6] The radio programs were collected from two Internet radio stations from Hong Kong, including HKReporter (URL: http://hkreporter.memehk.com) and OurRadio (URL: http://www.ourradio.hk).

Dislocated Strings	***Frequency***	***%***
I. DP (Subject)	16	39.0
II. Adverb	17	41.5
IIIa. Sequence (Matrix Subj + Verb)	6	14.6
IIIb. Sequence (Miscellaneous)	2	4.9
Total:	41	100.0

Table 1. Types of DC dislocated strings

The dislocated strings in the corpus are consistent with the introspection reported in Sections 2.1-2.3. Indeed, they generally fall into the following categories: adverbs (41.5%), subject DPs (39.1%) and sequence (19.5%). Subject and adverb dislocations are very commonly found. The dataset observes the heaviness constraint. Only 5 out of 41 DC examples have a dislocated string longer than 3 syllables.

3. Grammatical Status of the Dislocated String

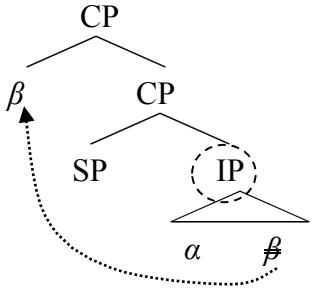
A controversy of dislocation is the grammatical status of the dislocated string. We will briefly review previous analyses of the dislocated string. After that, four analytical options will be scrutinized.

3.1 Previous Analysis of the Dislocated String

Law (2003) and Cheung (2005, 2009) argue that the dislocated string of RD[7] is the syntactic remnant after the focus phrase has undergone movement, as in (16). The host clause in RD, i.e. *β*, is a phrase that moves out of the IP and lands in the left periphery. The dislocated string *α* is left in-situ inside the IP remnant downstairs.

(16) a. $[_{CP}$ β SP $[_{IP}$ α ~~β~~]]

b.



α and *β* are syntactically parts of the same clause. The evidence for the representation is the syntactic connectivity effects between *α* and *β*, including anaphoric binding (17), scope reconstruction, association with focus *zinghai* (18), association with *doudai* and Principle C violation. (Interested readers should refer to Cheung (2009).)

(17) 自己啲學生㗎，Billy 好關心。 (Mandarin / Law 2003)
Zigei$_i$ di hoksaang gaa, Billy$_i$ hou gwaansam.
self CL student SP Billy very care-about
'Billy$_i$ cares about his$_i$ students.'

(18) 嗰本小說呀，張三淨係借咗。 (Cheung 2009)
Go bun siusyut aa, Zoengsaam zinghai ze-zo __.
DEM CL novel SP Zoengsaam only borrow-PERF
'Zoengsaam only borrowed the novel (and nothing else).'

[7] Law (2003) and Cheung (2009) have not considered DC.

The movement analysis permits an account of the connectivity effects between the host clause and the dislocated string. However, Luke (2004) argues against the movement approach to RD (Packard and Shi 1986; Cheung 2009) because it does not predict the repetition of the dislocated string in DC. Instead, he argues that the dislocated string is a case of conversation increment (see Section 3.3). In the next few sub-sections, we will examine four contending approaches to DC in turn.

3.2 Option 1: Disfluency

Many Cantonese (and Mandarin) speakers feel that DC is substandard and only reflects the flexibility or carelessness of speech. Chao (1968) analyzes the dislocated string in Chinese RD as an afterthought form for conversation repair. One may question whether DC is a case of disfluency or a performance anomaly. Spontaneous speech production often contains false starts, repetition, self-correction and incomplete utterances (Clark 2004; Tree 2006). Repetition is a common kind of disfluency in English (Shriberg 1996) and Mandarin (Tseng 2003, 2008).

(19) 因為因為他有健身中心。
Yinwei yinwei ta you jianshen zhongxin.
because because it has fitness center
'Because because it has a fitness center.'

In the case of DC, the speaker merely repeats some words in the host clause. Hearers can abstract away from the repetition and interpret the utterance (Fernanda and Bailey 2004). The dislocated string does not seem to have any truth-conditional effect. The disfluency view of DC is not unreasonable.

Three arguments will be put forth to show why disfluency is inadequate. First, repetition due to disfluency tends to occur right after the target being repeated, as in (19). However, repetition in DC is normally intervened by a number of words. Second, the strings that can be repeated are often limited to such elements as subjects and pre-verbal elements although, if DC is due to performance error, it is not clear why repetition is limited to these. Third, not all subjects or pre-verbal adverbs can be dislocated equally well. The copying process that targets strings for repetition turns out to be structure-sensitive. Compare sentences (a) and (b) in (20) and (21), whose contrast has not been reported previously.

(20) a. 佢聯絡過啲講者喇，佢。
Keoi lyunlok-gwo di gongze laa, keoi.
he contact-EXP GE speaker SP he
'He contacted the speakers.'
b. *我識晒 [$_{DP}$ 佢聯絡過嘅嗰啲講者] 㗎，佢 。
*Ngo sik-saai [$_{DP}$ keoi lyunlok-gwo ge go di gongze] gaa, keoi.
I know-all he contact-EXP GE DEM CL speaker SP he
'I know all the speakers that he contacted.'

(21) a. 佢已經去過喇，已經。
Keoi jiging heoi-gwo laa, jiging.
he already go- EXP SP already
'He has been (there).'

b. *如果佢已經去過，我聽日就唔去喇，已經。
*Jyugwo keoi jiging heoi-gwo, ngo tingjat zau m-heoi laa, jiging.
if he already go-Exp I tomorrow then not-go SP already
'If he has already been there, I will not go there tomorrow.'

In (20a) and (20b), the same word for the subject *keoi* 'he' is targeted for dislocation. The major difference is that *keoi* in (20a) is in the root clause whereas *keoi* in (20b) is inside a relative clause. In (21b), when the adverb *jiging* 'already' is located in a condition clause, the dislocation becomes bad. Cantonese speakers' judgment of the contrast in sentences (a) and (b) is strong. If DC is due to disfluency, it is surprising that the disfluency filtering mechanism fails in (b) sentences but not in (a) sentences. The above strongly suggests that DC is not arbitrary but is sensitive to structure (see also Section 4.2.1). Any adequate theory of DC requires reference to syntactic structure. Accounts based purely on discourse functions seem not so tenable.

3.3 Option 2: Conversation Increment Analysis

Luke (2004) studies dislocation structures from the perspective of discourse functions. Taking DC and RD as a unified phenomenon, he argues against the movement approach to Chinese RD (Law 2003; Cheung 2005, 2009) because the account fails to accommodate DC. Instead, the dislocated string of DC and RD is regarded as conversation "increment". Ford et al. (2002: 16) define increment as 'any nonmain-clause continuation of a speaker's turn after that speaker has come to what could have been a completion point, or a "transition-relevance place," based on prosody, syntax, and sequential action'. The dislocated string is a continuation following the host clause, and cannot function as an independent sentence. The speaker utilizes the continuation (i.e. the dislocated string) to lengthen the current conversation turn to facilitate turn transition. While the analysis offers useful insights, it has several problems. First, repetition is not an inherent feature of the original theory of increment. It is not clear why strings are duplicated at the end of a sentence. Second, the increment account does not predict structure-sensitvity (see Section 3.2). Third, this analysis does not say why some elements can be easily dislocated but others cannot (e.g. object DP).

3.4 Option 3: Non-sentential Base-generated Fragments

Section 3.2 has demonstrated the necessity for the syntactic link between the host clause and the dislocated string. One simple option is that the dislocated string is a base-generated fragment that adjoins to the host clause, as in (22).

(22) $[_{S'}$ $[_{S}$ host clause] [α]]

Consider the examples in (23) and (24).

(23) $[_{S'}$ $[_{S}$ 你 投過 票 咩], $[_{DP}$ 你]]?
$[_{S'}$ $[_{S}$ Nei tau-gwo piu me], $[_{DP}$ nei]]?
you cast-EXP ballot YNQ you
'Have you (ever) cast a ballot?'

(24) $[_{S'}$ $[_{S}$ 我哋已經出咗本雜誌啦]，$[_{Adv}$ 已經]]。
$[_{S'}$ $[_{S}$ Ngodei jiging ceot-zo bun zaapzi laa], $[_{Adv}$ jiging]].
we already print-PERF CL magazine SP, already.
'We have already printed the magazine.'

The underlying structures of the dislocated strings above could simply be a DP and an Adv (or AdvP) adjoining the host clause. The base-generated fragment approach is not implausible. Some linguists (Barton 2006; Stainton 2006) have shown independently that grammar should allow non-sentential fragments.[8]

However, fragment analysis is not desirable on several grounds. The first argument again concerns the structure-sensitivity of DC. It does not predict the ungrammaticality of (20b) and (21b). If the DPs are base-generated at the right edge, all the dislocated copies in (20) and (21) should be acceptable. Second, the analysis allows elements such as immovable pre-verbal adverbs like *dou* 'also' and *jiu* 'then' to be base-generated at the right edge, which seems rather exceptional.

(25) 佢都嚟㗎，都。
Keoi dou lei gaa, dou.
he also come SP also
'He will also come.'

Third, an even bigger problem is that the dislocated string in Chinese dislocation can be non-phrasal elements, as mentioned in Section 2.1. Consider examples in (26) and (27).

(26) 我又答啱喇，我又。
Ngo jau daap ngaam laa, ngo jau.
I again answer correct SP I again
'I got it right again.'
(27) 佢可能要飲汽水㗎，可能要。
Keoi honang jiu jam heiseoi gaa, honang jiu.
he probably want drink soft.drink SP probably want
'He probably wants to have a soft drink.'

One has to find a way to base-generate non-constituent strings (i.e. *ngo jau* and *honang jiu*) (without deletion). Such grammatical rules would be ad hoc. Lastly, some morphemes (e.g. *zinghai* 'only' and *doudai wh*-the-hell adverb) require an associate in their c-command scope to be well-formed. However, in DC they can be dislocated without such an associate.

(28) 我淨係點咗一碟炒飯咋，我淨係。
Ngo zinghai dim-zo jat dip caaufaan zaa, ngo zinghai.
I only order-PERF one CL fried.rice SP I only
'I only ordered a fried rice.'

If *ngo zinghai* is all that is generated for the dislocated string in (28), the example is rather unexceptional. The problems above suggest that base-generated fragment analysis is not a good route to take.

3.5 Option 4: Bi-clausal Analysis

Shi (1992) proposes that Mandarin DC (and RD) underlyingly involves the

[8] This view is different from the other view that fragments (advocated by Morgan (1973) and Merchant (2004) among others) are derived by ellipsis.

duplication of the host clause, which he calls a "twin" structure. The motivation is that it provides a mechanism to generate two copies of the dislocated string in DC. To explain the asymmetry of the two clauses, deletion is assumed to apply to some "non-core" element(s) in at least one copy of the twin clauses. When deletion occurs only in the second clause, DC results, as in (29). When deletion also applies in the first clause, one obtains RD, as in (30).

