A Movement Analysis of Right Dislocation: The Case of Mandarin Chinese

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Right dislocation has been observed across various languages. However, there has not been detailed investigation of this phenomenon in Mandarin Chinese. This study identifies and analyzes the formal syntax of right dislocation in Mandarin Chinese, proposing a remnant movement analysis for the phenomenon in Minimalism. Unlike the previous movement analysis of right dislocation, the present analysis consists of overt topic movement and remnant focalization, capturing the discourse function of right dislocation and specifying the landing site for both right-dislocated phrases and the host clause. The present analysis can also account for the derivation of the other structures with topicalization and with sentence final particles in Mandarin Chinese.

0. Introduction¹

This study explores the formal syntax of right dislocation (henceforth, RD) in Mandarin Chinese (henceforth, MC). RD has been widely investigated in the Romance languages (Cecchetto 1999, López 2009), Germanic languages (Ott & de Vries 2012, 2014, 2016), Japanese (Tanaka 2001) and Korean (Chung 2009, Lee 2009, Ko 2014). However, there have not been detailed studies on RD in MC under the generative framework, raising relevant questions about its properties and analysis in MC. Before moving to the analysis of RD in MC, I firstly describe the structure of RD. Descriptively RD consists of a host clause and a dislocated phrase, as in (1a). In the examples from Italian and MC, *Gianni* and *Lisi* are the dislocated (RD) phrases. In the host clause, there must be a co-indexed resumptive pronoun (*lo*, *ta*) as in (1b) and (1c). Importantly, MC RD as discussed in this study does not have a distinct pause between the host clause and the dislocated phrase, which is prosodically different from afterthought constructions.²

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² The difference between afterthought and right dislocation involves at least prosody and syntax (Averintseva-Klisch 2008). The prosodic difference will be addressed in section 1. The syntactic difference between these two constructions is essentially the following. For afterthought, the

- (1) a. [[host clause] [dislocated XP]]
 - b. Italian (Cecchetto 1999)

Io *(lo_i) odio, Gianni_i.

I him hate Gianni

'I hate him, Gianni.'

c. Mandarin Chinese

Mali yinggai keneng xihuan *(**ta**_i) ba **Lisi**_i. Mary probably maybe like he SFP Lisi

'Mary probably likes him_i, Lisi_i.'

There are two goals to the present study. First, it provides further insight onto the nature of the interface between syntax and discourse/information structure, which has not been extensively investigated. Second, analyses have been proposed for RD data in several languages. MC data exhibit some similarities to, but also differences from those data. Therefore, the analysis of the MC data shown in this study helps refine the analysis of this construction from a comparative perspective. In what follows, I firstly describe the relevant properties of RD in MC and then I argue for a two-operation movement analysis of RD in the language, specifying the landing site of the dislocated phrase and the proposed overall structure of RD in MC. This paper is organized as follows. Section 1 presents the RD data under consideration. Section 2 shows my proposal for the analysis of RD in MC. Section 3 discusses some consequences of the present proposal and presents a comparison to previous analyses. Section 4 concludes the paper.

1. Right dislocation in Mandarin Chinese

RD in MC exhibits several characteristics; nevertheless, only the ones that are relevant to this paper are shown in this section. First, the right dislocated NP can originate either from the subject or object position, as in (2). It is seen that both the RD subject, *Mali* (2a), and object, *Lisi* (2b), are in the rightmost position. Interestingly, there is an asymmetry between the resumptive pronoun for dislocated subject and dislocated object. For dislocated subject, the resumptive pronoun can be omitted while for the

resumptive pronoun does not have to be co-referent with the right-dislocated phrase and island sensitivity does not hold, as shown in (1). Since the distinction between these two would require more extensive discussion, in the present study I focus only on right dislocation.

(1) Afterthought in wh-islands

Zhangsan xiang zhidao shei xihuan ta ba, wo shi shuo, Lisi? Zhangsan want know who like he SFP I SHI say Lisi 'Zhangsan wants to know who likes him, I mean, Lisi?'

dislocated object, the resumptive pronoun is preferably not omitted.³ The asymmetry also holds for pure A'-Topic movement cases, as in (3).

