# **Defocalization in Cantonese Right Dislocation**

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Abstract: In this paper, I argue that a subtype of right dislocation (RD) in Cantonese introduces defocus in a sentence. It involves a process of defocalization, the core semantic function of which is to reduce possible focus sets within a sentence. RD shows syntactic properties such as locality condition and long distance dependency. It is argued that the RD at issue is instance of A'-movement to the left periphery. I propose that RD can be derived through a combination of two independent operations. First, the defocalized element undergoes a leftward movement (defocalization) to the specifier of DefocusP (a projection lower than sentence particles). The remnant TP then moves to the specifier of another projection above sentence particles, which is independently motivated. The current proposal complements the Dislocation Focus Construction (Cheung 2005) and hence contributes to a complete theory in deriving right dislocation in Cantonese. Finally, I argue that the right dislocation of verb is an instance of syntactic (long-distance) head-spec movement.\*

Key words: Cantonese, right dislocation, defocalization, head movement

#### 1. Introduction

Right dislocation (RD) is a well-attested phenomenon in Cantonese, a member of *Yue* dialects in Chinese mostly spoken in Southern China, such as Hong Kong and *Guangzhou* province. RD creates non-canonical, that is, non-SVO, word order. Some examples of RD are given in (1).

- (1) Dislocation Focus Construction (DFC, Cheung 2005)
  - a. O-SP-S-V

 $[_{\rm O}$  jat bou dinsigei ] lo1  $[_{\rm S}$  keoi ]  $[_{\rm V}$  maai-zo ] (Cheung 2005: 1) one CL TV SP 3SG buy-PERF

'He bought a TV.'

b. V-O-SP-S

 $[_{\rm V}$  maai-zo ]  $[_{\rm O}$  jat bou dinsigei ] lo1  $[_{\rm S}$  keoi ] buy-PERF one CL TV SP 3SG 'He bought a TV.'

The position of sentence particles (SP) plays an important role in differentiating RD from other constructions (such as topicalization). Although SP is character-

<sup>\*</sup> I thank two anonymous reviewers for helpful comments. All remaining errors are mine.

ized by its sentence-final nature in Cantonese, SP appears sentence-medially in RD, a case of which Cheung (1997) considers a rare one in Cantonese. RD in (1) is captured under Cheung's (2005) analysis, namely, DFC, which involves leftward focus movements. The pre-SP part is analyzed as a result of focus movement. However, some variants of RD have received little attention in the literature.

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(2) RD variants<sup>3,4</sup>
a. S-V-SP-O

[s keoi][v jau mou maai] aa3[o gaa ce]
3SG have not.have buy SP CL car
'Has he bought the car?'
b. S-O-SP-V

[s Zoeng Saam][o go bou dinnou] lo1[v wui maai]
PN that CL computer SP will buy
'ZS will buy that computer.'
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The fundamental difference between RDs in (1) and (2) is the constituency status of the pre-SP element. In (1), it is always a constituent (following from the movement analysis of DFC), whereas it is not necessarily so in (2). The string S-V and S-O do not form a constituent. In the literature, Matthews & Yip (1994: 71–2) record a few examples like (2). Cheung (1997) and Chan (2013) also notice the phenomenon but only give sporadic discussion with regard to its syntax. Although investigation on RD has been carried out in Law (2003) and Cheung (2005, 2009), cases of RD in (2) consistently fall beyond the main discussion. This paper focuses on the syntax and semantics of these understudied cases of RD. I argue that the RD at issue involves a process of defocalization, the core semantic function of which is to reduce possible focus set within a sentence. I propose

<sup>&</sup>lt;sup>1</sup> Note that SPs differ substantially from non-sentential particles that follow clauses or topics, such as *le1*, see Leung (2005: 55–7). The sentence-medial SPs in RD function in the exact way as their sentence-final counterpart (see Cheung 1997: 38–9). Furthermore, replacing these sentence-medial particles in RD with non-sentential particles results in ungrammaticality. Therefore, they should be regarded as instances of SPs, instead of non-sentential particles.

<sup>&</sup>lt;sup>2</sup> Concerning the semantic function of SPs, I give a rough description of the five SPs mentioned throughout the paper (c.f. Matthews & Yip 1994):

lo1 invites agreement, cooperation or sympathy.

aa3 softens a statement or question.

me1 marks questions with negative presuppositions.

ge2 expresses tentative or uncertain affirmation.

wo3 emphasizes a noteworthy piece of information.

<sup>&</sup>lt;sup>3</sup> RD appears most naturally in colloquial context, almost non-existent in formal register and written languages. They may sound unnatural if uttered out of the blue. Throughout the paper, relevant contexts are supplied where necessary.

<sup>&</sup>lt;sup>4</sup> Cantonese data without indicated source are constructed by the author and confirmed by three native Cantonese informants.

that the RD in (2) involves a two-step derivation. First, the defocalized element undergoes leftward movement to the specifier of DefocusP to the left periphery (i.e. an instance of A'-movement). Then the remnant TP further moves to a pre-SP position, giving the surface order. Finally, I argue that a subtype of RD (such as (2) b) should be regarded as an instance of syntactic (long-distance) head movement.

The organization of this paper is as follows. Section 2 and 3 analyze the syntactic properties and interpretive effects of the RD at issue respectively. Section 4 demonstrates that previous accounts for RD fail to derive the RD in (2). Section 5 outlines the proposal and Section 6 is designated to discuss the right dislocation of verb. Section 7 consists of concluding remarks.

Note that there exists a type of RD, the so-called 'gapless' RD. The right-dislocated elements correspond to an element in the original sentence, instead of a 'gap' like RD in (1) and (2). Gapless RD is beyond the scope of the current work (for relevant discussions, see Cheung 2015). For terminology, I use the term RD narrowly to refer to RD of the type in (2) (later renamed as Dislocation Defocus Construction, DDC), while those in (1) will be referred as DFC throughout the paper.

# 2. Syntactic properties of right dislocation

# 2.1. Internal syntax

RD and DFC share a similar surface structure with regard to the position of SP. Let us assume the following structure for both RD and DFC:

#### (3) $\alpha SP \beta$

In terms of constituency, as briefly mentioned in the introduction, the  $\alpha$  part of RD does not form a constituent and it can be a discontinuous string (as in (2)b), while the  $\beta$  part is either a constituent (as in (2)a) or a head/ cluster of heads (as in (2)b). Since it is widely accepted that only constituents or head can be targeted for syntactic movements, the  $\beta$  part appears to be the moved element and  $\alpha$  is the remnant of movements. The right opposite situation is observed in DFC, where the  $\alpha$  part is always a constituent, whereas the  $\beta$  part can be non-constituent (as in (1)a). It is argued that  $\alpha$  is the moved element and  $\beta$  the remnant of movement (Cheung 2005, 2009). The constituency of  $\alpha$  and  $\beta$  then becomes diagnostic in distinguishing RD and DFC. If  $\alpha$  is a constituent, it is DFC; if  $\beta$  is a constituent or a head, it is RD. Let us assume that movement is involved in RD (evidence to be presented in section 2.2).

In terms of phrase structure status,  $\beta$  in RD can be complement, adjunct or head, as illustrated in (4)–(8). Note that  $\alpha$  in DFC can only be complement, where fronting of adjunct and head is forbidden (Cheung 2005).

<sup>&</sup>lt;sup>5</sup> There exists a possibility that both  $\alpha$  and  $\beta$  are constituents, such as (2)b, making RD and DFC indistinguishable. I do not offer a way to distinguish them further here.

- (4) NP<sup>6</sup> complements (i.e. object)

  ZS zeoihau jau mou maai  $t_i$  aa3 [ $_{NP}$  gaa ce] $_i$ PN at.the.end have not.have buy t SP CL car

  'Has ZS bought that car at the end?'
- (5) CP complements

  ZS wui soengseon  $t_i$  me1 [CP Lei Sei beng-zo] PN will believe t SP PN get.sick-PERF

  'Will ZS believe that LS is sick?'
- (6) Adverbials

  ZS tingjat  $t_i$  heoi teng jincoengwui lo1 [ $_{Adv}$  dosou ] $_i$ PN tomorrow t go listen concert SP probably 'ZS probably goes to a concert tomorrow.'
- (7) PP adjuncts

  ZS  $t_i$  maai-zo bou soenggei aa3 [ $p_p$  hai dinnou zit ],

  PN t buy-PERF CL camera SP at computer festival 'ZS bought a camera at the Computer Festival.'
- (8) Modal verbs

  ZS jatzik dou  $t_i$  heoi duksyu ge2 [ $_{V}$  soeng ] $_{i}$ PN all.the.times all t go study SP want 'ZS want to go to study all the times.'