(29) DC: $[_{S'}\ [_{S1}\ (X)\ Y\ Z\ SP\ ]\ ,\ [_{S2}\ \sout{(X)}\ Y\ \sout{Z}\ ]\ ]$
(30) RD: $[_{S'}\ [_{S1}\ \sout{(X)\ Y}\ Z\ SP\ ]\ ,\ [_{S2}\ (X)\ Y\ \sout{Z}\ ]\ ]$ (X, Y and Z = strings)

Shi remarks that although the twin structure has two clauses, the DC sentence as a whole has the intonation of a single sentence. As a result, the two copies in the bi-clausal structure should not be regarded as two independent sentences. However, Shi's proposal has not included any explicit formulation of deletion rules. Deletion without constraints easily results in the over-generation of unacceptable dislocation sentences.

The bi-clausal approach has been independently put forth in some recent analyses of dislocation phenomena[9] in Dutch/German (Ott and de Vries 2012, *to appear*), Japanese (Abe 1999; Tanaka 2001; Takita 2011) and Korean (Chung 2009; Lee 2009; Park and Kim 2009; Yim 2013). They all share the central claim that dislocation structures involve the juxtaposition of two copies of the host clause (i.e. [S_1, S_2]). A phrase in S_2 moves (or scrambles) to the beginning of S_2, followed by TP ellipsis in S_2. The derivation is analogous to sluicing in English, as advocated by Merchant (2001, 2004). Henceforth, we will call it the sluicing approach to dislocation. The derivation is illustrated using the Japanese example (Tanaka 2001: 558) in (31).

(31) Step 1: $[_{S1}\ X\ Y\ Z\ SP\ ]\ ,\ [_{S2}\ X\ Y\ Z\ ]$
(i) $[_{S1}$ John-ga *pro*$_i$ yonda yo], $[_{S2}$ John-ga LGB-o$_i$ yonda yo]].
John-NOM read COMP John-NOM LGB-ACC read COMP
'John read LGB.'

Step 2: $[_{S1}\ X\ Y\ Z\ SP\ ]\ ,\ [_{S2}\ Z\ [_{S2}\ X\ Y\ \_\_\ ]$

(ii) $[_{S1}$ John-ga *pro*$_i$ yonda yo], [LGB-o$_i$ $[_{S2}$ John-ga ___ yonda yo].

(movement of Z to S2-initial)

Step 3: $[_{S1}\ X\ Y\ Z\ SP\ ]\ ,\ [_{S2}\ Z\ \sout{[_{S2}\ X\ Y\ \_\_\ ]}\ ]$
(iii) $[_{S1}$ John-ga *pro*$_i$ yonda yo], $[_{S2}$ LGB-o$_i$ $\sout{[_{S2}\ \text{John-ga}\ \_\_\_\ \text{yonda yo}]}$].

(deletion of TP in S2)

Unlike Shi's proposal, the deletion under the sluicing approach is highly constrained. The proposal has been claimed to work for dislocation in Dutch, German and Korean (e.g. (32) and (33)), and is supported by various tests such as case-marking, island effects and binding facts.

[9] What we call DC in this paper is equivalent (at least descriptively) to what other researchers call "right dislocation" in other languages.

(32) German (Ott and de Vries *to appear*)
[$_{CP1}$ ich habe einen Star getroffen], [$_{CP2}$ den John Travolta$_i$ ~~[habe ich t_i getroffen]~~]
I have a star met the John Travolta have I met
'I met a star, John Travolta.'

(33) Korean (Park and Kim 2009)
[$_{CP1}$ John-un [Δ_1 Δ_2 mekesstako] malhayssta] ,
John-TOP ate-COMP said-DECL
[$_{CP2}$ Mary-ka$_1$ sphakeythi-lul$_2$ ~~[$_{TP}$ John-un [t_1 t_2 mekesstako] malhayssta]~~].
Mary-NOM spaghetti-ACC John-TOP ate-COMP said-DECL
'John said that Mary ate pizza.' (Δ = gap)

The evidence for the bi-clausal structure in Cantonese DC will be discussed in Section 4.

3.6 Interim Summary

Section 3 has shown that the dislocation of elements to the right in DC is not random but is subject to structural constraints. Only elements above the VP (e.g. topic, subject, modal, pre-verbal adverb, etc.) are subject to dislocation copying. These facts provide solid evidence showing that the host clause and the dislocated string are not merely related pragmatically. Any adequate account of DC must postulate a syntactic relationship between the two parts. The implication is that the disfluency analysis (Option 1) and the conversation increment analysis (Option 2) seem inadequate. Nor is it desirable to base-generate the dislocated string (without deletion) (i.e. Option 3). As the dislocated string can be a non-constituent string or an element that requires an associate, it would be quite difficult to explain the generation of fragments. The bi-clausal analysis (Option 4) fares the best.

4. Evidence for a Parallel Structure in Dislocation Structures

While the bi-clausal analysis seems a promising one, this section presents evidence for the existence of an elided structure in the second clause that parallels the host clause in Cantonese DC. The arguments for the sluicing approach to dislocation in other languages will be reviewed in Section 4.1. A similar parallel structure in Cantonese DC will be justified in Section 4.2.

4.1 Evidence from Dutch/German/Japanese/Korean Dislocations (DGJK)

Evidence based on (i) case agreement, (ii) island effects, and (iii) quantifier scope converges to the parallelism hypothesis in the dislocation structures in DGJK.

4.1.1 Case-matching Connectivity Effects

Connectivity effects have been used extensively in demonstrating the relationship between fragments and elided structures (Morgan 1973; Merchant 2001). The case marking on the dislocated nominal has to be the same as its correlate in the host clause. The matching case marking (e.g. accusative marking in (34) and (35)) can be easily explained if one hypothesizes that the dislocated string shares the same underlying structure as the host clause.

(34) German (Ott & de Vries *to appear*: 17)
Ich habe ihm geholfen, {*der / *den / dem} Peter.
I have him.DAT helped *the.NOM *the.ACC the.DAT Peter
'I helped him, Peter.'

(35) Japanese (Tanaka 2001: 552, ex. 3a)
John-ga LGB-o yonda yo, LGB-o.
John-NOM LGB-ACC read SP LGB-ACC
'John read LGB, LGB.'

For example, the elided verb in the second clause assigns the acuusative case to the dislocated nominal, making the case marking consistent across the two clauses.

4.1.2 Island Effects
Another important motivation of the parallelism hypothesis is the island sensitivity of the dislocated string. Consider the phrase *die vrouw* 'that woman' in (36).

(36) Piet vertelde dat hij haar geplaagd had, die vrouw. (Dutch/non-island)
Piet told that he her teased had that woman
'Piet said that he had teased her, that woman.'

This is acceptable when the correlate of the phrase is located in a non-island embedded clause. When the correlate is in a syntactic island, ill-formedness results, as in (37) and (38).

Dutch (Ott and de Vries to appear, ex 80b, c)
(37) Complex NP Island
*Ik heb iemand [die haar geplaagd had] een reprimande gegeven, die vrouw.
I have someone [who her teased had a reprimand given that woman
'I took someone who teased her to task, that woman.'
(38) Adjunct Island
*[Toen ze aan kwam fietsen] sprong Piet op, die vrouw.
[when she on came cycling jumped Piet up that woman
'When she arrived cycling, Piet jumped up, that woman.'

If one assumes that *die vrouw* is extracted out of an underlying island identical to the host clause, the ungrammaticality can be easily explained.

Similarly, in (39), the dislocated phrase *Mary-lul* corresponds to a gap in a non-island embedded clause. It follows that the sentence is fine. However, when the same embedded clause is an island (40), the sentence becomes bad.

Korean (Park and Kim 2009: 36)
(39) Bill-un [John-i ecey manna-ass-ta-ko] malhay-ss-e,
Bill-TOP John-NOM yesterday meet-PAST-DECL-COMP say-PAST-DECL
Mary-lul.
Mary-ACC
'Bill said that John met yesterday, Mary.'
(40) ?*Susi-nun [[Bill-i ecey manna-ass-ta-nun] somwun-ul]
Susi-TOP Bill-NOM yesterday meet-PAST-DECL-ADN rumor-ACC
tul-ess-tey, Mary-lul.
hear-Past-is said Mary-ACC
'Susi is said to have heard that Bill met yesterday, Mary.'[10]

[10] The English translation is provided by Park and Kim (2009). While the translation does not involve any island, *Mary-lul* is actually inside the complex NP island 'the rumor that …'.

Similar island effects in Japanese dislocation are reported in Tanaka (2001). The hypothesis that the dislocated phrase is accompanied by an elided structure that mirrors the host clause provides a good explanation.

4.1.3 Quantifier Scope Anomaly

The quantifier scope interpretation corroborates the sluicing analysis of dislocation. Consider the ungrammatical Japanese sentence in (41) from Tanaka (2001: 577).

(41) *[$_{S1}$ John-ga [Mary-ga nani-o tabeta-ka] oboete-iru-no],
John-NOM Mary-NOM what-ACC ate- Q remember-is-Q
[$_{S2}$ nani-o$_i$ ~~[$_{S2}$ John-ga [Mary-ga t_i tabeta-ka] oboete-iru-no]~~]?
what-ACC John-NOM Mary-NOM ate-Q remember-is-Q
'Does John remember what Mary ate, what?'

Tanaka has argued that (41) is bad because *nani-o* takes the embedded scope in S1 but the matrix scope in S2 after scrambling to the initial position in the second clause. The two clauses produce inconsistent scope interpretation, leading to ungrammaticality. Again, the explanation hinges on the assumption that *nani-o* scopes over an elided structure similar to the host clause.

4.2 Parallel Structure in Cantonese DC

Two types of evidence will be drawn on to demonstrate the plausibility of the (elided) parallel structure in the second clause.

4.2.1 Sensitivity to Structure

Cantonese DC displays sensitivity to the syntactic structure in which the correlate of the dislocated string resides. The pattern resembles island sensitivity. The evidence will suffice to suggest that the well-formedness of the dislocated string can be best explained if the parallel structure is assumed. The general restriction of copying is that the correlate of the dislocated string must not originate from a position in a syntactic island in the first clause.

Contrast the dislocation of *keoi* in (42) and (43). The dislocation is perfectly fine in non-islands (42). When the same clause is embedded as a relative clause in (43), the dislocation of *keoi* becomes very bad.

Non-island

(42) 佢會聯絡嗰四位講者喇，佢。
Keoi wui lyunlok go sei wai gongze laa, keoi.
he will contact DEM four CL speaker SP he
'He will contact those four speakers.'