- (2) a. Right dislocated subject
 (Ta_i) kandao Lisi le *(a) Mali_i!
 She see Lisi Asp SFP Mary
 'She_i saw Lisi, Mary_i!'
- b. Right dislocated object

 Mali kandao *(ta_i) le *(a) Lisi_i.

 Mary see he Asp SFP Lisi
 'Mary saw him_i, Lisi_i.'
- (3) a. Topicalized subject

 Mali_i a, (ta_i) xihuan Lisi

 Mary TOP she like Lisi

 'Mary, she likes Lisi.'
- b. Topicalized object
 Lisi_i a, Mali xihuan*(ta_i)
 Lisi TOP Mary like he
 'Lisi, Mary likes him.'

Second, sentence final particles (SFPs) are obligatory in RD (Cheung 2009). It is also illustrated in (2) that for both dislocated subject and dislocated object, the sentence final particle, a, cannot be omitted. Importantly, SFPs in RD always end up in a position preceding the RD phrase, as opposed to appearing in sentence-final position in other clauses (4). The SFP is not allowed after the RD phrase (5), which I will account for in the analysis I develop below, in which the host clause and the RD move to the left periphery separately.

- (4) Mali bu xihuan Lisi ma? Mary not like Lisi SFP 'Doesn't Mary like Lisi?'
- (5) *Mali bu xihuan ta_i *(ma) Lisi_i (*ma)? Mary not like him SFP Lisi SFP 'Intended: Did Mary not like him, Lisi?'

Third, RD does not have a distinct pause between the dislocated phrase and the SFPs, unlike afterthoughts. As in the contrast shown in (6), an afterthought construction (6a) can have a distinct pause or a phrase between the right-dislocated phrase and the host clause. In right dislocation (6b) this is not allowed.

³ The omission of a resumptive object would cause confusion between a normal sentence and a right-dislocated sentence such as (1). In other words, the interpretation of (2) could be the same as the RD where the meaning of it is *Mary saw Lisi*. It could also be that Mary saw something which was mentioned in the previous context and Lisi is used as a vocative.

⁽²⁾ Mali kandao le a Lisi. Mary see Asp SFP Lisi 'Mary saw Lisi.'

(6)

a. Afterthought

Lisi. Mali xihuan ta shi bu ma? wo shuo, Mali like he **SFP** Ι SHI Lisi not say 'Doesn't Mary like him, I mean, Lisi?'

b. Right dislocation

*Mali bu xihuan ta shi shuo Lisi? wo ma **SFP** Ι SHI Mary not like he say Lisi

Finally and most crucially, RD exhibits island sensitivity. The following islands, Complex NP islands (7), wh-islands (8) and Adjunct islands (9) all illustrate the violation in RD in MC. The following examples show that both right-dislocated subjects and objects cannot be moved out of an island. As shown in (7a), when the dislocated subject, Liuyong, correfers with the pronoun in the complex NP condition, moving Liuyong to the right-dislocated position causes an island violation. The dislocated object, Lisi, in (7b) exhibits the same violation. Similarly, when Lisi is originally generated in the wh-island (8), no matter whether it is generated in a subject position or an object position, Lisi cannot be moved to the rightmost position. Lastly, in the adjunct condition (9), Lisi cannot undergo a movement to the rightmost position of the sentence.

(7) Complex NP condition

- a. *Lisi zhidao ta_i xie-guo de changshiao shu dou hen Lisi know he write-Asp DE book dou best selling verv Liuyong_i? ma **SFP** Liuyong 'Intended: Does Lisi know that the books that he has written are bestsellers,
- Liuyong?'
 b. *Ni kan-guo xihuan ta_i changge de ren ma Lisi_i?
 - you see-Asp like he sing DE people SFP Lisi 'Intended: Have you seen the people who like that he sings(,) Lisi?'

(8) Wh-islands

- a. *Zhangsan xiang zhidao ta_i xihuan shenme a Lisi_i? Zhangsan want know he like what SFP Lisi 'Intended: Zhangsan wants to know what he likes(,) Lisi?'
- b. *Zhangsan xiang zhidao shei xihuan ta_i a Lisi_i? Zhangsan want know who like he SFP Lisi

'Intended: Zhangsan wants to know who likes him, Lisi?'