RD is a root phenomenon. It is disallowed within an embedded clause.

- (9) \*ngo zi  $\begin{bmatrix} \\ CP \end{bmatrix}$  ZS  $t_i$  m heoi  $\begin{bmatrix} \\ Adv \end{bmatrix}$  dosou  $\end{bmatrix}_i$  ] lo1 1SG know PN t NEG go probably SP 'I know ZS probably doesn't go.'
- (10) \*ngo zi  $\begin{bmatrix} CP & ZS & t_i \\ PN & t \end{bmatrix}$  heoi tai hei  $\begin{bmatrix} V & SOENG \\ V & SOENG \end{bmatrix}$  lo 1 1SG know PN t go watch movie want SP 'I know ZS wants to go to see a movie.'

Concerning the RD in (8) (or right dislocation of verb, RDV), apart from modal verbs, data below show that various kinds of verbs can be right-dislocated, including the following two types of verbs (Cheung 1997).

- (11) Verbs taking non-finite complement clause ngodei  $t_i$  wan sikmat lo1  $\begin{bmatrix} v \end{bmatrix}$  citfaak  $\begin{bmatrix} v \end{bmatrix}$  (Cheung 1997: 32) 1PL  $t_i$  find food SP seek.to 'We seek to find food.'
- (12) Matrix verbs in resultative construction keoi  $t_i$  mit laan fung seon aa3  $[v_i]$  lau dou  $[v_i]$  (ibid: 31) 3SG t tear break CL letter SP be.angry till 'He got so angry that he tore the letter.'

Right-dislocating the copul hai 'be' in (13)b may sound odd if uttered out of

 $<sup>\</sup>overline{^{6}}$  I do not contrast NP and DP, since the distinction does not contribute to the current discussion.

the blue, but it is felicitous in response to (13)a in a colloquial context. Also, there are cases where a transitive and an intransitive verb is right-dislocated, as in (14) and (15).

- (13) Copula
  - a. Q: nei hai bindou jan aa3 2SG COP where person SP

'Where are you from?'

b. A: ngo  $t_i$  hoenggong jan aa3 [ $_V$  hai ] $_i$  1SG t Hong.Kong person SP COP 'I am from Hong Kong.'

(14) Transitive verbs

ngo haazau  $t_i$  sing so ziu aa $3 \left[ v \text{ sik-zo} \right]_i$  1SG afternoon t whole CL banana SP eat-PERF 'I ate the whole bunch of bananas this afternoon.'

(15) Intransitive verbs

keoi zukzuk  $t_i$  saam jat aa $3 \left[ v \right]$  haam-zo  $\left[ v \right]$  saam jat aa $3 \left[ v \right]$  haam-zo  $\left[ v \right]$  saam jat aa $3 \left[ v \right]$  haam-zo  $\left[ v \right]$  cry-PERF 'He cried for three full days.'

One of the anonymous reviewers indicates that the phenomenon of RDV is far more complicated than what is discussed here. In many cases, right dislocation of the verbs makes the sentences marginally acceptable or even unacceptable. The application of RDV is highly constrained; however, among the acceptable examples as discussed above (i.e. (8) and (11)–(15)), there appears to be no general ban imposed on the selection of verbs (e.g. transitive verbs, intransitive verbs or modal verbs). As we will see below, RDV can target verbs in different syntactic positions (i.e. matrix verbs, embedded verbs or lower verbs, see corresponding examples in (14)–(15), (20)b and (26) respectively). As a conjecture, I attribute the various unacceptable cases of RDV to some independent semantic/ pragmatic restriction, instead of a syntactic one. I shall leave open the issues on the condition that regulates the acceptability of RDV. This paper proceeds by discussing acceptable cases of RDV.

# 2.2. Movement effects and locality constraints

Although the internal syntax of RD is different from DFC, RD displays similar movement effects as DFC. Such effects are also observed in topicalization. Following the reasoning in Li (2000), I show that RD displays movement effects, and argue that RD is also an instance of A'-movement. Li (2000) suggests that the following facts should motivate a movement account in topicalization, stated in (16) below.

- (16) Li (2000:6)
  - a. A PP, which cannot be a pro, can be topicalized.
  - b. Part of an idiomatic expression can be topicalized.

- c. The displaced PP or idiom chunk can be separated from its original position across clauses (long distance dependency relation) but cannot be separated by an island boundary (island conditions).
- d. Reconstruction is possible as illustrated by the binding of anaphors.

As for (16)a, since the use of *pro* in Chinese is a commonplace, it is possible that the right-dislocated element is coindexed with a *pro* in the original sentence, as exemplified in (17). In such case, no movement is required.

(17) ZS zeoihau jau mou maai  $pro_i$  aa3 [ $_{NP}$  gaa ce] $_i$  PN at.the.end have not.have buy pro SP CL car 'Has ZS bought the car at the end?'

However, as Saito (1985) has observed, a *pro* cannot be a PP, and thus a right-dislocated PP must be a result of movement rather than coindexation with a base-generated *pro*. Example (7) above illustrates a case where PP is right dislocated, against the *pro*-analysis. Furthermore, given the nominal nature of *pro*, it cannot be coindexed with adverbs like *dosou* 'probably' or verbs. The base generation *pro*-analysis is inapplicable to RD of adverbs such as (6), and RDV such as (2)b, (8) and (13)b. A movement analysis is thus motivated.

With regard to (16)b, let us assume that an idiom has to be merged as a unit at some level during the derivation. Displacement of an idiom chunk is thus indicative of movement. Examples in (18) and (19) confirm that right-dislocating the object or the verb does not deprive the idioms of their idiomatic readings.

- (18) nei cinkei m hou  $\begin{bmatrix} t_{ldiom} \end{bmatrix}$  haap  $t_i \end{bmatrix}$  aa3  $\begin{bmatrix} t_{NP} \end{bmatrix}$  ni zung cou  $\begin{bmatrix} t_{i} \end{bmatrix}$  2SG please NEG should taste t SP this CL vinegar 'Don't be jealous on this kind of thing.' (*Lit*. 'Don't taste this vinegar.')
- (19) ngo tung keoi  $\begin{bmatrix} t_{i} & t_{i} &$

(16)c concerns the locality of A'-movement. If RD shows long distance dependency and locality constraint, it is very likely that movement is involved in the derivation of RD. Both properties are confirmed. While a CP boundary can intervene between  $\alpha$  and  $\beta$ , island boundaries cannot.

- (20) Long distance dependency (CP boundary intervention)

  a. ngo zi [CP ZS t maai-zo bou soenggei] aa3 [PP hai2]

  1SG know PN t buy-PERF CL camera SP at dinnou zit]

  computer festival

  'I know ZS bought a/the camera at the Computer Festival.'
  - b. ngo zi  $\begin{bmatrix} & ZS & t_i & \text{heoi duksyu} \end{bmatrix}$  aa3  $\begin{bmatrix} & \text{soeng} \end{bmatrix}_i$  1SG know PN t go study  $\end{bmatrix}$  SP want 'I know ZS want to go to study.'

- (21) NP complement island
  - a. \*ZS dakdou-zo  $\begin{bmatrix} \\ NP \end{bmatrix}$  LS  $t_i$  maai-zo jat cang lau ge PN acquire-PERF PN t buy-PERF one CL house PRT siusik  $\end{bmatrix}$  lo1  $\begin{bmatrix} \\ PP \end{bmatrix}$  jung jingam  $\end{bmatrix}_i$  news SP with cash

'ZS acquired the news that LS bought a house with cash.'

- b. \*ZS zipsau m dou [ $_{\rm NP}$ LS  $t_{\rm i}$  gong sap zung jyujin ge PN accept NEG able PN t speak ten CL language PRT sisat ] aa3 [ $_{\rm V}$  sik] $_{\rm i}$  fact SP know
  - 'ZS cannot accept the fact that LS can speak ten languages.'
- (22) Adjunct island
  - a. \*ZS  $[_{CP}$  janwai  $t_i$  maai-zo dinnou ] soji mou cin sik PN because t buy-PERF computer so not.have money eat faan lo1  $[_{PP}$  jung jingam  $]_i$  meal SP with cash
    - 'Because ZS bought a computer with cash, he has no money for meal.'