Complex NP Island

(43) *我識晒 [佢會聯絡嘅嗰啲講者]㗎，佢。
*Ngo sik-saai [keoi wui lyunlok ge go di gongze] gaa, keoi.
I know-all he will contact GE DEM CL speaker SP he
'I know all the speakers who he will contact.'

Island violation is also obtained when elements of other categories are dislocated. Observe a contrast in (44) and (45) where adverbs are dislocated. Dislocating adverbial elements (e.g. *soengsingkei* 'last week' and *dou* 'also') is permissible when

their correlates are located in the matrix clause but not when their correlates are inside an island (e.g. *tingjat* 'tomorrow' and *jiging* 'already').

Complex NP Island

(44) 我上星期見到 [聽日會飛去柏林嘅嗰個同學] 呀，{a. ✓上星期 / b. *聽日}。
Ngo soeng singkei gindou [tingjat wui fei-heoi Paaklam ge go go tunghok] aa,
I previous week see tomorrow will fly-go Berlin GE that CL student SP
a. ✓ soeng singkei. b. *tingjat.
previous week tomorrow
'Last week, I saw the student who will fly to Berlin tomorrow.'

(45) 佢哋都相信 [李總統已經落咗台嘅講法] 呀，{a. ✓都 / b. *已經}。
Keoidei dou soengseon [Lei Zungtung jiging lok-zo toi ge gongfaat] aa,
they also believe Lei President already go.down-PERF stage GE claim SP
a. ✓dou. b. *jiging.
also already
'They also believe the claim that President Lei has already stepped down.'

The effects are found in other types of syntactic islands, as in (46) and (47).

Adjunct Island

(46) 因為佢今日已經出咗院，所以我聽日會返翻工喇，{a. *佢 / b. *今日 / c. *已經 / d. ✓我 / e. ✓聽日 / f. (?)會}。
Janwai keoi gamjat jiging ceot-zo jyun,
because he today already go.out-PERF hospital
soji ngo tingjat wui faan-faan gung laa,
therefore I tomorrow will return-back work SP
a. *keoi. d. ✓ngo.
he I
b. *gamjat. e. ✓tingjat
today tomorrow
c. *jiging f. (?) wui
already will
'As he has already been discharged from the hospital, I will return to work tomorrow.'

Sentential Subject Island

(47) [John 出年會成為主席]令我尋日好開心呀，{a. ?John / b. *出年 / c. *會 / d. ✓尋日}。
[John ceotnin wui singwai zyuzik] ling ngo camjat hou hoisam aa,
John next.year will become chairman make I yesterday very happy SP
a. ?John. c. *wui.
will
b. *ceotnin. d. ✓soeng singkei.
next.year previous week
'That John will become the chairman next year has made me very happy last week.'

What is also critical is the grammaticality status of copying materials inside non-island embedded clauses. If Cantonese DC is indeed island-sensitive, we expect

no violation when the correlate is in non-island embedded clauses (e.g. clausal complements). It turns out that the results are somewhat ambiguous.

(48) Mary 認為 [John 係個飛機師] 咩，
Mary jingwai [John hai go feigeisi] me,
Mary think John be CL pilot Q
'Mary thinks that John is a pilot?'

a. ✓ Mary?
b. ? John?

(49) 佢哋都會知道[李先生已經辭咗職] 㗎喇，
Keoidei dou wui zidou [Bill jiging ci-zo zik] gaa laa,
they dou will know Bill already resign-PERF post SP SP
'Will they also believe that Mr. Lei has already resigned.'

a. ✓keoidei.
they
b. ✓dou.
also
c. ?Bill.
d. ?jiging.
already

(50) 你說這個髒不髒，你說這個? (Mandarin / Meng 1982: 175)
Ni shuo zhe ge zang-bu-zang, ni shuo zhe ge?
you say DEM CL dirty-not-dirty you say DEM CL
'Tell me whether this is dirty or not!"

There is rather significant speaker variation for copying a correlate in a non-island embedded clause, e.g. *John* in (48) and *jiging* 'already' in (49). Some find them slightly degraded; others, quite marginal. However, comparatively speaking, they are not as bad as those in syntactic islands. The acceptability can be summarized as follows:

(51) <u>(I) Root clauses</u> <u>(II) Non-island embedded clauses</u> <u>(III) Islands</u>
Acceptable > (Somewhat) Marginal > Unacceptable

One possible interpretation is that Cantonese DC is indeed sensitive to islands. The degradation of Group II is due to the "Acceptability Declination Effect", which will be reported in Section 5.2. The effect predicts that elements further away from the beginning of the clause are less preferred to undergo dislocation copying. As elements inside a clausal complement are further from the clause-initial position, Group II is less preferred but not entirely bad. The observations strongly suggest that the dislocated string moves out of a larger elided structure parallel to the first clause.

4.2.2 Connectivity Effects

Some syntactic elements obligatorily require the presence of another element to be well-formed[11]. They are useful diagnostics to probe into the content of the elided materials. Examples include (i) the *zinghai* 'only' test, (ii) the *doudai* ("*wh*-the-hell" adverb) test, and (iii) the licensing of polarity item *cungloi* 'ever'.

<u>*Zinghai* 'only' … FOCUS</u>: As in English *only*, *zinghai* 'only' in Cantonese must associate with an element in its c-command scope for exclusive focus interpretation.

[11] This can be subsumed under what Merchant (2013) broadly refers to as "the Isidore's diagnostic" – "something is missing that otherwise must be present".

(52) John 剩係借咗嗰本小說咋。
John zinghai ze-zo go bun siusyut zaa.
John only borrow-PERF DEM CL novel SP
(a) *'*John* only borrowed the novel. (Nobody else did).'
(b) 'John only borrowed *the novel* (and nothing else).'
(c) 'John only *borrowed the novel*. (He did nothing else.)'
(d) 'John only *borrowed* the novel. (He did not buy it.)'

Interestingly, in Cantonese DC, it is perfect to copy *zinghai* without an overt element in its c-command domain.

(53) John 淨係借咗嗰本小說咋，(John)淨係。
John zinghai ze-zo go bun siusyut zaa, (John) zinghai.
John only borrow-PERF DEM CL novel SP John only
'John only borrowed *the novel*.'

If one postulates the existence of an elided parallel structure that goes with the dislocated *zinghai*, its well-formedness can be accounted for without extra stipulation.

Doudai … *wh*-word: To form a *wh*-the-hell expression in Mandarin, the adverb *daodi* must associate with a *wh*-phrase in its c-command domain (Huang and Ochi 2004; Yuan 2014). The Cantonese cognate *doudai* behaves in the same way as Mandarin *daodi*. Both (54a) and (54b) are grammatical because *doudai* c-commands *matje* 'what.' In contrast, (54c) violates the c-command requirement.

(54) a. 你到底要買乜嘢呀？
Nei doudai jiu maai matje aa? [✓ *doudai* … wh]
you DOUDAI want buy what Q
'What the hell do you want to buy?'
b. 到底邊個要買車呀？
Doudai bingo jiu maai ce aa? [✓ *doudai* … wh]
DOUDAI who want buy car Q
'Who the hell wants to buy a car?'
c. *邊個到底要買車呀？
Bingo doudai jiu maai ce aa? [wh … *doudai*]
who DOUDAI want buy car Q
'Who the hell wants to buy a car?'

In Cantonese DC, it is perfectly fine to dislocate *doudai* without an overt *wh*-phrase in its c-command domain.

(55) a. 你到底要買乜嘢呀，(你)到底？
Nei doudai jiu maai matje aa, (nei) doudai?
you DOUDAI want buy what Q you DOUDAI
'What the hell do you want to buy?'
b. 到底邊個要買車呀，到底？
Doudai bingo jiu maai ce aa, doudai?
DOUDAI who want buy car Q DOUDAI
'Who the hell wants to buy a car?'

The postulation of an elided parallel structure can explain the well-formedness of the dislocated *doudai* without c-commanding a *wh*-phrase.

Conglai 'ever' … NEG: Mandarin *conglai* 'ever' is licensed only when followed by a clausemate negation (Progovac 1994), which is identical to the Cantonese cognate *cungloi* 'ever'. The contrast below illustrates the obligatory presence of a clausemate negation.

(56) 佢從來 *(冇) 見過 John。
Keoi cungloi *(mou) gin-gwo John.
he ever have.not see-EXP John
'He has never seen John.'
(57) *(冇人)從來見過 John。
*Mou-jan cungloi gin-gwo John.
have.not-person ever see-EXP John
'Nobody has ever seen John.'

However, *cungloi* can be dislocated without a clausement negation in its domain.

(58) 佢從來冇見過 John，(佢)從來。
Keoi cungloi mou gin-gwo John, (keoi) cungloi.
he ever have.not see-EXP John, he ever
'He has never seen John.'

Postulating an elided parallel structure in the second clause explains the unexpected well-formedness of the dislocated *cungloi* in (58).

To summarize, much empirical evidence is in favor of postulating the existence of some elided structure parallel to the host clause. In Section 5, a modified version of the bi-clausal sluicing analysis will be put forward to derive Cantonese DC.

5. Deriving Dislocation Copying

5.1 Proposal

The derivation of DC will first be described using (59). The motivation for each step will be elaborated upon in subsequent sub-sections.

(59) 我淨係買咗芝士咋，我淨係。
Ngo zinghai maai-zo zisi zaa, ngo zinghai.
I only buy-PERF cheese SP I only
'I only bought cheese.'

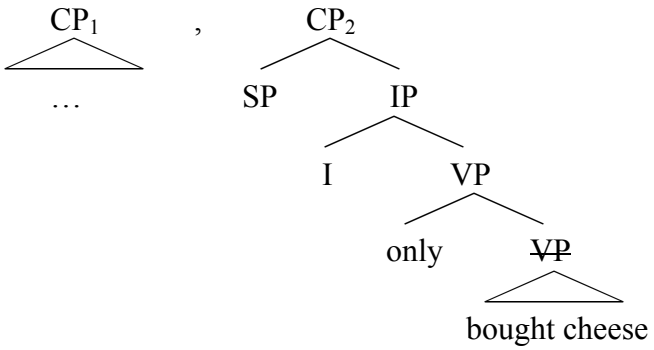
In the following, the SP is assumed to be the head of a head-initial CP in the underlying representation. Section 5.3.2 will elaborate upon this assumption further.