(9) Adjunct Condition

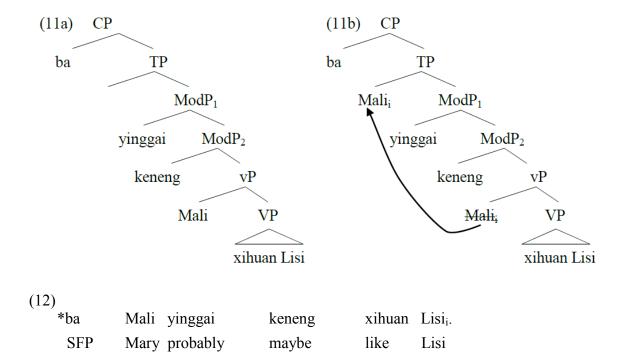
*Ta_i huilai zhiqian ni buneng zou a Lisi_i! He come back before you cannot leave SFP Lisi 'Intended: Before he came back, you cannot leave(,) Lisi!'

2. Proposal

Based on the investigation of new MC data, I argue in favor of a movement analysis of RD that consists of two operations, i.e., overt topic movement of the dislocated RD phrase followed by remnant focalization movement of the TP to a Specifier of Focus position that is part of the split CP domain in MC (see Paul 2014, Erlewine 2016, Pan & Paul 2016, for the position of SFPs in MC). The step-by-step derivation of (10) is shown in (11).

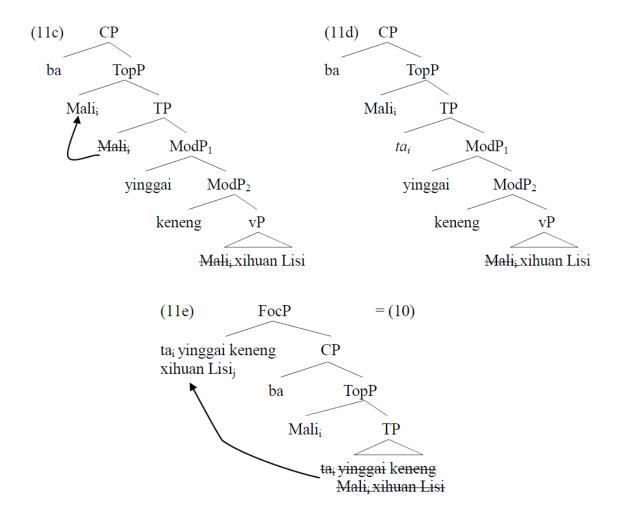
(10) Ta_i yinggai keneng xihuan Lisi ba Mali_i. she probably maybe like Lisi SFP Mary 'She probably likes Lisi, Mary.'

The underlying structure is shown in (11a), where the sentence final particle is base generated at the C position. The first step of the derivation is A-movement of the subject from Spec of vP to Spec of TP, as illustrated in (11b), namely, *Mali* moves to the Spec TP position. The derivation cannot end here; the sentence final particle cannot remain in the sentence initial position as shown in (12). The sentence final particle requires moving the full TP to the Spec of CP position. However, in order to account for right dislocation, TP movement to Spec of CP alone will not account for why the right-dislocated phrase surfaces in the sentence final position. I show below the additional steps I argue for, before TP-movement to Spec, CP applies.



After subject movement to Spec, TP, the next step is moving the subject *Mali* to Spec of TopP position (11c). This A'-movement is crucial in the derivation of right dislocation since it not only separates the dislocated phrase from the host clause but it also captures the fact that the dislocated phrase is the old information, a Topic. After A'-topic-movement, the resumptive pronoun can be argued to be a consequence of remnant movement (11d) (see e.g. Aoun et al. 2001 for arguments for resumption as movement). The last step is remnant movement of the whole TP to Spec of FocP position (11e), which also generates the correct surface word order of right dislocation. Meanwhile, the pragmatic function of the remnant TP is also captured in its behavior as a Focus element, representing new discourse information in the discourse. The present analysis also independently captures the exceptional clause-final position of SFPs in MC.