'Because ZS wants to buy a computer, he saves ten dollars everyday.'

In addition, reconstruction effects are regarded as one of the properties of A'-movements (Huang et al. 2009), whereas A-movements show no reconstruction effects (see Chomsky 1995). Consider (23). Binding relation between antecedent *mui-go-jan* and the anaphor *zigei* still holds after right-dislocating the anaphor. The anaphor is moving across CP boundary (crossing the SP) so it escapes from the embedded CP to a position where binding relation cannot be established. Yet, (23) is as good as its non-right-dislocated counterpart. Reconstruction must be in effect to retrieve the binding relation before movement.

Reconstruction effects in RD may lead to ungrammaticality. If there is no reconstruction, the ungrammaticality of (24) is surprising, since right-dislocating the CP does not result in ungrammaticality, as in (5). However, (24) receives a straightforward explanation if reconstruction is in effect. When the CP is reconstructed back to the original position at LF, the proper name is c-commanded by and is co-indexed with the subject pronoun, a case of Principle C violation (i.e. a proper name must be free).

(24) \*keoi, m seon  $t_j$  lo1 [ $_{CP}$  ZS, beng-zo], 3SG NEG believe t SP PN be.sick-PERF 'ZS, doesn't believe that he, is sick.'

To sum up, we have confirmed all the properties listed in (16) in terms of RD, patterning with topicalization. A movement account for RD is motivated and RD should be regarded as another instance of A'-movement.<sup>7</sup>

Before leaving this section, it is important to note that the Head Movement Constraint (HMC, Travis 1984), informally stated as (25), does not apply to RD.

(25) Head Movement Constraint (Roberts 2001: 113) Head movement of X to Y cannot 'skip' an intervening head Z.

RDV is predicted to violate HMC no matter the direction of movement. Take (26) as an example. The right-dislocated verb 'go' is situated between two verbs in its original position. Movement of the verb 'go' must cross either one of the heads and hence violate HMC. However, (26) is perfectly good.<sup>8</sup>

(26) ngo  $\begin{bmatrix} v \text{ soeng } \end{bmatrix} t_i \begin{bmatrix} v \text{ sik } \end{bmatrix}$  syutgou aa3  $\begin{bmatrix} v \text{ heoi } \end{bmatrix} t_i \end{bmatrix}$  and t eat ice-cream SP go 'I want to go to eat ice-cream.'

### 3. Interpretive effects of right dislocation

### 3.1. The post-SP position in RD as defocus

# 3.1.1. Focus-resistant nature of right-dislocated elements

In section 2, it is shown that RD is an instance of A'-movement. The next question one might ask is what interpretive effects RD imposes on the sentence. This section illustrates the focus-resistant nature of the right-dislocated elements by highlighting the fact that they cannot be associated with focus interpretation or stress. Three pieces of evidence would be presented.

The first one originates from the property of wh-phrase. Since phrasal categories can be right-dislocated, we expect RD works naturally with wh-phrases just as well. Yet (27) and (28) contradicts our expectation. Following Rochement's (1986) claim that wh-phrases in direct questions inherently function as a focus, I attribute the ungrammaticality of (27) and (28) to the inherent focus feature held by wh-phrases, which is absent in other phrasal categories.

# (27) NP objects and 'what'

a. ZS m geidak gaau  $t_i$  aa3 [ $_{NP}$  fan boumeng biu ] $_i$  PN NEG remember submit t SP CL application form 'ZS forgot to submit the application form.'

 $<sup>\</sup>overline{^{7}}$  See Cheung (2005, 2009) for A'-movement properties of DFC. Both RD and DFC are instances of A'-movement.

<sup>&</sup>lt;sup>8</sup> Whether the verb moves on its own may be controversial. I leave this issue to section 6.

b. \*ZS m geidak gaau  $t_i$  aa3 [ $_{wb}$  matje ] $_i$  PN NEG remember submit t SP what 'What did ZS forget to submit?'

- (28) Adverbials and 'when'
  - a. ZS t<sub>i</sub> maai-zo gaa san ce aa3 [Adj camjat] PN t buy-PERF CL new car SP yesterday
     'ZS bought a new car yesterday.'
  - b. \*ZS t<sub>i</sub> maai-zo gaa san ce aa3 [<sub>wb</sub> geisi]<sub>i</sub> PN t buy-PERF CL new car SP when 'When did ZS buy a new car?'

Following this line of reasoning, we predict that, when focus reading is assigned to a phrase, it cannot be right-dislocated. To confirm this one, we can apply the question-answer test, since the answer to a question bears informational focus (c.f. Cheung 1997, 2005, Law 2003). We predict the answer part in a sentence cannot undergo RD in terms of felicity. This is borne out. Consider:

- (29) NP object as answer
  - a. Q: ZS m geidak gaau matje aa3 PN NEG remember submit what SP 'What did ZS forget to submit?'
  - b. A: #ZS m geidak gaau  $t_i$  aa3  $\begin{bmatrix} \\ NP \end{bmatrix}$  fan boumeng biu  $\begin{bmatrix} \\ \\ \end{bmatrix}$  (=(27)b)
- (30) Adverbials as answer
  - a. Q: ZS geisi maai-zo gaa san ce aa3 PN when buy-PERF CL new car SP 'When did ZS buy a new car?'
  - b. A: #ZS  $t_i$  maai-zo gaa san ce aa3  $[A_{Adi}$  camjat  $[A_{Adi}]$  (=(28)b)

(29)b and (30)b are identical to (27)b and (28)b, respectively. They are syntactically well formed, but they are infelicitous answers to their corresponding questions. A straightforward explanation is that the right-dislocated elements are focus-resistant and they cannot serve as an answer, which holds informational focus.

The third piece of evidence comes from the interplay with stress. Although stress is not obligatory in Cantonese, it can be adopted to denote focus where necessary. In other words, there is stress-focus correspondence (c.f. Cheung 2005). The (b) sentences in (31)–(33) are disallowed due to the presence of stress on the right-dislocated elements. However, it is acceptable to stress the same element in the corresponding non-right-dislocated (a) sentences. Again, this asymmetry can be explained if the right-dislocated elements resist focus interpretation and hence cannot be stressed (marked by itatics).

- (31) Stress on complement NP

  - b. \*ZS m geidak gaau  $t_i$  aa $3 \left[_{NP} fan boumeng biu \right]_i$

(32) Stress on adverbials

a. ZS [Adv. camjat ] maai-zo gaa san ce yesterday buy-PERF CL new car SP 'ZS bought a new car yesterday.'

b. \*ZS  $t_i$  maai-zo gaa san ce aa3 [ $_{Adv}$  camjat]

(33) Stress on verb

a. ZS [v soeng] cizik aa3 PN want resign SP 'ZS wants to resign.'

b. \*ZS  $t_i$  cizik aa3  $[v soeng]_1^9$ 

In sum, the post-SP position resists focus interpretation, i.e. it cannot hold any focus. This position cannot be reduced to a non-focused position, as this would allow the possibility for being focused. It would be surprising if a non-focus position consistently resisted focus interpretation, since in principle they could be focused. I suggest the bifurcate division focus and non-focused position be replaced by the tripartite classification, which consists of focus, non-(de)focus, and defocus.

# 3.1.2. Defocus and possible focus set

Defocus not only resists focus interpretation, but also reduces possible focus set. Since defocus cannot be focused, the elements in the defocus position cannot be included in any focus set. Consider the focus construction in the form 'mai...lo1', discussed in Tang (2008). Elements within the scope of the adverb mai and SP lo1 can receive focus interpretation, as shown in (34). The focus interpretation can be ambiguous depending on the elements that are within the focus scope.

(34) ZS  $mai \left[ v_p \text{ ze-zo} \right]$ bun syu ] lo1 go borrow-PERF that CL book SP Possible focus set: {NP object, VP, V}<sup>10</sup> 'ZS borrowed that book.'

More transparently, the possible focus set can be written as {NP object}, {V + NP object and {V}. However, right-dislocating the NP object and the verb in (35) and (36), respectively, reduces the number of possible focus readings.