Step 1: Juxtapose two parallel clauses

(60) [$_{CP1}$ zaa ngo zinghai maai-zo zisi], [$_{CP2}$ zaa ngo zinghai maai-zo zisi]
SP I only buy-PERF cheese SP I only buy-PERF cheese

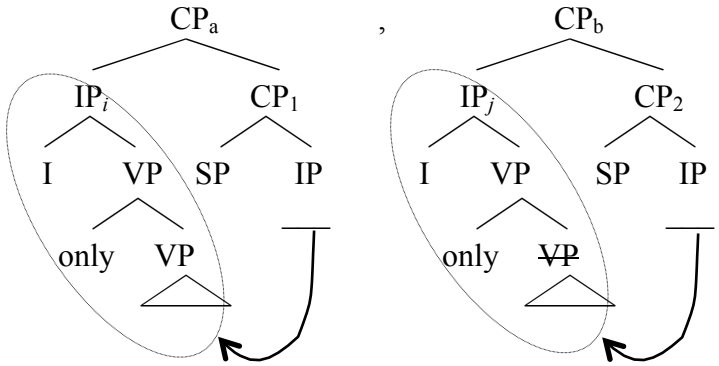
Step 2: Apply *α*P ellipsis in the second clause

(61) [$_{CP1}$ zaa ngo zinghai maai-zo zisi], [$_{CP2}$ zaa ngo zinghai ~~maai-zo zisi~~]
SP I only buy-PERF cheese SP I only buy-PERF cheese



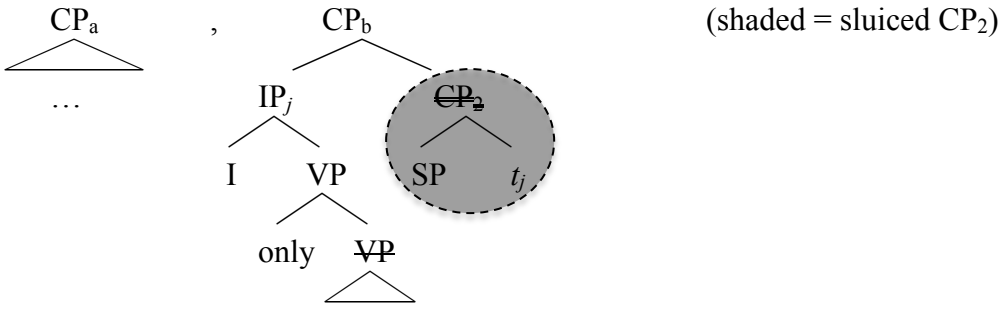
Step 3: Move *δ*P to the left periphery of the second clause

(62) [$_{CPa}$ [$_{IP}$ *ngo zinghai maai-zo zisi*]$_i$ [$_{CP1}$ *zaa* t_i]] ,
I only buy-PERF cheese SP
[$_{CPb}$ [$_{IP}$ *ngo zinghai* ~~*maai-zo zisi*~~]$_j$ [$_{CP2}$ *zaa* t_j]]
I only buy-PERF cheese SP



Step 4: Elide CP_2 in the second clause (i.e. sluicing)

(63) [$_{CPa}$ [$_{IP}$ ngo zinghai maai-zo zisi]$_i$ [$_{CP1}$ zaa t_i]] ,
I only buy-PERF cheese SP
[$_{CPb}$ [$_{IP}$ ngo zinghai ~~maai-zo zisi~~]$_j$ [$_{CP2}$ ~~zaa~~ t_j]]
I only buy-PERF cheese SP



5.2 Ellipsis of αP

The challenge to the bi-clausal approach is to formulate deletion rules on the second clause. Sluicing analysis is an elegant way to derive dislocation. However, there are several reasons why sluicing analysis as formulated in Tanaka (2001), Park and Kim

(2009) and Ott and de Vries (to appear) cannot be applied in a straightforward manner in Cantonese DC. The biggest problem is that, unlike dislocation in DGJK, the dislocated strings in Chinese can be heads or non-constituents (see also Section 3.4), which the sluicing approach in its original form does not predict.

(64) 阿明都返咗屋企喇，阿明都。
Aaming dou faan-zo ukkei laa, Aaming dou.
Aaming also return-PERF home SP Aaming also
'Aaming has also gone home.'
(65) 佢會將間屋賣出去㗎喇，會。
Keoi wui zoeng gaan uk maai-ceot-heoi gaa laa, wui.
he will zoeng CL house sell-out-go SP SP will
'He will sell the house.'

The non-phrasal dislocated strings above cannot be derived by simple phrasal movement in the second clause. Nor can they be derived via multiple movements. Further, the adverb *dou* in (64) is highly fixed and generally not subject to movement. The modal *wui* in (65) is a head that does not undergo phrasal movement. To circumvent the problem, it is proposed that Cantonese DC differs from dislocation in DGJK in the additional ellipsis before sluicing applies.

VP Ellipsis
It is proposed that the second clause in DC always contains an elided site that includes at least the VP, resulting in dislocated strings that look like remnants, as illustrated in (66) and (67).

(66) [阿明都返咗屋企喇]，[阿明 都 ~~[VP 返咗屋企]~~]。
[Aaming dou faan-zo ukkei laa], [Aaming dou ~~[VP faan-zo ukkei]~~].
Aaming also return-PERF home SP Aaming also return-PERF home
'Aaming has also gone home.'
(67) [佢會好小心咁睇嗰本書㗎喇]，[~~佢~~ 會 ~~[VP 好小心咁睇嗰本書]~~]。
[Keoi wui hou siusam-gam tai go bun syu gaa laa], [~~keoi~~ wui ~~[VP hou siusam-gam tai go bun syu]~~]
he will very careful-way read that CL book SP SP he will very careful-way read that CL book
'He will read the book very carefully.'

The effect can be more explicitly demonstrated in the examples below. Whenever the copied string contains any part of the VP, the DC sentence is out. The VP seems to be obligatorily elided.

(68)

阿明都返咗屋企喇， Aaming dou faan-zo ukkei laa, Aaming also return-PERF home SP	a. ✓Aaming. b. ✓dou. c. ✓Aaming dou. d. *faan-zo. e. *ukkei. f. *faan-zo ukkei. g. *Aaming dou faan-zo.

(69)

我已經去過日本五次喇，
Ngo jiging heoi-gwo Jatbun ng ci laa,
I already go-EXP Japan five time SP

a. ✓ngo.
b. ✓ngo jiging.
c. ✓ jiging.
d. *heoi-gwo.
e. *Jatbun.
f. *heoi-gwo Jatbun.
g. *ng ci.
h. *heoi-gwo Jatbun ng ci.

(70)

佢會好小心咁睇嗰本書㗎，
Keoi wui hou siusam-gam tai go bun syu gaa,
he will very careful-way read DEM CL book SP

a. ✔keoi.
b. ✔keoi wui.
c. (?) wui.
d. ??hou siusam-gam.
e. ??wui hou siusam-gam.
f. ??tai.
g. *go bun syu.
h. *tai go bun syu.

The elements that fail to copy include verbs[12], object DPs, frequency phrases, duration phrases, manner adverbs and any combination of these. Low VP manner adverbs (e.g. *hou siusam gam* 'very carefully') are also excluded. The dislocation pattern is not shared by dislocation in DGJK. For example, dislocating an object DP is permissible in DGJK. It should also be noted that the kind of VP ellipsis found in DC is not the same as the regular VP ellipsis found in Cantonese (or Chinese). For example, the Chinese VP ellipsis requires an auxiliary or modal to license the ellipsis (Li 2002; Wei 2010) but the VP ellipsis here does not.

High VP/ModalP Ellipsis

The materials inside the VP are contrasted with elements higher up in the structure, e.g. VP adjuncts (71, 72), modals (73, 74), temporal adverbials (75), locatives (76) and light verb + DP[13] sequences (77) and subjects. These pre-verbal elements can generally be dislocated.

Immovable Pre-verbal Adjuncts (i.e. High VP ellipsis)

(71) 佢已經睇完本書喇，
Keoi jiging tai-jyun bun syu laa,
he already read-finish CL book SP
'He has already finished reading the book.'

a. ✓ keoi.
b. ✓ jiging.
c. ✓ keoi jiging.

(72) 佢都睇完本書喇，
Keoi dou tai-jyun bun syut laa,
he also read-finish CL book SP
'He has also finished reading the book.'

a. ✓ keoi.
b. ✓ dou.
c. ✓ keoi dou.

[12] One counter-example to this is the verb *hai* 'be'.
[13] Two examples of light verb constructions are (i) passive *bei* + DP (Huang 1999), and (ii) disposal *zoeng* + DP (similar to Mandarin *ba* construction) (Matthews and Yip 2013: 168).

Modals

(73) 佢應該已經睇完本書喇，
Keoi jinggoi jiging tai-jyun bun syu laa,
he should(EPIST) already read-finish CL book SP
'He should have already finished reading the book.'

a. ✓ keoi.
b. ✓ jinggoi
c. (?) jiging.
d. ✓ keoi jiging.
e. (?) keoi jinggoi jiging.

(74) 佢會睇完本書喇，
Keoi wui tai bun syu laa,
he will(FUTURE) read CL book SP
'He will read the book.'

a. ✓ keoi.
b. (?) wui
c. (?) keoi wui.

Temporal Adverbial

(75) 佢星期日會去教會㗎，
Keoi singkeijat wui heoi gaauwui gaa,
he Sunday will go church SP
'He will go to church this Sunday.'

a. ✓ keoi.
b. ✓ singkeijat.
c. ? wui.
d. (?) keoi singkeijat.

Locative Adverbial

(76) 佢喺美國讀大學㗎，
Keoi hai Meigwok duk daaihok gaa,
he at USA study university SP
'He did his college studies in the USA.'

a. ✓ keoi.
b. (?) hai Meigwok.
c. (?) keoi hai Meigwok.

Light Verb Construction (LVC)

(77) 佢將啲錢放咗喺個袋度囉，
Keoi zoeng di cin fong-zo hai go doi dou lo,
he ZOENG CL money put-PERF at CL bag place SP
'He put the money in the bag.'

a. ✓ keoi.
b. (?) keoi zoeng di cin.
c. ? zoeng di cin.

(78) 佢喺學校被同學打呀，
Keoi hai hokhaau bei tunghok daa aa,
he at school PASS classmate beat SP
'He put the money in the bag.'

a. ✓ keoi.
b. (?) keoi hai hokhaau.
c. (?) bei tunghok.
d. ? keoi hai hokhaau bei tunghok.