'Intended: Mary probably likes Lisi.'



This proposal is also supported by the following contrast between topic and focus (13). From the question and answer pair, it can be seen that right-dislocated phrases serve as old information (topic) and cannot be focused. Hence, using right dislocation for the answer (A) is felicitous in (13a), but not in (13b) where the focus of the question is the right-dislocated phrase.

(13) a. Focus on host clause

b. #Focus on the right-dislocated phrase

Q: Mali	shi	zhaoda	ıO	shei?	Q: Shi	shei	zhaodao) Li	si?
Mary	Foc	find		who	Foc	who	find	Li	si
'Who did	d Mary fi	nd?'			'Wh	no foun	d Lisi?'		
A: Ta _i shi	zhaodao	Lisi	a	$Mali_i$	A: #Shi	tai	zhaodao	Lisi a	Mal
she Foc	find	Lici	SFP	Mary	For	c she	find	Lici SI	EP Mar

'It was Lisi that she found, Mary.'

alii Lisi SFP 'It was her who found Lisi, Mary.'

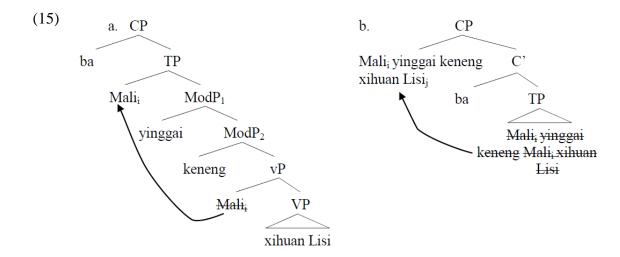
3. Consequences

3.1. Topic movement and sentence final particles

3.1.1. Derivation of basic SFP cases

An additional consequence of the present proposal is the derivation of sentences with SFPs but without right-dislocated phrases, as in (14). The derivation of (14) under the present proposal is illustrated in (15). (15a) is the same derivational step as in (11b); that is, moving the subject NP to Spec of TP position. Unlike the case of right dislocation, if we want to derive this basic sentence with SFP, we just directly move the whole TP to the Spec of CP position, as illustrated in (14b).

(14) Mali yinggai xihuan Lisi keneng ba Mary probably maybe like Lisi **SFP** 'Mary probably likes Lisi.'



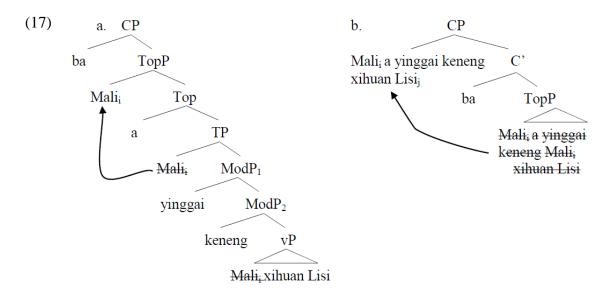
3.1.2. Derivation of Topic-movement only cases

The other consequence of the present proposal is that it can also capture the derivation of topic movement in Mandarin Chinese. (16) is an instance of subject topicalization in Mandarin Chinese, where the topic marker is optional. The topic marker here overtly identifies the subject, *Mali* as occurring in the topic position, and not in the Spec of TP position.

(16) Mali (a), yinggai keneng xihuan Lisi ba Mary TOP probably maybe like Lisi SFP 'Mary, she probably likes Lisi'

The derivation of topicalization in Mandarin Chinese under the present proposal is illustrated in the following. The two steps are identical to (11a) and (11b). After movement of the subject, Mali, to Spec, TP, it further moves to the Spec of TopP position, generating the structure with topicalization as in (17a), which is identical to the step in (11c), except for the fact that the topic head a is overtly realized in (17a).

Unlike the derivation of right dislocation, in cases of topic-movement with SFP such as (16), the whole TopP then moves to the Spec of CP position as in (17b), generating the overt structure with the SFP in final position.