(35) RD of NP objects

ZS  $mai \left[ v_P \text{ ze-zo } t_i \right] lo1 \left[ v_P \text{ go bun syu} \right]_i$ Possible focus set:  $\{V\}$ 

(36) RDV ZS  $mai \left[ v_D \ t_i \right]$  go bun syu  $\left[ lo1 \left[ v_D \ ze-zo \right] \right]$ . Possible focus set: {NP object}

The original possible set loses all the sets containing the right-dislocated element (=defocus). For example, in (35), due to the RD of the NP object, all the possible

<sup>&</sup>lt;sup>9</sup> Lengthening of the verb 'want' improves the acceptability for reasons unknown to the author. However, the stressing in (a) sentences does not involve any lengthening.

<sup>&</sup>lt;sup>10</sup> Tang (2008) suggests that the subject can also be the contrastive focus. For simplicity, I do not include it into the focus set. The same applies to (41) and (42).

focus sets containing the NP object in (34) are lost, leaving the only possible set as {V}. The same applies to the case of RDV.

An interesting question, however, is whether the reduction in possible focus set can be derived independently from the notion of defocus. For example, rightdislocated elements fall outside the c-commanding scope of focus operator and hence are excluded from the computation of focus set. If so, the notion of defocus seems redundant in accounting for the reduced possible focus set. Here, I follow the reasoning in Cheung (2005: 50-1) and argue that the notion of defocus is independently needed. As shown in section 2.2, the syntactic interpretation of RD is mediated by reconstruction, which can re-establish the binding relationship between anaphor and its antecedent (such as (23)). We have also seen that reconstruction in RD is insensitive to grammaticality, that is, reconstruction is obligatory and can lead to ungrammaticality (such as (24)). The defocus in RD is reconstructed back to the focus scope at LF. However, the reconstruction of defocus cannot retrieve all the originally possible focus sets, as in (35) and (36). So reduction in possible focus set is not resulted from the failure to establish a c-command relation between the focus operator and the right-dislocated element. Instead, it is a direct result of the focus-resistant nature inherited in defocus that prevents all right-dislocated elements from being focused. The notion of defocus is needed to explain the reduction in possible focus set.

The fact that the computation of focus set is not mediated by reconstruction is supported by evidence observed in scrambling in Japanese. Japanese scrambling displays reconstruction effects (Saito 1985). However, Ishihara (2001: 181) illustrated with the following example that 'scrambling induces a difference in the focus set, creating potential focus domain that would not be available in the non-scrambled word order'. In other words, despite reconstruction of the scrambled elements at LF, original focus set cannot be retrieved, the same as our case involving RD.

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(37) Non-scrambled word order
                                                               (Ishihara 2001: 168, with adaptions)
       \begin{bmatrix} T_{P} & T_{P} & T_{P} \end{bmatrix}
                                                                       katta]]]
            PN-NOM
                                 today
                                                     book-ACC bought
       'Taro bought a book today.'
                                                     Possible focus set: {NP object, VP1, VP2, TP}
(38) Scrambled word order
                                                                             (ibid: 168, with adaptions)
       \begin{bmatrix} T_{\text{TP2}} & \text{hon-o} \end{bmatrix} \begin{bmatrix} T_{\text{TP1}} & \text{Taro-ga} \end{bmatrix} \begin{bmatrix} T_{\text{ADV}} & \text{ky\'oo} \end{bmatrix} \begin{bmatrix} T_{\text{VP1}} & T_{\text{hon-o}} & \text{katta} \end{bmatrix}
              book-ACC
                                     PN-NOM
                                                                                       bought
                                                         Possible focus set:{ADV, VP2, TP1, TP2}
        'Taro bought a book today.'
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#### 3.1.3. RD as Defocus Dislocation Construction (DDC)

The previous section showed RD excludes the dislocated element from the computation of focus. It is then natural to regard this process as defocalization. In a sense, the interpretive effect of RD is in fact similar to that of DFC. Recall that DFC is a focus construction achieved via dislocation (Cheung 2005, 2009). I repeat the example of (1)a as (39), where the dislocated (=fronted) NP object is

focus of the sentence.

```
(39) [_{\rm O} jat bou dinsigei ] lo1 [_{\rm S} keoi ] [_{\rm V} maai-zo ] (Cheung 2005: 1) one CL TV SP 3SG buy-PERF 'He bought a TV.'
```

As Law (2003: 266) points out, DFC 'serves as a disambiguation device in the sense that it identifies the intended focus among all the possible foci.' Put differently, DFC helps reduce possible focus set by selecting particular focus sets. To exemplify, the NP object in (40) is fronted in DFC and is the only element that receives (exhaustive) focus interpretation inherited in the adverb *zinghai* 'only'. However, the possible focus set of (40) contrasts that of its non-dislocated counterpart in (41).

In (40), although reconstruction is available in DFC (Cheung 2005), it does not retrieve all the possible set as in (41). The difference of DFC and RD is that DFC picks out elements and dictates that focus set should *include* only this/these element(s), whereas RD picks out elements and dictates that all focus sets should *exclude* this/these element(s). Both DFC and RD are thus disambiguation devices with regard to the possible focus set. Accordingly, I rename the RD at issue as Defocus Dislocation Construction (henceforth DDC), on a par with DFC.

# 3.2. Defocus ≠ Topic

Intuitively, both a defocus and a topic mark a less prominent element in a sentence. This leads us to the question of whether the notion of defocus is just a sentence-final counterpart of topic. However, defocus cannot be reduced to topic since they do not share the same coverage on their targets. What can be defocalized does not necessarily correspond to what can be topicalized. The asymmetry between defocus and topic can also be observed in terms of reconstruction.

First, topics in Chinese are either definite or generic (Li & Thompson 1989). Existential phrases (marked by *jau* in Cantonese) and non-specific NP (where the speaker does not recognize the unique reference) do not qualify as topic. If defocus is just another name for topic, we expect these phrases cannot be defocalized, since they cannot be topicalized. Yet, examples below show the contrary. These phrases can be defocalized in (42)b and (43)c but cannot be topicalized in (42)a and (43)b.

# (42) Existential phrase

a. TOP:

```
*[ jau go hoksaang ]_{i} ngo ting ZS gong [_{CP} t_{i} tausin lai wan jau CL student 1SG hear ZS say t just come find
```

nei ] wo3 2SG SP

'I heard from ZS that a student found you just now.'

ngo ting ZS gong [ $_{CP}$   $t_i$  tausin lai wan nei ] wo3 [ jau go hoksaang ].

(43) Non-specific NP

a. Q: ZS wan deoizoeng wan seng dim aa3 PN find partner find till how SP 'How is it going for ZS to find a partner?'

b. TOP:

\*[NP jat go aam jat go aam ge gitfan-deoizoeng]<sub>i</sub> ZS zung one CL suitable PRT marriage-partner PN still gitfan-deoizoeng], ZS zung not.vet wan dou t aa3 find able t SP

'ZS hasn't found a suitable marriage partner yet.'

c. DDC:

ZS zung mei wan dou  $t_i$  aa3 [NP jat go aam ge gitfan deoizoeng ].

Moreover, as shown in section 3.1.1, wh-phrases in direct questions cannot be defocalized because they hold an inherent focus. However, at least some whphrases can be topicalized in Chinese (Wu 1999), 11 as illustrated in (44)a, but it cannot be defocalized, as in (44)b.

(44) Wh-phrases

a.  $\hat{T}OP: [_{mh} \text{ binjoeng je }]_{i}$  nei sik zou  $t_{i}$  gaa3 stuff 2SG know do t SP 'Which thing do you know how to do?'

b. DDC: \*nei sik zou t gaa3 [ binjoeng je ].

Some PP adjuncts that cannot be topicalized can be defocalized, as in (45). I offer no satisfactory explanation of such asymmetry, but it is clear that topic and defocus do not always converge and thus belong to two separate notions.

(45) PP adjuncts

a. TOP:  $*[p_p]$  gan Wong sinsaan ], ZS  $t_i$  heoi ngoigwok zou follow PN Mr. PN t go overseas do jingau aa3 research SP

<sup>&</sup>lt;sup>11</sup> An anonymous reviewer questions whether the wh-phrases with inherent focus (as suggested in section 3.1.1) could be topicalized. The answer is positive. According to Wu (1999), when wh-elements in wh-questions is topicalized, it presupposes a particular set of things (i.e. the possible answers to the wh-questions). Wh-questions without such topicalization do not impose this presupposition. So semantically speaking, this particular set of things serves as the topic of the sentence. Such topic interpretation of wh-phrases poses no contradiction with the inherent focus feature of wh-elements.