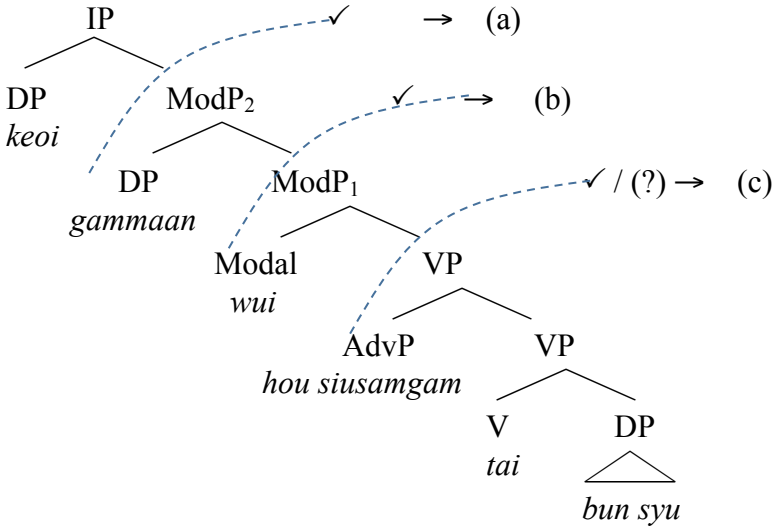
The relative acceptability (in descending order) can be summarized below.

(79) Subject > *jiging*/*dou*/*jau* > Modal/Temporal > (?)Locative
> (?)Light Verb Phrase > *Manner Adverb > *Verb > *Object

The above suggests that the acceptability of copying gradually decreases as the distance of the copied element from the beginning of the sentence increases. This constraint is henceforth known as the "Acceptability Declination Effect".

To account for the ellipsis of elements higher up in the clausal structure, it is proposed that the ellipsis is not restricted to VP but can be extended to larger phrases containing the VP, as illustrated in (80). The truncation can occur at $ModalP_2$, $ModalP_1$ and VP to produce (80a), (80b) and (80c) respectively.

(80) 佢今晚會好小心咁睇完本書㗎喇，
Keoi gammaan wui hou siusamgam tai bun syu gaa laa,
he tonight will hou carefully read CL book SP SP
a. ✓ keoi.
b. ✓ keoi gammaan.
c. (?) keoi gammaan wui.



IP Ellipsis
The following are examples of dislocations of gapped and gapless topics, which imply truncation at the IP level.

(81) 嗰本書，佢今晚會好小心咁睇㗎喇，嗰本書。
Go bun syu, keoi gammaan wui hou siusamgam tai gaa laa, go bun syu.
DEM CL book he tonight will very carefully read SP SP DEM CL book
'That book, he will read it very carefully tonight.'

(82) 嗰齣戲，個主角演得好差呀，嗰齣戲。
Go coet hei, go zyugok jin-dak hou caa aa, go coet hei.
DEM CL movie CL protagonist act-DAK very bad SP DEM CL movie
'As for the movie, the protagonist acted terribly.'

One may question whether it is necessary to postulate IP ellipsis. Examples (81) and (82) could alternatively be analyzed as the result of having a silent *pro* subject in the second clause (coreferential with the subject in the first clause) plus the ellipsis of ModalP. This representation (81) could produce the dislocated strings also.

(83) …, [嗰本書， ***pro*** ~~[ModalP 今晚會好小心咁睇]~~]。
… , [go bun syu , ***pro*** ~~[ModalP gammaan wui hou siusamgam tai]~~].
DEM CL book tonight will very carefully read

While the *pro* analysis is not implausible, two pieces of evidence suggest that IP ellipsis is favored in cases where use of the silent *pro* is denied.

(84) 到底邊個可以去呀，[到底 ~~[$_{IP}$ 邊個可以去]~~]？
Doudai bingo hoji heoi aa, [doudai ~~[$_{IP}$ bingo hoji heoi]~~]？
DOUDAI who can go SP DOUDAI who can go
'Who the hell can go?'

(85) 嗰架舊車，冇人會買㗎啦，嗰架舊車。
Go gaa gau ce, mou-jan wui maai gaa laa, go gaa gau ce.
DEM CL old car have.not-person will buy SP SP DEM CL old car
'That old car, nobody will buy it.'

In (84), the subject is a *wh*-word, and it cannot be replaced by *pro* because the attitudinal adverb *doudai* necessarily c-commands the *wh*-phrase (Huang and Ochi 2004; Yuan 2014). This implies that IP gets deleted. Similarly, the subject *mou-jan* 'nobody' generally cannot be referred to with a *pro*. To derive (85), *mou-jan* must be present in the underlying structure and subsequently gets elided. This again suggests that the IP is truncated in (84) and (85).

CP Ellipsis

The two examples below exemplify the deletion of structure including a topic phrase, suggesting the possibility of CP/TopicP ellipsis in Cantonese DC.

(86) [[$_{TopP}$ 嗰棵樹，[$_{TopP}$ 啲花，我好鍾意]] 呀]，嗰棵樹。
[[$_{TopP}$ Go po syu, [$_{TopP}$ di faa, ngo hou zungji]] aa], go po syu.
DEM CL tree CL flower I very like SP DEM CL tree
'As for the tree, those flowers, I like them very much.'

(87) [$_{CP1}$ 佢話 [$_{CP2}$ 嗰棵樹 $_{TopP}$，啲花好靚] 㗎]，佢話。
[$_{CP1}$ Keoi waa [$_{CP2}$ go po syu $_{TopP}$, di faa hou leng] gaa]，keoi waa.
he say DEM CL tree CL flower very pretty SP he say
'He said that as for the tree, the flowers are pretty.'

The findings in Section 5.2 are summarized in (86). In a simple clause, the minimal structure that has to be deleted is VP, although the ellipsis can occur at ModP, IP and CP. Generally speaking, elements further away from the VP are more acceptable for undergoing dislocation.

(88)

OK		**OK/?**		*****
Topics, Subjects	>	Adverbs, Adverbials, Modals, Light verb + DP	>	Manner adverbs, Verbs, Objects, Frequency / Duration phrases

Henceforth, the ellipsis of VP/ModalP/IP/CP in DC is referred to as "*α*P ellipsis".

5.3 Sluicing Approach

5.3.1 Unexplained Cases

*α*P ellipsis tells only half of the story. It predicts that everything above the elided site, if present in the host clause, should show up in the dislocated string. Nevertheless, we have already come across many cases where the prediction is not borne out. Take (89) as an example.

(89) 佢都已經睇完本書喇，
Keoi dou jiging tai-jyun bun syu laa,
he also already read-finish CL book SP
'He has already finished reading the book.'

a. ✓ keoi.
b. ✓ dou.
c. ✓ jiging.
d. ✓ keoi dou.
e. ✓ keoi dou jiging.

*α*P ellipsis only predicts (89a), (89d) and (89e). Nevertheless, (89b) and (89c) are also very acceptable. The main issue is that *α*P ellipsis says nothing about the omission of materials occurring before the dislocated string, i.e. the boxed part in (90).

(90) X Y Z , [~~X~~] Y [~~$_{\alpha P}$ … Z~~]

Here two conceivable strategies for removing the boxed part will be considered with reference to (91).

(91) a. 佢都已經睇完本書喇， *pro* 已經 [~~$_{VP}$ A~~]。
Keoi dou jiging tai-jyun bun syu laa, ***pro*** jiging [~~$_{VP}$ A~~].
he also already read-finish CL book SP already
'He has already finished reading the book also.' (Y = jiging)

b. 佢都已經睇完本書喇，~~佢都~~ 已經 [~~$_{VP}$ A~~]。
Keoi dou jiging tai-jyun bun syu laa, ~~keoi dou~~ jiging [~~$_{VP}$ A~~].
he also already read-finish CL book SP he also already
'He has already finished reading the book also.' (Y = *jiging*)

The first strategy is given in (91a). The subject *keoi* is represented as a silent *pro*[14], and the adverb *dou* 'also' is not even generated in the second clause (say, due to imperfect copying). This gives rise to the required surface string. While this "*pro* cum imperfect copying" (PcIC) strategy is plausible, it will be demonstrated below that it fails to explain some cases. The second strategy is that the phrase containing the dislocated element and the elided *α*P is moved to the left periphery of the second clause. This is followed by the deletion of the remainder of the second clause which contain *keoi dou*. We will present the sluicing analysis in detail in Section 5.3.2.

The rest of this section will demonstrate the deficiency of the PcIC approach. The argument is that some elements cannot be simply replaced by *pro* or assumed to be unrepresented in the second clause.

Negative quantifier *mou-jan* 'no one'

On the PcIC analysis, subjects in the second clause can be replaced with a silent *pro*, coreferential with the subject in the first clause. However, some subjects, such as the quantifier *moujan* 'no one', cannot be referred to by an overt pronoun or a *pro*[15].

[14] It has been shown earlier that the silent *pro* is problematic when it follows the dislocated string. The present case is different. The question is whether it is possible to postulate *pro* in the boxed part.

[15] The failure to use an overt pronoun *keoi* or a silent *pro* to refer to *moujan* 'no one" is confirmed by the contrast in (i) and (ii). In (i), Speaker B wants to confirm Speaker A's view by repeating Speaker A's utterance. While the subject in Cantonese can normally be substituted by a *pro*, the option is unavailable when the subject is 'no one'.

(i) A: Mou-jan$_i$ sik daap dai-saam-tai.
have.not-person be.able answer number-three-question
'No one can answer question three.'

(92) 冇隊友喺飛機度可以瞓到覺呀，喺飛機度。
Mou-deoijau hai feigei dou hoji fan-dou-gaau aa, hai feigei dou.
have.not-team.member at plane place can sleep.able SP at plane place
'No team member could sleep on the plane.'

(93) 冇人星期日返嚟做嘢㗎，星期日？
Mou-jan singkeijat faanlai zouje gaa, singkeijat?
have.not-person Sunday come.back work SP Sunday
'No one comes back to work on Sunday.'

The above two sentences are acceptable in Cantonese. They pose problems to PcIC because a negative quantifier *mou-jan* cannot serve as the antecedent of *pro*. The sentences should be predicted to be ill-formed, which is not borne out. The data suggests that there is no *pro* in the second clause.

Universal quantification *dou*

In Cantonese, pre-verbal universally quantified adjuncts and *mouleon* unconditional phrases have to co-occur with a following universal quantificational adverb *dou*. In (94) and (95), the dislocated element is *dou*.

(94) (?)佢日日都著綠色衫㗎，都。
(?)Keoi jat-jat dou zoek luksi saam gaa, dou.
he day-day DOU wear green clothes SP DOU
'He wears green clothes every day.'

(95) (?)佢無論幾時都著綠色衫㗎，都。
(?)Keoi mouleon geisi dou zoek luksi saam gaa, dou.
he no.matter when DOU wear green clothes SP DOU
'No matter when, he always wears green clothes.'

The PcIC analysis entails that, in the second clause, the subject is a *pro*, and *jat-jat* and *mouleon geisi* are unrepresented due to imperfect copying. However, if the assumption is correct, nothing in the second clause is subject to the universal quantification of *dou*. The presence of the universal quantification adverb *dou* is left unexplained[16]. Apparently, it is more reasonable to assume that *jat-jat* and *mouleon geisi* are present in the underlying structure but get elided.