3.2. Comparison with previous analyses

3.2.1. (Remnant) movement analysis

In this section, I briefly review some of the analyses of right dislocation proposed in the literature. One of them is a competing remnant movement approach in the literature, which can capture the fact that RD is sensitive to islands. This analysis also contends that

the right dislocated phrase undergoes a leftward movement, but it is followed by remnant movement of the vP (Cechetto 1999, Frascarelli 2000, Villalba 2000, Belletti 2004), as illustrated in (18) in Catalan.

(18) Steps for movement analysis for RD (López 2009: 102)

(i) Jo	$\mathbf{els}_{\mathrm{i}}$	he	llegit	els	$\mathbf{llibres}_{\mathrm{i}}$
I	them	have	read	the	books
(ii) Jo [els	(object raising)				
(iii) Jo [els	s he llegit t_i] _k [el	s llibres l; tk			(VP raising)

However, there are some limitations of this analysis. First, the motivation for the right-dislocated phrase leftward movement is not explicitly spelled out. Second, the landing site of the right-dislocated phrase and of the remnant vP are not specified. The Chinese data raises additional questions for this analysis, such as the generation of sentence final particles and the specification of the constituent that remnant movement applies to, which I accounted for in sections 2 and 3.2. In addition, the Chinese data may also raises questions about the generation of RD structures with modals, which I illustrated in (14). I explore this issue in detail in other work in preparation.

3.2.2. Base generation analysis (with only one movement step)

There is also a competing base-generation approach that has only one relevant movement operation (other than movement operations that take place for other reasons). This approach assumes that the dislocated phrase (referred to as background in Zwart 2001), is base-generated in a high specifier position. The host clause then undergoes leftward movement (therefore, no remnant movement is involved), as in (19). The Dutch example from Zwart (2001) is provided in (19b).

Nevertheless, there are limitations for this approach as well. First, it does not specify the position of the base-generated RD phrase nor the exact landing site of the host clause. Second, assuming the data from Zwart and MC in fact correspond to the same grammatical phenomenon, it is unclear how Zwart's base-generation analysis would account for the position of the RD phrase in Mandarin Chinese. Particularly, the position of SFPs in Mandarin Chinese indicates that the dislocated phrase needs to be placed in a position higher than TP, which challenges the base generation analysis of the right-dislocated phrase. If we apply Zwart's base generation analysis to MC cases such as (10)

(with or without the overt realization of a topic marker), there would be two possible outcomes, but neither one would generate the correct structure, as shown in (20) and (21). In (20a), it would be assumed the dislocated phrase is base-generated at the Spec, CP position and SFP is not part of the host clause (it is rather the C head, as I argued for e.g. in (11)). After the remnant movement takes place in (20b), it does not generate the correct RD order. Similarly, in (21a), the dislocated phrase would be base-generated at the Spec, CP position but SFP would be part of the host clause. This structure also does not capture the correct RD order in MC as in (21b), since the SFP would end up in clause initial position after remnant movement took place. Last and most important, the base-generation analysis cannot account for the island sensitivity of RD in MC (section 1).

- (20) Possibility 1
 - a. [*Mali* (a)] ba [**Lisi xihuan ta**] Mary TOP SFP Lisi like her
 - b. *[**Lisi xihuan ta**]_i [*Mali* (a)] ba t_i
- (21) Possibility 2
 - a. [*Mali a*] [**ba Lisi xihuan ta**] Mary TOP SFP Lisi like her
 - b. *[ba Lisi xihuan ta]_i[Mali a] t_i

4. Conclusion

Previous analyses of right dislocation (RD) proposed for languages other than Mandarin Chinese (MC) did not specify the landing site of the dislocated phrase and the host clause. Crucially, those analyses are not able to account for the surface placement of sentence final particles in MC. Base-generation analyses also fail to derive the island sensitivity of RD in MC. Considering understudied cases of RD in Mandarin Chinese, I proposed a movement analysis containing two operations, topicalization and focalization, and specified precisely the landing site of the dislocated phrases. This analysis can account not only for the correct surface (phonological) representation but also for the discourse function of RD structures in MC. In addition, my proposed analysis can derive independent cases of basic clauses with SFP and topicalization without RD structures.

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