'ZS go overseas to do research with Mr. Wong.'

b. DDC: ZS  $t_i$  heoi ngoigwok zou jingau aa3 [ $p_p$  gan Wong sinsaan ] $_i$ 

The behavior of frequency phrase illustrates the same point. In (46), the frequency phrase *saam-ci* 'three times' can be right-dislocated (i.e. defocalized). However, it cannot be topicalized.

(46) Frequency phrases

- a. TOP: \*[saam ci]<sub>i</sub> ngo gin-gwo Wong siuze  $t_i$  laa3 three time 1SG see-EXP PN Miss t SP 'I have met Miss Wong for three times.'
- b. DDC: ngo gingwo Wong siuze  $t_i$  laa3 [ saam ci ],

In sum, defocus covers a different range of elements compared to topics, so it is implausible to regard defocus as a sentence-final topic.

On the other hand, the behaviors of topicalization and defocalization are different with regard to reconstruction. Li (2000) argues that reconstruction in topicalization is necessary *only if* there are morpho-syntactic clues that require reconstruction; otherwise, the topics are base-generated. Put differently, reconstruction in topicalization is not obligatory and applies only when necessary. As we mentioned in section 2.2, reconstruction in DDC is obligatory and it may lead to ungrammaticality. Consider the following paradigm in Cantonese, based on the Mandarin data in Li (2000:12). (47)a shows the canonical word order (CWO) in Cantonese (SVO). It is ungrammatical due to Principle C violation, i.e. the proper name ZS is bound by the subject pronoun. DDC in (47)b is also disallowed because reconstruction is obligatory in DDC, reconstructing the proper name back to the object position. However, topicalization in (47)c is grammatical and coindexation holds between the proper name and the subject pronoun.

- (47) Principle C and reconstruction effects
  - a. CWO: \*[keoi], m wui zungji [NP ngo maai bei [ ZS ], ge 3SG NEG will like 1SG buy for PN PRT laimat ] lo1 gift SP 'He, won't like the present I bought for ZS,.'
  - b. DDC: \*[ keoi ], m wui zungji  $t_j$  lo1 [ $_{NP}$  ngo maai bei [ ZS ], ge laimat ], c. TOP: [ $_{NP}$  ngo maai bei [ ZS ], ge laimat ], [ keoi ], m wui zungji  $t_i$  lo1

Under Li's (2000) account, proper names, unlike anaphors, do not show any morpho-syntactic constraints (i.e. no need to be bound). Reconstruction is not motivated and cannot be in effect. If defocalization is equivalent to topicalization, we expect the absence of reconstruction in (47)b, which in turns avoid the violation of Principle C. However, the ungrammaticality of (47)b suggests that this is not the case. The paradigm in (47) thus reveals an important difference between defocalization and topicalization.

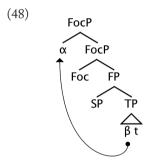
In light of the mismatch with regard to what can be topicalized and what can

be defocalized, in addition to the difference in terms of their reconstruction behaviors, the notion of topic differs from that of defocus qualitatively. We have little reason to treat defocus as a sentence-final counterpart of topic.

# 4. Previous analyses on right dislocation 12

# 4.1. DFC analysis in Cheung (2005, 2009)

Before giving the proposal on DDC, it is crucial to review some previous analyses on RD. Consider first the DFC analysis. Assuming that an SP is a head of a head-initial functional projection (FP) in the CP domain, Cheung (2009) argues that the focus undergoes leftward movement to the Spec of the Focus phrase, a projection higher than FP, illustrated in (48). This analysis captures the fact that the  $\alpha$  part in the schema ' $\alpha$  SP  $\beta$ ' is always a constituent and that face that the  $\beta$  part is the remnant that can be, and usually is, a non-constituent.



Recall that the constituency of  $\alpha$  and  $\beta$  in DDC is exactly opposite to that of DFC (section 2.1). In DDC,  $\beta$  is always a constituent (or a head) whereas  $\alpha$  is the remnant. Deriving DDC via Cheung's analysis is difficult but not totally impossible. It is possible that  $\beta$  is indeed in-situ and all other parts move to the Spec Foc. I illustrate this possibility with example (2)b and the corresponding structure is (49). Both the NP subject and the NP object undergo leftward movement, while the modal verb wui 'will' and the matrix verb maai 'buy' are in-situ.

(49) [ZS]<sub>i</sub> [go bou dinnou]<sub>k</sub> [
$$_{FP}$$
 lo1  $t_i$  wui maai  $t_k$ ] PN that CL computer SP will buy 'ZS will buy that computer.'

This analysis, however, faces a challenge when applied to long-distance cases of DDC. For example, in order to generate the correct word order in (20)b (=(50)), we need to assume multiple applications of leftward movement to Spec FocP.

(50) 
$$\begin{bmatrix} D_P & D_G \end{bmatrix}_i \begin{bmatrix} V_V & Z_I \end{bmatrix}_j \begin{bmatrix} D_P & Z_S \end{bmatrix}_k \begin{bmatrix} V_P & D_G & U_I \end{bmatrix}_l \begin{bmatrix} D_P & D_G$$

<sup>&</sup>lt;sup>12</sup> Some researchers suggest a non-movement approach for RD. However, given the movement effects observed in section 2.2, non-movement approaches may face challenges with regard to island constraints attested in RD. I choose to focus on movement approaches only.

However, as Cheung proposes, DFC is constrained by the Generalized Left-Branch Condition (GLBC), which forbids any left-branching element to be fronted (e.g. subject and verbs). The movements of NP subject ngo 'I' and the verb zi 'know' are illicit under the DFC framework. More importantly, if the defocus (i.e. the verb soeng 'want') is in-situ, it would be surprising to detect island effects since there is no movement at all (c.f. section 2.2). I conclude that DFC analysis is inapplicable to DDC. <sup>13</sup>

### 4.2. Cheung (1997)

The Generalized Dislocation Adjunction (GDA) proposed in Cheung (1997: 91) attempts to derive DDC via VP adjunction. Under GDA, the rear part of the VP moves to adjoin to VP, as in (52). (53) instantiates an application of GDA on DDC, which seems plausible.

- (51) Generalized Dislocation Adjunction (GDA)
  An instance of Move-α that adjoins a YP (a phrasal constituent immediately preceding the SP) to any XP so that the moved YP can bind the trace at the base position.
- (52) [<sub>IP</sub> Subject [<sub>VP</sub> [<sub>VP</sub> Predicate<sub>rear</sub> SP]<sub>i</sub> [<sub>VP</sub> Predicate<sub>front</sub> t<sub>i</sub>]]]
   (53) [<sub>IP</sub> Aaming [<sub>VP</sub> [<sub>VP</sub> zou jun gongfo laa3]<sub>i</sub> [<sub>VP</sub> jiging t<sub>i</sub>]]]
   PN do finish homework SP already
   'Aaming has already finished (his) homework.'

However, GDA states that only phrasal constituents immediately preceding the SP can be fronted. However, this is not always the case in DDC, when an object is right-dislocated, as in (4)(=(54)). The string *zeoihau jau mou maai* does not immediately precede the SP since the NP object *gaa ce* 'the car' originates in the pre-SP position. The string does not form a constituent either. So (54) cannot be derived through GDA.

(54)  $\begin{bmatrix} I_{P}ZS & I_{VP} & I_{VP} & I_{VP} & I_{E} &$ 

Only when SP is base-generated within the VP, then VP adjunction is possible. However, not all SPs are VP-internal. In the direct question in (55), the interrogative SP *me1* is in matrix scope and hence external to the embedded clause. GDA cannot be applied since the string ZS m lai me1 does not form a constituent.

(55) nei zi  $\begin{bmatrix} CP & t_i & ZS \end{bmatrix}$   $\begin{bmatrix} VP & m & lai \end{bmatrix}$   $\begin{bmatrix} me1 \end{bmatrix}$   $\begin{bmatrix} Adv & tingjat \end{bmatrix}$   $\begin{bmatrix} SP &$ 

<sup>&</sup>lt;sup>13</sup> Law's (2003) analysis on right dislocation converges with Cheung's analysis to a large extent and can be argued against on the same ground.

Also, similar to the DFC analysis, island constraints are predicted to be absent since the defocus does not move at all, but this is not the case.