5.3.2 Sluicing: Move and Delete

The proposed strategy to derive (91b) is that the second clause shares the same

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B: Hai laa. {✓Mou-jan / *Keoi$_i$ / *pro_i} sik daap dai-saam-tai.
Right SP have.not-person he be.able answer number-three-question
'Right. Nobody can answer question three.'

This is minimally contrasted with quantifiers like *mui-jat*-CL-X 'every X'.

(ii) A: Mui-jat go tunghok dou sik daap dai-saam-tai.
every-one CL student DOU be.able answer number-three-question
'Every student can answer question number three.'
B: Hai laa. {✓ Keoidei$_i$ / ✓pro_i} sik daap dai-saam-tai.
Right SP they be.able answer number-three-question
'Right. They can answer question three.'

[16] It should be noted that *dou* in (94) and (95) do not carry the meaning of 'also'.

structure as the first clause. The dislocated element is derived via sluicing analogous to fragment answers (Merchant 2004; Yim 2012; Wei 2013). The derivation of (91b) is illustrated using (96).

(96) i … , keoi dou [$_{\delta P}$ jiging ~~[$_{\alpha P}$ A]~~]
he also already
ii … , [$_{\delta P}$ jiging ~~[$_{\alpha P}$ A]~~]$_i$ [keoi dou t_i]
already he also
iii … , [$_{\delta P}$ jiging ~~[$_{\alpha P}$ A]~~]$_i$ ~~[keoi dou t_i]~~ → (89b)
already he also

The first step is to front the larger phrase (call it "δP") which contains the dislocated string along with the elided αP to the left periphery of the second clause (i.e. 96ii). Then the remainder of the second clause is deleted (indicated by double strikethrough), leaving behind *jiging* (i.e. 96iii). Different combinations of αP and δP result in various dislocated strings.

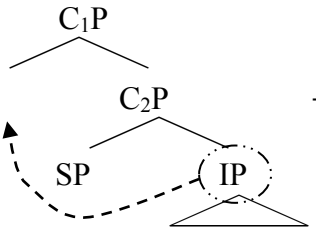
(97) a. … , [$_{\delta P}$ keoi ~~[$_{\alpha P}$ dou jiging tai-jyun bun syu]~~]$_i$ ~~[t_i]~~ → (89a)
b. … , [$_{\delta P}$ dou ~~[$_{\alpha P}$ jiging tai-jyun bun syu]~~]$_i$ ~~[keoi t_i]~~ → (89b)
c. … , [$_{\delta P}$ jiging ~~[$_{\alpha P}$ tai-jyun bun syu]~~]$_i$ ~~[keoi dou t_i]~~ → (89c)
d. … , [$_{\delta P}$ keoi dou ~~[$_{\alpha P}$ jiging tai-jyun bun syu]~~]$_i$ ~~[t_i]~~ → (89d)
e. … , [$_{\delta P}$ keoi dou jiging ~~[$_{\alpha P}$ tai-jyun bun syu]~~]$_i$ ~~[t_i]~~ → (89e)

The formulation not only addresses the deletion of the boxed part but also works when there is no boxed string (e.g. 89d and 89e). The syntactic derivation provides a simple explanation for cases where multiple elements[17] such as *keoi dou jiging* in (89e) can be dislocated. The string is a δP with an elided αP, rather than derived by multiple instances of dislocation[18].

At first glance, the movement of δP may appear to be an ad hoc solution tailor-made for obtaining the dislocated string. However, we wish to highlight an independent motivation for moving δP. It has been argued that the functional projection hosting the SP(s) in Chinese is underlyingly head-initial, as in (98) (Simpson and Wu 2002; Hsieh and Sybesma 2008; Cheung 2008, 2009, Simpson 2014). To derive the canonical word order (98a), the sentence (say, IP) has to undergo an obligatory movement around the SP. Further, Cheung (2009) proposes that, in Chinese RD, it is one of the phrases on the main "spine" (e.g. IP, ModP, VP, object DP) that can be subject to the obligatory movement, giving rise to the inverted word order (98b).

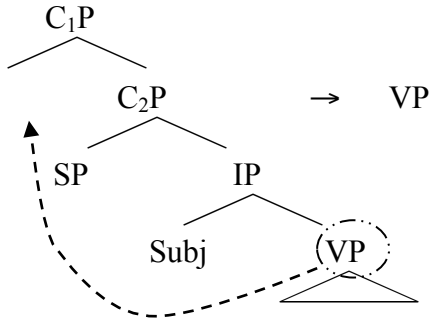
[17] It is mentioned in Section 2.1 that multiple elements can be dislocated simultaneously.
[18] The assumption predicts that cases where the dislocated string is discontinuous (i) or follows a word order different from the host clause (ii) are ruled out.
(i) *佢都已經睇完本書啦，都本書。
*Keoi dou jiging tai-jyun bun syu laa, dou bun syu.
he also already read-finish CL book SP also CL book
'He has already finished reading the book.'
(ii) *佢都已經睇完本書啦，已經都佢。
*Keoi dou jiging tai-jyun bun syu laa, jiging dou keoi .
he also already read-finish CL book SP already also he
'He has already finished reading the book.'

(98) a.



→ IP SP (canonical word order)

b.



→ VP SP Subject (right dislocation)

If the obligatory XP movement analysis of the Chinese clausal structure is correct, the movement of *δ*P is the same as the obligatory XP movement, and so is required.

The sluicing approach brings about another welcome result – island-sensitivity of Cantonese DC (see Section 4.2.1). Merchant (2004) advocates the sluicing approach in explaining the ungrammaticality of fragment answers when the correlate of the answer resides in an island.

(99) a. Does Abby speak the same Balkan language that *Ben* speaks?
b. *No, *Charlie*.
c. No, she speaks the same Balkan language that *Charlie* speaks. (p. 688)

To derive (99b), *Charlie* first moves out of the complex NP clause to the sentence-initial position. The rest of the sentence is then elided. Due to the illicit movement out of an island, (99b) is no good.

Recall that copying elements inside syntactic islands is particularly bad. On the sluicing account, the ungrammaticality receives a simple explanation.

(100) … , [[$_{\delta P}$ … [~~$_{\alpha P}$ A~~]]$_i$ [… [**island** … t_i]]]

(101) a. *我識晒 [佢會聯絡嘅嗰啲講者]㗎，佢。 (Complex NP)
*Ngo sik-saai [keoi wui lyunlok ge go di gongze] gaa, keoi.
I know-all he will contact GE DEM CL speaker SP he
'I know all the speakers who he will contact.'

b. * … , [$_{\delta P}$ keoi [$_{\alpha P}$ ~~wui lyunlok~~]]$_i$ [ngo sik-saai [$_{CP}$ t_i] ge go di gongze]]

The materials surviving sluicing in the second clause undergo movement to the clause-peripheral position. If the dislocated element carried by *δ*P is located in an island in the underlying structure, the movement of the *δ*P should trigger island violation, as shown in (100) and (101).

5.3.3 Omission of Sentence Particle in the Second Clause

For simplicity, the SP in the second clause was ignored in the discussion above. The remaining mystery of Cantonese DC is the obligatory omission of the SP in the second clause. Cantonese DC does not permit an SP to appear at the end of the second clause. Indeed, no corpus examples have an SP at the end of the dislocated string. If an SP is inserted, the DC sentence becomes ungrammatical.

(102) 我哋已經出咗本雜誌喇，已經(??喇)。
Ngodei jiging ceot-zo bun zaapzi laa, jigging (??laa).
we already publish-PERF CL magazine SP, already SP.
'We have already published the magazine.'

(103) 你食過駝鳥肉咩，你(*咩)？
Nei sik-gwo toliu-juk me, nei (*me)?
you eat-EXP ostrich-meat Q you Q
'You have eaten ostrich meat before?'

(104) 你到底去咗邊度呀，你到底(*呀)？
Nei doudai heoi-zo bindou aa, nei doudai (*aa)?
you DOUDAI go-PERF where Q you DOUDAI Q
'Where the hell did you go?'

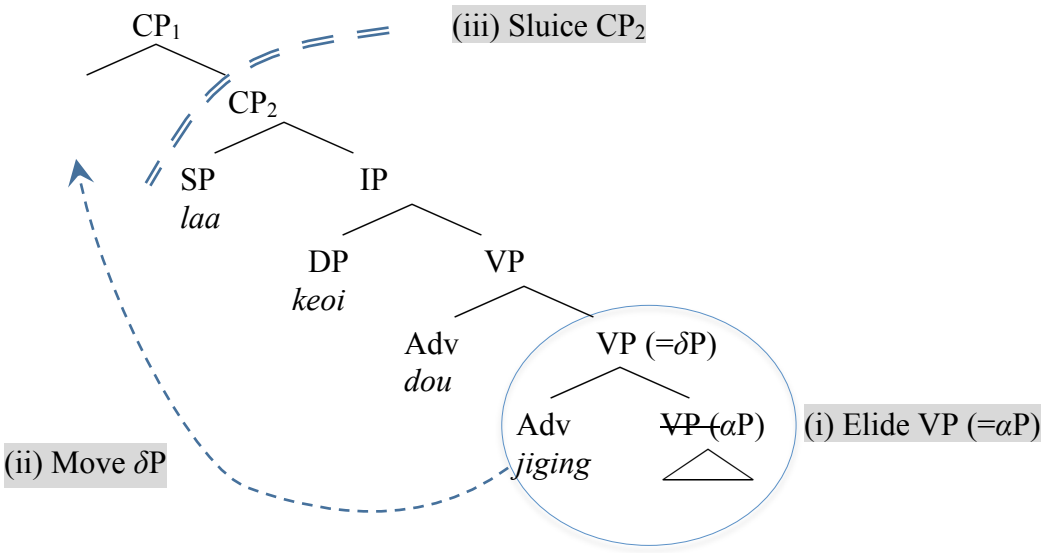
Despite the omission, it seems reasonable to think that the SP is still in the underlying representation. In Cantonese, when an utterance ends with no SP and no rising question intonation, it is interpreted as either declarative or imperative. For example, (103) is a yes/no question. If the second clause has no SP, it should assert "You have eaten ostrich meat before". This should conflict with the interrogative question in the first clause. However, (101) is a well-formed yes/no question. It should be noted that the obligatory omission of SP is not entailed by the sluicing account. In Cantonese, fragment utterances or fragment answers typically end with an SP. Wei (2013) noted that fragment questions in Mandarin end with the question particle *ne*. Fragment answers in Korean also come with a final particle – *yo* (Yim 2012).

To explain SP omission, we propose that sluicing in Cantonese DC occurs at a level above all functional projections containing SPs. A revised derivation of (91b) is given below.