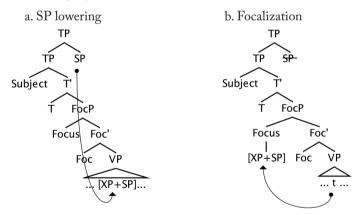
### 4.3. Chan (2013)

Chan (2013) notices that Cheung's DFC analysis cannot capture a type of RD, which he termed 'Clause-internal Dislocation'. In our terminology, it is the right dislocation of an adverbial. An example is given in (56).

(56) di pouzap gei houmei wo3 houci CL Portuguese.sause quite tasty SP seem 'The Portuguese sauce does seem quite tasty.'

Chan (2013) suggests that SP is an affix attached to the right of TP. He argues that a TP-adjoined SP is lowered and affixed to the focused constituent, forming [XP+SP]. Then, he follows Belletti's (2004) proposal that a focus projection is located between TP and VP. That is, the focus appears in a post-subject but preverbal position. The focus, together with the lowered affix SP, moves to the focus position for feature checking. Chan argues that (56) is derived via SP lowering, followed by focalization.

## (57) Chan's (2013) proposal



Chan's proposal is indeed an updated version of Cheung's (1997) analysis. They differ in two ways. First, SP is no longer assumed to be generated VP-internally, but is regarded as a TP affix. Second, VP-adjunction is replaced by focus movement. However, as we have seen, there exist cases where the fronted part does not form a constituent (e.g. right dislocation of NP complement in (54)). Also, if *hoici* 'seem' in (56) does not move at all, there should be no violation of island constraint. Again, this is contrary to the fact we have seen in section 2.2. Note that the unconventional assumption that SP is lowered to the focus element requires further justifications.

# 5. Proposed derivation of DDC

# 5.1. Backbone of the proposal

In this section, I will present a proposal for DDC. The backbone of the proposal is twofold. First, I propose the notion of defocus as a syntactic feature assigned to any lexical items. It then triggers defocus movement (=defocalization). Second, I suggest that DDC involves a combination of two independent operations, that is, defocalization followed by TP-raising to Spec FocP. The analysis assumes that SP is a head-initial functional projection in the CP domain, following Sybesma (1999), Simpson & Wu (2002), Cheung (2005, 2008, 2009), and Hsieh & Sybesma (2008).

# 5.2. Defocus as a syntactic feature

The idea that defocus is a syntactic feature draws on the parallelism with the Focus Criterion in Chinese (Ernst & Wang 1995),<sup>14</sup> which is tacitly assumed in DFC. I propose that there is a corresponding criterion for defocus.

#### (58) Defocus Criterion

- a. The defocalized element must be checked with a head bearing [-Foc];
- b. A Defocus head of DefocusP must be in a Spec-head configuration with the defocalized element.

Both focus-related features, [+Foc] and [-Foc], trigger movement. Also, a [-Foc] feature is semantically incompatible with [+Foc] feature. This explains the focus-resistant nature of defocus. Note that, following Shyu (2001), I assume that neither criteria constrain other (de)focus devices, such as focus association and phonologically stressed focus. These devices are related to lexical or phonological focus features, instead of a syntactic one.

The idea that defocus is a syntactic feature is not a novel one. In her study in Romance languages, Zubizarreta (1998) proposes p-movement (prosodically motivated movement) where defocalized constituents (marked with a [-F(oc)] feature) undergo leftward adjunction to ensure the focalized constituent is in the final position to receive prosodic prominence. Zubizarreta (1998) also argues that, since the Nuclear Stress Rule (NSR) applies at the end of the syntactic derivation and p-movement must apply prior to NSR, p-movement must apply in the syntax.

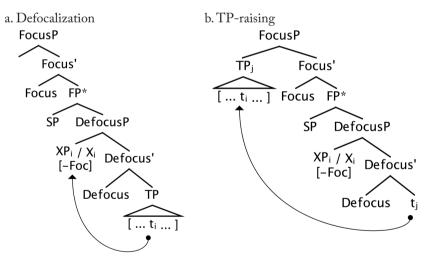
On the other hand, Takano (2014) independently develops an analysis of Japanese RD, proposing a [-F(oc)] feature. He argues that [-Foc] is a counterpart of the focus feature that syntactic heads can have. The elements bearing [-Foc] undergo rightward syntactic movement, contributing to interpretation (e.g. altering quantifier scopes). These dual functions (overt movement and LF-effects) correspond to that of [+Foc] feature. Although the checking head for the [-Foc] element is unspecified, suffice it to say that [-Foc] as a syntactic feature has its root in the literature.

<sup>&</sup>lt;sup>14</sup> Brody (1991) and Choe (1992) also propose Focus Criterion for Hungarian and Korean, respectively.

# 5.3. A two-step derivation

I assume with Cheung (2009) that the basic structure in CP-domain is in the order of FocP > FP\* > IP. 15 Observing that the defocus in DDC always follows SP, whereas the focus in DFC always precedes SP, I propose a DefocusP immediately below FP\*, giving the order of FocP > FP\* > DefocusP > IP. The defocus head attracts the elements with the [-Foc] feature. DDC is derived via defocalization in the first place, followed by the raising of the remnant TP, as illustrated in (59). In (59)a, according to the Defocus Criterion in (58), the defocalized elements (with the [-Foc] feature) move to Spec DefocusP in the CP domain for feature checking. Unlike DFC, there is no particular constraint on the phrase structure status of the defocalized element (such as GLBC). Defocus can be an NP complement, a CP complement, an adjunct, an adverbial or a single head. 16 As an instance of A'-movement, defocalization obeys locality constraints. Also, the DefocusP is a matrix projection in the CP domain that is unavailable in the embedded clause. DDC results in a root phenomenon. Since defocalization occurs within narrow syntax, the structure is read off at LF and the element in the DefocusP is excluded from the computation of focus set (c.f. the interpretive effects of DDC in section 3). Then, the remnant TP moves to the Spec FocP, the same position as the landing site of the focus elements in DFC.

### (59) DDC derivation



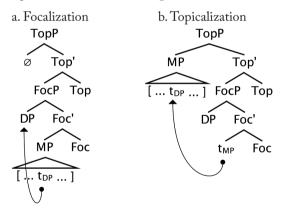
<sup>&</sup>lt;sup>15</sup> FP is the projection headed by SPs. The asterisk on FP indicates this projection can iterate. Since SPs is allowed to cluster, multiple FP projections are assumed to be possible (see Leung 2005 for this property of SPs in Cantonese).

<sup>&</sup>lt;sup>16</sup> I leave the issue concerning whether the verb moves on its own to section 6. I argue that this movement is an instance of syntactic (long-distance) head movement landing on a Spec position.

Concerning the legitimacy of the TP-raising operation in (59)b, I assume with Sybesma (1999), Simpson & Wu (2002), Hsieh & Sybesma (2008) and Cheung (2008, 2009) that TP-raising is an independently motivated operation. I stipulate that it is indeed a case of focalization, an idea hinted (but rejected) in Cheung (2008). An empirical advantage is that it explains why DFC and TP-raising are in complementary distribution. Both of them compete for the same position. If a focus is moved, the TP remains in-situ. If the there is focus element, the TP is moved. Further justification is required, but I would not pursue here. Setting this issue aside, the proposed derivation serves to complements the limitations of the DFC analysis and contributes to the complete theory concerning the derivation of (gapless) right dislocation in Cantonese.

As a side note, the proposal of a two-step derivation in deriving right dislocation is not a peculiar one. A similar proposal for RD has been made in Ko (2015) in her discussion on Korean RD that involves an argument.<sup>17</sup> Her basic idea is that 'an argument moves to a designated focus projection in the left periphery of the clause and the rest of the clause undergoes further leftward movement' (Ko 2015: 4).<sup>18</sup> More precisely, focalization is followed by topicalization of the remnant clause, which functions as a topic for the fronted focus. The proposal is illustrated in (60).

# (60) Two-step derivation of Korean (argument) RD



It is clear that the current proposal for DDC in Cantonese deviates from Ko (2015) in the sense that defocalization, but not focalization, takes place. But the second movement in both languages (i.e. remnant movement of the main clause, the M(odal) phrase or the TP) is independently motivated regardless of (de)focalization. A particular construction does not entail that there is only one operation; instead, we have no *a priori* reason to rule out the possibility that it is a combined

<sup>&</sup>lt;sup>17</sup> Ko (2015) suggests that RD involving adjuncts is base-generated at the final position of the sentence.