(105) i … , **laa** keoi dou [$_{\delta P}$ jiging ~~[$_{\omega P}$ A]~~]
SP he also already

ii … , [$_{\delta P}$ jiging ~~[$_{\omega P}$ A]~~]$_i$ [**laa** [keoi dou t_i]]
already SP he also

iii … , [$_{\delta P}$ jiging ~~[$_{\omega P}$ A]~~]$_i$ ~~[**laa** [keoi dou t_i]]~~ → (91b)
already SP he also



5.4 Variation of Dislocations

Lastly, we will briefly compare the typological differences of dislocation in Cantonese and DGJK. This study and the other cited studies for DGJK all assume the bi-clausal analysis. Structure-sensitivity and connectivity effects have provided good support for the existence of the elided structure in the second clause. Sluicing is utilized to constrain the deletion. Nevertheless, Cantonese differs from DGJK in two aspects. First, Cantonese (but not DGJK) necessarily applies the *α*P ellipsis before sluicing, giving rise to various forms of dislocated strings. Second, the phrases subject to movement in DGJK are restricted to DPs due to the availability of scrambling. Scrambling feeds sluicing. In contrast, Cantonese is generally not regarded as a scrambling language. Instead, it capitalizes on the obligatory XP movement of VPs, IPs or CPs (i.e. *δ*P), feeding sluicing. The difference in dislocation is summarized below:

(106) a. DGJK: scrambling > sluicing
b. Cantonese: *α*P ellipsis + movement of *δ*P > sluicing

6. Three Loose Ends

While the syntactic mechanism can provide an account to derive the special word order of DC, the formulation is subject to a few challenges that will be discussed in this section.

6.1 Island Repair and Contrast

While the sluicing approach is an elegant way to explain the variety of dislocated strings and their relationship between the host clause, a reviewer has pointed out a conceptual problem of the approach. The island effects of Cantonese DC (see Section 4.2.1) have been attributed to the illicit movement out of islands before sluicing. However, it has been well known that some types of sluicing can repair islands. Compare the island-(in)sensitivity of sluicing in (a) and (b) sentences below. [small capital = contrastive stress]

Set I: Merchant (2008)

(107) a. Abby wants to hire someone who speaks a Balkan language, but I don't remember which. [Non-contrastive ellipsis]

b. *Abby wants to hire someone who speaks GREEK, but I don't remember what OTHER languages. [Contrastive ellipsis]

Set II: Griffiths and Lipták (2014)

(108) a. A: I hear that Abby is likely to get mad if Ben speaks to one of the guys from your syntax class.
B: Yeah, John. [Elaborative non-*wh*-fragment]
B': Really? Who? [*Wh*-fragment without any contrastive material]

b. A: Is Abby likely to get mad if BEN speaks to Mary?
B: *No, SUSAN. [Corrective fragment]

Sluicing in (a) sentences is not sensitive to island conditions, but sluicing in (b) sentences is. Griffiths and Lipták (2014) argue that sluicing with contrastive focus correlates with island sensitivity but sluicing without contrastive focus correlates with island repair. The generalization captures the contrast in the two sets above. If the generalization is correct, since Cantonese DC is sensitive to islands, one would expect that the dislocated string should involve contrastive focus. Nevertheless, contrastive focus (with contrastive stress) is not observed in Cantonese DC. In fact, stress can only fall on words in the host clause but not in any part of the dislocation string (Shi 1992: 175; Cheung 2005; Lee 2013).

(109) a. *Keoi wui heoi jamngokwui gaa, KEOI wui. [small capital = stress]
he will go concert SP he will
'He will go to the concert.'
b. *Keoi wui heoi jamngokwui gaa, KEOI WUI.
c. *Keoi wui heoi jamngokwui gaa, keoi WUI.
d. *KEOI wui heoi jamngokwui gaa, KEOI wui.
e. *KEOI WUI heoi jamngokwui gaa, KEOI WUI.
f. *Keoi WUI heoi jamngokwui gaa, keoi WUI.
g. KEOI wui heoi jamngokwui gaa, keoi wui.
h. KEOI WUI heoi jamngokwui gaa, keoi wui.
i. Keoi WUI heoi jamngokwui gaa, keoi wui.

The problem is not unique to Cantonese DC but also applicable to other cited studies of dislocation in DGJK that use the sluicing approach. As far as I know, contrastive focus has generally not been documented as a feature of the dislocated string. For example, Takami (1995, cited in Nakagawa et al 2001) claims that "[p]ostposed elements are elements other than focus" in Japanese right dislocation. Tanaka (2001) has not mentioned anything about contrastive focus in Japanese right dislocation. The Japanese dislocation string can bear old or new information but not necessarily contrastive focus (Nakagawa et al. 2001). Nor have Ott and de Vries (2012, to appear) shown any correlation between island-(in)sensitivity and contrastive stress/focus in Dutch and German dislocation. Park and Kim (2009) is the only exception which claims such a correlation in Korean dislocation[19]. However, it should be noted that

[19] Park and Kim (2009: 41) write,
'One of the important features of the appendix is that it receives emphatic focus accompanied by some stress, as Choe (1987: 52) notes. Enkvist (1980: 135) characterizes emphatic focus as signaling "the relative weight that a speaker wants to attach to a particular element in the speech stream." It seems that emphatic focus is a flip side of contrastive focus. […] [T]he speaker uses

other studies of Korean right dislocation (Chung 2009; Yim 2013; Ko 2014) have never mentioned contrastive stress/focus as a feature of the construction.

There are several ways to deal with the dilemma. First, the correlation between contrast and island effects might not be entirely correct. Island-sensitive sluicing is still possible in some cases even without any contrastive focus. Second, Cantonese DC is only the result of "move-and-delete" and is not sluicing per se. As a result, generalizations about sluicing are irrelevant. Here I want to pursue a third possibility: Cantonese DC does involve a specific kind of contrastive focus but it is not realized by contrastive stress. The analysis is motivated by claims that the dislocated string in DC bears the function of emphasis, clarification and repair (Luke 2012; Lee 2013). However, these pragmatic functions are relatively weak. Lee (2013) suggests that "[s]econdary special focus is not stressed, and can be expressed in an RD[=Right Dislocation] phrase for a so-called minor emphasis" (p. 35). Lee has remarked in the example below that the element that gets repeated from the host clause, i.e. *lai*, receives a low level of emphasis.

(110) 這邊兒來住，來。
Zhei biar lai zhu, lai. (Mandarin)
this side come live come
'Come live over here.'

However, the emphasis or focus exhibited in DC is clearly different from the kind of contrastive focus presented in (107b) and (108b). In the following, a recent analysis of contrastive focus will be drawn upon to show why the "minor emphasis" in DC can be treated as contrastive focus.

According to Zimmermann (2008), contrastive foci "express a contrast between the information conveyed by the speaker in asserting α and the assumed expectation state of the hearer" (p. 9). The definition is given in (111). (Interested readers should refer to the paper for the details of the formulation.)

(111) Contrastive Focus Hypothesis: Contrastive marking on a focus constituent α expresses the speaker's assumption that the hearer *will not consider* the content of α or the speech act containing α *likely to be(come) common ground*.

Let us illustrate the concept using the contrastive focus on *caviar*.

(112) A: Surely, you ate *pelmeni*! (Zimmermann 2008: 10)
B: No, we ate *caviar*![20]

A's assertion suggests that he does not expect to be contradicted. As B assumes that A will not consider caviar a very likely food to be had, B uses contrastive stress on "caviar" to express his supposition that A is unlikely to consider "we ate caviar" to become the common ground.

Now recall that the core discourse function of DC is to emphasize, clarify and

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emphatic/contrastive focus to attach more weight to a particular element "to set right a poorly transmitted or wrongly received part of a message."'

They then claim that 'expressions bearing emphatic/contrastive focus are constrained by movement constraints'.

[20] It can be paraphrased as: 'No, we ate caviar. Further I assume that you will not readily accept the assertion containing "caviar" into the common ground.'

repair. DC typically happens when the speaker feels that the hearer has not adequately understood the message carried by the host sentence and integrated it into the common ground. The speaker uses the dislocated string to highlight to the hearer a discrepancy between the assertion of the host clause and the speaker's supposition that the hearer is unlikely to take the assertion into the common ground. In other words, DC brings about the contrastive focus function. Take (113a) as an example.

(113) a. John 會去音樂會㗎，John。
John wui heoi jamngokwui gaa, John.
John will go concert SP John
'John will go to the concert.'
b. John wui heoi jamngokwui gaa, JOHN wui heoi jamngokwui gaa.
Paraphrase: John will go to the concert; [yes] JOHN will go to the concert.

As the speaker utters *John wui heoi jamngokwui gaa*, he feels that the hearer is probably not fully aware that the assertion is about John (for whatever pragmatic reasons) and may not consider integrating the assertion into the common ground. "John" gets repeated by the speaker (using DC syntax) to create "minor emphasis"[21]. The effect is analoguous to repeating the host clause with a contrastive stress on *John*, as in (113b). Instead of using contrastive stress, DC can be regarded as a syntactic means to achieve contrastivity: the contrasted part is pronounced and the backgrounded part is unpronounced or elided.

If the preliminary analysis above is correct, we can now explain why Cantonese DC displays island sensivity. Even though contrastive stress on the dislocated string is denied, DC carries the contrastive function. As a result, DC aligns with sluicing with contrastive stress concerning island effects.

6.2 Nature of α*P* and δ*P*

Another important feature of the proposal in Section 5 is the reference to *α*P and *δ*P. The dislocated string is the result of different combination of *α*P and *δ*P. The formulation is unique and not found in other dislocation structures cited. One reviewer has asked whether similar mechanism is found elsewhere and what motivates such a syntactic derivation. Admittedly, the formulation of *α*P and *δ*P is not common. However, a parallel can still be found in the analysis of Cantonese Right Dislocation (Cheung 2009), which in turn resembles focus projection of the Nuclear Stress Rule.

Recall in (80) that the elided *α*P can potentially be any XP from VP up to IP along the major spine. Similarly, the fronted *δ*P, which contains *α*P, can also be any XP from VP up to IP. The requirement is reminiscient of Cheung's (2009) "Spine Constraint", which states that the fronted phrase in Cantonese RD can be an XP from the object DP up to IP on the major spine. The notion is exemplified by (114) and (115). Only constituents on the main spine (indicated by the dotted line) in (116) are allowed to front. The movement of nodes on the spine results in different dislocated word orders in (115).