<sup>&</sup>lt;sup>18</sup> Ko (2015) observes that the right-dislocated elements are interpreted as specificational focus in Korean RD, so the element moves to Spec FocP for focus interpretation.

result of two independent operations. In fact, Hiraiwa & Ishihara (2012) also argue that Japanese cleft constructions are derived from a two-step derivation (focalization followed by topicalization), the details of which are beyond the scope of this paper.

## 6. Right dislocation of verb and head movement

# 6.1. The background of head movement

In the two-step derivation of DDC, I have tacitly assumed that, like other phrasal categories, heads also move to Spec DefocusP under the Defocus Criterion in the first step of the derivation (i.e. defocalization). I will refer this movement as RDV for convenience, although it actually refers to a particular step in the full derivation of DDC. The head-spec movement involved in RDV may seem implausible since it is theoretically problematic in two ways. First, it violates the Chain Uniformity Condition (CUC), which dictates the landing site of head movement must be another head.

(61) Chains Uniformity Condition (Chomsky 1995: 253)
A chain is uniform with regard to phrase structure status.

Second, Head Movement Constraint (HMC, Travis 1984) is also violated since RDV can 'skip' heads (c.f. section 2.2).

However, the legitimacies of CUC and HMC themselves could be challenged. In the Bare Phrase Structure (BPS, Chomsky 1994), the phrase structure status of an element is determined relationally in terms of structural configurations. That is, 'a category that does not project any further is a maximal projection XP, and one that is not a projection at all is a minimal projection  $X^0$ ' (Chomsky 1994: 10). Since a minimal projection can be a maximal projection at the same time (i.e. a category that is not a projection and does not project), Fukui and Takano (1998) and Toyoshima (2001), among others, have pointed out that it is legitimate for a head (being simultaneously  $X^0$  and  $X^0$ ) to move to a specifier position (that requires a maximal projection) within BPS, which is forbidden in the previous  $X^0$ -theory.

However, Chomsky (1995) reintroduces the distinction between  $X^{\text{min}}$  and  $X^{\text{max}}$  and proposes CUC to constrain movement with regard to their phrase structure status. A head is again barred from moving to non-head position. Toyoshima (2001) points out, nonetheless, CUC is overgeneralizing since it prevents any movement of a non-maximal  $X^0$  category, such as V-T movement/adjunction. A VP-projecting verb (and hence  $X^{\text{min}}$ ), after adjoining to  $I^0$ , does not project anymore there (and hence a  $X^{\text{max}}$ ). As a result, a non-uniform chain is created. Vicente (2009) also questions the conceptual necessity of holding CUC. In the first place, CUC is at odds with the basic intuition of BPS to reduce phrase struc-

<sup>&</sup>lt;sup>19</sup> Chomsky (1995) tries to circumvent the problem by resorting to independent word-interpretation (WI) processes. See discussions in Fukui & Takano (1998), Toyoshima (2001) and Vicente (2009).

ture status to strictly relational properties. It is unnecessary, as Vicente further argues, that a chain must be uniform. It happens to be a constraint that narrowly applies to internal merge, since external merge is never constrained in a similar way. An  $X^{\min}$  can freely merge with  $X^{\max}$ , or we would rule out all cases where a head merges with its complement. Non-movement dependency, such as agreement, may also relate an  $X^{\min}$  and an  $X^{\max}$  (see examples in Vicente 2009). The legitimacy of CUC is largely questionable.

Now consider HMC. Observing that HMC is subject to the same locality constraint as c-selection, researches have shown that HMC can be derived from subcategorization (or c-selection) (c.f. Svenonius 1994 and Pesetsky & Torrego 2001). That is, a head must satisfy its subcategorization requirement via selection of its complement. Following Svenonius' (1994) suggestion that c-selection is achieved through feature checking (c-feature), Matushansky (2006) suggests the parallelism between head and phrase movement: head movement is based on c-selection, while phrasal movement is based on Agree. Cheng & Vicente (2013: 27) agrees that '[i]f the subcategorizing c-feature overtly attracts the subcategorized category, the result is classical head-to-head movement.' Following this line of reasoning, it is plausible that head movements can be triggered by noncategorial feature. Indeed, Pesetsky and Torrego (2001) argue for such stance in their analysis of T-C movement in Germanic languages. They suggest that [uT] is the trigger for head movements. Similarly, Cheng & Vicente (2013) indicates that a discourse-related feature like [topic] or [focus] can also serve as a trigger for head movement. Nothing should block such long-distance movement since locality follows from the requirement of subcategorization. A head, on a par with a phrase, is allowed to move to the left periphery for feature checking, as a typical A'-movement, HMC only holds when subcategorization is involved, and it cannot rule out other instances of head movement as long as they are feature-driven.

If movement operations are not constrained by CUC and HMC, head-spec movement is a theoretically legitimate operation. The mechanism allowing head-spec movement has been proposed and defended in Fukui & Takano (1998), Toyoshima (2001), Matushansky (2006), Vicente (2009), Cheng & Vicente (2013) and Harizanov (2016), among others. In what follows, I present empirical evidence to argue that RDV has to be derived via syntactic (long distance) head-spec movement by ruling out other alternatives. Note that I do not argue *all* head movements should be put under the proposed analysis. Instead, I argue that RDV is another piece of evidence supporting the mechanism of head-spec movement.

# 6.2. Right dislocation of verb as head-spec movement

In order to show that RDV qualifies as an instance of head-spec movement, three points have to be made clear. First, only the head undergoes movement. Second, the landing site of the movement is Spec. Third, it occurs in the overt syntax, i.e. RD is a syntactic movement prior to Spell-Out.

#### 6.2.1. Verb movement, not remnant VP movement

An alternative to verb movement is remnant VP movement. The idea is that, prior to VP movement, all elements except the verb in the VP have been extracted from VP, leaving a remnant VP behind. When this remnant VP is moved, it appears that the verb has moved alone. Consider the remnant VP topicalization in German, where the underlying structure of (62) is (63) (den Besten & Webelhuth 1990: 77–78).

- (62) [Gelesen] hat Hans das Buch nicht read has Hans the book not 'Hans has not read the book.'
- (63)  $\begin{bmatrix} t_{\text{VP}} & t_{\text{i}} & \text{gelesen} \end{bmatrix}$  hat Hans  $\begin{bmatrix} t_{\text{i}} & \text{das Buch} \end{bmatrix}$  nicht  $t_{\text{VP}} = t_{\text{i}}$

According to their proposal, *das Buch* is first moved out from VP via scrambling. The remnant VP then moves to the left periphery. Since the VP contains only the verb, it appears to be a head movement. In other words, the surface head movement is a phrasal movement in disguise. The key element in this approach is that there must be a productive mechanism that can evacuate all constituents, except the verb, from the VP. Note that scrambling in German can be invoked on all necessary occasions. The remnant VP containing only the verb can thus be routinely created. However, whether a similar mechanism can be found in Cantonese/Chinese is doubtful. First, Soh (1998) argues that the Chinese object shift rule (i.e. object scrambling) has a very limited domain of application, applying only to DPs around low (VP-level) adverbs. An example of Mandarin scrambling is given in (64). Although the object and the frequency phrase can be scrambled, they are still kept within VP. They cannot move to the left of the verb. Therefore object scrambling cannot create a remnant VP in a similar way as in German.

- (64) Mandarin scrambling
  - a. wo [VP qing-guo [na ge ren] [liang ci]] 1SG invite-EXP that CL person two time 'I invited that person twice.'
  - b. wo [VP qing-guo [liang ci] [na ge ren]]

Other than resorting to scrambling, we may rely on a construction that fronts the object before the verb (i.e. SOV order) in Chinese. Consider (65). The fronted object is regarded as a secondary topic (Ting 1995) or a contrastive focus (Ernst & Wang 1995). Setting its discourse status aside (but see Shyu 2001 for a discussion), the object is fronted to a post-subject and pre-verbal position. The examples in (66) illustrate that this position is at least higher than VP since it must precede that VP adverb *jiging* 'already'.

(65) [s ZS] [o ni bun syu] [v tai-gwo] laa3 PN this CL book read-EXP SP 'ZS read this book.'