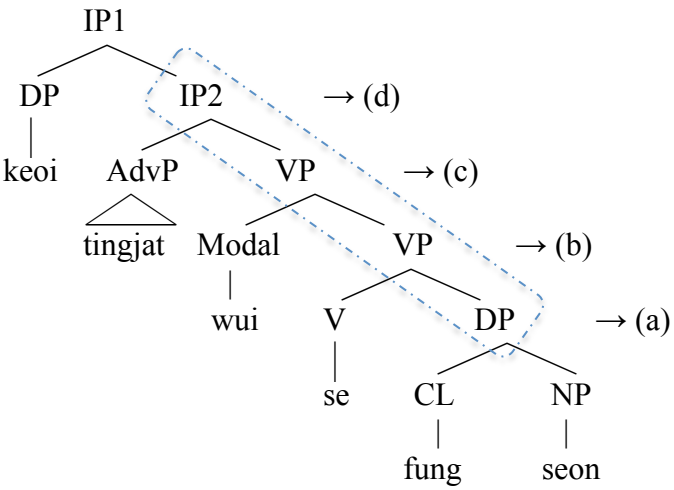
[21] We are now in a position to explain why contrastivity in DC seems to be rather different from typical examples of contrastive focus. Canonical contrastive focus involves a pair of two distinct alternatives, e.g. *Ben vs. Susan* (108b) and *pelmeni* vs *caviar* (112). However, the alternatives of DC are identical, i.e. *John* vs. *John* (113). One can regard the latter as a special case of the typical kind. However, the latter one is still contrastive because the contrast lies in the information status of the speaker's assertion and the speaker's supposition of the assertion's status for the hearer.

(114) Keoi tingjat wui se fung seon lo1. (canonical word order)
he tomorrow will write CL letter SP
'He will quickly write the letter.'

(115) Cantonese RD

a fung seon lo1, keoi tingjat wui se. (dislocated word orders)
b se fung seon lo1, keoi tingjat wui.
c wui se fung seon lo1, keoi tingjat.
d tingjat wui se fung seon lo1, keoi.

(116)



The major spine is very similar to the notion of "major path" in Cinque (1993), which in turn, was motivated by the research on focus phrases projected from nuclear stress (Chomsky 1971; Reinhart 1995; Zubizarreta 1998, among others). The general observation is that although the default nuclear stress in English falls on the rightmost/most deeply embedded constituent, e.g. the head noun of the object DP, the sentence is ambiguous between various focus readings, as illustrated by Reinhart's examples in (117a—c). The focus phrase can be any constituents that contain the word with nuclear stress.

(117) a. Speaker A: What's this noise?
Speaker B: [$_F$ My neighbor is building a DESK]. (focus = IP)

b. Speaker A: What's your neighbor doing these days?
Speaker B: My neighbor [$_F$ is building a DESK]. (focus = VP)

c. Speaker A: What's your neighbor building?
Speaker B: My neighbor is building [$_F$ a DESK]. (focus = DP)

d. Speaker A: Who is building a desk?
Speaker B: #My neighbor is building [$_F$ a DESK].

The XPs of the focus set (i.e. DP, VP, IP but not subject DP) all contain the nuclear stressed word *desk*, and are very similar to the candidate XPs of αP and δP.

What motivates the ellipsis of *α*P, the movement of *δ*P and the ellipsis of TP? These operations look unrelated. However, I want to propose that the three operations work in tandem with each other to guarantee that only the contrasted part can show up in the dislocated string for contrastive interpretation. Based on Section 6.1, the dislocated string receives some (minor) contrastive focus reading. When contrastive focus is realized phonologically, one simply puts a stress on the word or string. It is possible that contrastive focus can be achieved syntactically. To highlight the contrasted part, two things are to be done: (a) to highlight the contrasted part so that it shows up in the dislocated string, and (b) to 'silence' the non-contrasted part. The purpose of the ellipsis and the movement is to highlight the contrasted and silence the uncontrasted. For example, to highlight *John* in (118), one first projects the focus phrase *δ*P (subject to the Spine Constraint) so that *δ*P is large enough to include the contrasted element *John*. In this case, *δ*P has to be an IP. To silence the uncontrasted part, the *α*P should be a ModP so that *wui heoi jamngokwui* can become elided.

(118) John 會去音樂會㗎，John。
John wui heoi jamngokwui gaa, John.
John will go concert SP John
'John will go to the concert.'

6.3 PF Deletion

Merchant (2001; 2004) has argued forcibly that sluicing is a case of PF deletion. One source of evidence is amelioration of island violation due to the sluicing of the *wh*-clause in (119a). This is contrasted with (119b) where the *wh*-clause is spelt out.

(119) a. They want to hire someone who speaks a Balkan language, but I don't remember which.
b. *I don't remember which ~~(Balkan language) they want to hire someone who speaks~~.

Merchant's claim is that the structure in (119b) is a PF-island which is illicit to the PF but not to the LF. Deletion of the TP in (119a) renders the deviance ineffectual at the PF, salvaging the sentence.

If the analysis of Cantonese DC presented in the previous sections is correct, it can lend further support to the PF deletion of sluicing. Recall the connectivity effects involving *zinghai*, *doudai* and *cungloi* and their associate elements (see Sections 3.4 and 4.2.2). They give rise to a puzzle, which has also been observed in Chinese RD (Cheung 2011). In non-DC sentences, the associate element has to sit *overtly* in the c-command domain of *zinghai*, *doudai* or *cungloi* (henceforth, "overt c-command requirement"). In non-dislocation sentences, the connectivity relation becomes bad when the associated element is inside an elided structure or extracted outside of the c-command domain, which can be consistently seen in (120) and (121).

(120) a. John 淨係見到 Bill。*Mary 都淨係 ~~[見到 Bill]~~。 (associate elided)
John zinghai gindou Bill. *Mary dou zinghai ~~[gindou **Bill**]~~.
John only see Bill Mary also only see Bill
Intended: 'John only saw *Bill*. Mary also only saw *Bill*.'

b. *Bill 呢，Mary 淨係見到咋。 (associate extracted)
*Bill ne, Mary zinghai gindou.
Bill TOP Mary only see
Intended: 'Mary only saw Bill (but not other people).'

(121) a. 邊個會贏呢？*到底 ~~[邊個會贏]~~ 呢？ (associate elided)
Bingo wui jeng ne? *Doudai [~~*bingo* wui jeng~~] ne?
who will win Q doudai who will win Q

b. *乜嘢呢，佢到底會淨係買呀？[22]
*Matje ne, keoi doudai wui zinghai maai aa?
what TOP he DOUDAI will only buy Q
Intended: 'What is the only thing such that he will only buy?'

Nevertheless, the generalization can be exceptionally violated in Cantonese DC. *Zinghai*, and *doudai* in the dislocated strings do not have any overt associate in their c-command domain in the examples below. Yet the sentences are all good.

(122) John 淨係借咗嗰本小說咋，(John)淨係。 (=53)
John zinghai ze-zo go bun siusyut zaa, (John) zinghai.
John only borrow-PERF DEM CL novel SP John only
'John only borrowed *the novel*.'

(123) 到底邊個要買車呀，到底？ (=55b)
Doudai bingo jiu maai ce aa, doudai?
DOUDAI who want buy car Q DOUDAI
'Who the hell wants to buy a car?'

The dilemma can be resolved if one assumes that the ellipsis of αP, the movement of δP and the sluicing of the clause all occur in the PF. The representation fed into the LF is unaffected by deletion. That is, the associate remains in the domain of *zinghai*, *doudai* and *cungloi* without violating the c-command requirement. However, in the PF representation, the associate is removed along with the elided structure, producing the apparent violation of the overt c-command relation. If the analysis is correct, Cantonese RD can provide further empirical support to the claim that sluicing is a case of PF deletion.

7. Conclusion

This paper has set out to argue that any satisfactory characterization of Cantonese DC must include a syntactic theory of the host clause and the dislocated string. The critical evidence is that the choice of the string to be copied at the right edge is sensitive to structure and cannot be easily explained away by discourse pragmatics or performance errors. To derive the dislocated copy, bi-clausal analysis has been adopted. The sluicing approach, which has been used to derive the dislocation structures in DGJK, is applied to elide elements in the second clause of Cantonese DC. However, instead of scrambling a DP which occurs in DGJK, it is argued that Cantonese DC first moves the δP, which necessarily contains an elided αP, to the left periphery of the second clause, and then sluices the remainder of the second clause. Different combinations of αP and δP give rise to the wide range of dislocated strings, including non-phrasal strings. The dislocation string gives rise to contrastive/emphasis interpretation. This study shows that what is common to dislocation in Cantonese and

[22] The sentence is bad on the intended object focus reading. It can only have the verb focus reading.

DGJK is the application of sluicing in the second clause. The typological differences are attributable to the type of movement operation that feeds sluicing. Whereas the movement in Cantonese is the obligatory XP movement, that in DGJK is the scrambling of DP.

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Appendix: Sample DC sentences from the corpus

(124) 你想玩連戰咩，你？
Nei soeng waan Lin Zin me, nei?
you want trick Lin Zin Q you
'You want to trick Lin Zin?'

(125) 你知道你係有 fans㗎，你知道。
Nei zidou nei hai jau fans gaa, nei zidou.
you know you be have fans SP you know
'You know you have fans.'

(126) 你香港已經變咗係一個空殼㗎嘅，已經係。
Nei Hoenggong jigging bin-zo hai jat-go hunghok gaa laa,
you Hong.Kong already become-PERF be one- CL empty.shell SP SP
jigging hai.
already be
'Hong Kong has become hollowed out.'

(127) 一定變咗醜聞，一定。
Jatding bin-zo cauman, jatding.
Definitely become-PERF scandal definitely
'It has definitely become a scandal.'

(128) 佢都覺得係幾好㗎//佢覺得
Keoi dou gokdak hai gei hou gaa, keoi gokdak.
he also feel be quite good SP he feel
'He also felt that it is quite good.'

(129) 其實點樣去分辨呢，其實？
Keisat dimjoeng heoi fanbin ne, keisat?
actually how go distinguish Q actually
'Actually how can I distinguish (them)?'

(130) 我覺得嗰啲其實都似早期嘅港產片㗎喎，都。
Ngo gokdak go di keisat dou ci zoukei ge
I feel DEM CL actually all resemble early GE
gongcaan-pin go wo, dou.
Hong.Kong.produced-movie SP SP also
'I think that those are actually like early Hong Kong movies.'

(131) 我未去美國住過，剩係去過美國旅行啫，剩係。
Ngo mei heoi Meigwok zyu-gwo,
I have.not go USA live-EXP
singhai heoi-gwo Meigwok leoihang ze, singhai.
only go-EXP USA travel SP, only
'I have not lived in the USA before. I have only traveled to the USA.'

(132) 我聽你講嘢我真係好唔滿意喎，真係。
Ngo teng nei gong je ngo zanhai hou m-munji wo, zanhai.
I listen you speak thing I really very not-satisfied SP really
'As I hear you talking, I really felt very annoyed.'

(133) 嗰套都好勁㗎，嗰部戲。
Go tou dou hou ging gaa, go bou hei.
DEM CL also very awesome SP DEM CL movie
'The movie is also awesome.'

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