- (66) VP adverbs and object fronting
  - a.  $ZS \left[ \sum_{XP} \left[ \sum_{NP} ni \right] \right] bun syu \left[ \sum_{VP1} \left[ \sum_{Adv} jiging \right] \left[ \sum_{VP2} tai-guo \right] t_i \right]$  laa3 PN this CL book already read-EXP t SP 'NS has already read this book.'
  - b. \*ZS [ $_{\rm VP1}$  [ $_{\rm Adv}$  jiging ] [ $_{\rm XP}$  [ $_{\rm NP}$  ni bun syu ] $_{\rm i}$  [ $_{\rm VP2}$  tai-guo  $t_{\rm i}$  ] ] ] laa3

The adverb *jiging* in (66)a cannot be moved to the same position as objects, since the ordering of adverbials is highly restricted (Mui & Chao 2000). In cases where adverbs are in-situ, a remnant VP can still be created via object fronting (i.e. VP2). However, this remnant VP cannot help give the correct word order in RDV via remnant VP movement. Consider the derivational steps of (67) in (68):

- (67)  $[_{S} ZS]$  jiging  $[_{O} seng$  so ziu ] laa3  $[_{V} sik$ -saai ] PN already whole CL banana SP eat-all 'ZS has already eaten the whole bunch of bananas.'
- (68) Attempted (halfway) derivation<sup>20</sup>
  - a. Base order:

[SZS] jiging [SVP] [VP] sik-saai [SP] [SP] seng so ziu [SP]

b. Topicalization (object fronting)

 $[_{\rm S}~{
m ZS}~]~[_{
m O}~{
m seng}~{
m so}~{
m ziu}~]~{
m jiging}~[_{
m VP}~[_{
m V}~{
m sik}{
m -saai}~]~t_{
m O}~]$ 

c. Defocalization (remnant VP fronting)  $\begin{bmatrix} v_{\text{VP}} & v_{\text{VP}} \end{bmatrix} \begin{bmatrix} v_{\text{VP}} & v_{\text{VP}} \end{bmatrix} \begin{bmatrix} v_{\text{VP}} & v_{\text{VP}} \end{bmatrix} \begin{bmatrix} v_{\text{VP}} & v_{\text{VP}} \end{bmatrix}$ 

In the step (68)c, we have no way to establish a correct word order unless the adverb could be raised further. So even a remnant VP can be created, it is not the

To sum up, a German-type remnant VP movement is inapplicable to derive RDV. We must then allow bare verbs to move long distance to the Spec DefocusP, in a manner similar to A'-movement.

# 6.2.2. Specifier as the landing site

right sort that can derive RDV.

The next question is where this verb lands. We have seen in previous examples that the verb is usually adjacent to SP. Also, SP is a 'phonologically deficient' head, which may require phonological support. It seems attractive to resort to the conventional approach of head-head adjunction, where the moved verb in RDV adjoins to SP, instead of occupying a Spec position. However, the adjacency between the verb and SP is not necessary in RDV. The verb and the SP can be separated by some element, as in (69):

(69) ngo  $t_i$   $t_j$  ceng gaa lo1 [Adv tingjat] [V soeng] 1SG t t ask.for leave SP tomorrow want 'I want to ask for leave tomorrow.'

The adverb tingjat 'tomorrow' intervenes between the SP and the verb. It is

<sup>&</sup>lt;sup>20</sup> SP *laa3* is omitted for simplicity. Assuming that SP is merged after DefocusP is created, the first step of DDC (i.e. defocalization) does not involve any interaction with the SP.

unlikely that both a phrasal category and a head adjoin to the same head (i.e. SP). Rather, we might assume there being multiple Spec positions for both the adverb and the verb in DefocusP. Both of them check their [-Foc] feature with the Defocus head.<sup>21</sup>

Also, as argued in section 2 and 3, DDC (including RDV) displays typical properties of A'-movement (such as locality constraints, reconstruction effects and discourse effects) and hence an instance of A'-movement. Since Spec is regarded as the landing site of A'-movement, the assumption that the verb in RDV also lands here requires no further stipulation; or we will need to explain why A'-movement has different landing sites.

# 6.2.3. Syntactic movement prior to Spell-Out

The major argument for the PF-analysis of head movement is its lack of semantic/ interpretive effects. Chomsky (2001: 137) points out that 'the semantic effects of head-raising in the core inflectional system are slight or nonexistent, as contrasted with XP-movement'. However, at least some cases of head movement show semantic effects (such as expansion of scope or c-command possibilities), discussed in Zwart (2001), Lechner (2005) and Roberts (2010), among others. In particular, Lechner (2005) argues that a PF analysis of movement results in both theoretical and empirical problems. Although RDV in Cantonese does not alter the scope relation or c-command possibilities (due to the mediation of reconstruction), alternation in focus set is illustrated in (36) in section 3.1.2. Platzack (2013) indicates that if head movement has interpretive effects, we expect to find different readings within one language when a constituent has the option as to whether to move to a higher position. This is exactly the case that we found in RDV. RDV is optional in Cantonese and if it occurs, it imposes interpretive effects on the computation of focus set. Together with the syntactic constraints observed by RDV in section 2, RDV should be regarded as a syntactic movement, instead of any post-syntactic operations.

#### 7. Conclusion

In this paper, I have focused on a particular type of right dislocation, where the right-dislocated element is always a constituent or a head. In particular, these instances of right dislocation reveals typical A'-movement properties, including locality constraints and reconstruction effects. They also display interpretive effects by reducing possible focus set (i.e. exclusion of the right-dislocated element from the computation of focus set). The right-dislocated elements are thus regarded as defocus and the corresponding process as defocalization. Despite its similarities

<sup>&</sup>lt;sup>21</sup> The multiple-specifier solution to (69) is far from satisfactory, as one of the reviewers points out. I do not commit myself to this solution in explaining RD that involves more than one element. I shall leave this issue open. The crucial point here is that, as long as some elements can intervene between the SP and the right-dislocated verb, RDV cannot be derived via head-head adjunction.

with topicalization, defocus cannot be reduced to a sentence-final counterpart of topic. Mismatches on targets of topicalization and defocalization are observed. Their behaviors with regard to reconstruction effects also differ. The RD at issue is considered a counterpart of DFC, Dislocation Defocus Construction (DDC).

Concerning the derivation of DDC, I argued that previous analyses on right dislocation could not be applied to DDC. Assuming a head-initial analysis of SP, I proposed a two-step derivation. The first is defocalization, a counterpart of focalization. An element that bears the feature [-Foc] moves to the Spec DefocusP immediately below SP projection (i.e. FP) for feature checking. The remnant TP then moves to Spec FocusP above FP, which is independently motivated. DDC serves to complement the missing part of DFC and covers the neglected instances of right dislocation in Cantonese.

In the last section, I discussed a subtype of DDC, the right dislocation of verb (RDV) and argued that RDV is an instance of syntactic head-spec movement. Theoretically, I showed that the Chain Uniformity Condition and the Head Movement Constraint could not be adopted to argue against the legitimacy of head-spec movement operation. Empirically, I demonstrated that only the head is moved, but not a VP remnant of any sort, in RDV. Also, the landing site is a specifier, rather than a head position. Given that it is subject to syntactic constraints and displays interpretive effects, RDV has to be an operation in the overt syntax.

#### Gloss

1 – First person	2 – Second person	3 – Third person
ACC – Accusative	CL – Classifier	COP – Copula
EXP – Experiential	NEG – Negation	NOM – Nominative
SG – Singular	SP – Sentence particles	PERF - Perfective
PN – Proper noun	PRT – Particle	

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## 【要 旨】

### 広東語倒置文における脱焦点化

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本論文では、広東語には、文中の要素を終助詞の後に移動させることによって「デフォーカス」を表すような倒置文が存在することを主張する。このようなタイプの倒置文は「脱焦点化」という機能を持つと考えられる。また、統語的な特徴としては、局所性条件と長距離依存関係が見られる。したがって、「デフォーカス」は統語領域の左端への A'-移動と考えることができる。この構文は、二つの操作によって派生されうる。一つ目は脱焦点化による A'-移動である。デフォーカスした要素は、左端にある Defocus Phrase(終助詞より低い最大投射)の指定部に移動する。二つ目は残余要素である TP の移動である。残余要素 TP は Focus Phrase(終助詞より高い最大投射)の指定部に移動する。この残余移動は焦点化と見なすことができる。この提案は、Cheung(2005)が提案した Dislocation Focus Construction を補足するもので、今まで扱っていない倒置文を分析することによって、広東語の倒置文の全貌を捉えることが可能となる。最後に、動詞を対象としている倒置文は、Matushansky(2006)が提案した統語的な「主要部から指定部への移動」の一例であると主張する。