

RESUMPTIVE PRONOUNS ARE NOT OPTIONAL: EVIDENCE FROM TOPIC CONSTRUCTIONS OF THE POSSESSOR IN MANDARIN CHINESE¹

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In Mandarin Chinese topic constructions of the possessor, optional resumptive pronouns (RP) seem to occur. Meanwhile, the data also show a difference in the extractability of the possessor, i.e., the so-called subject-object asymmetry in extractability (Huang 1982). That is, when the possessor of a subject possessive phrase is topicalized/left-dislocated, a gap is grammatical, and an RP is also allowed; when the possessor of an object possessive phrase is topicalized, a gap is disallowed, and an RP saves the otherwise illicit extraction of the possessor. This paper first argues that the Chinese possessive phrase has a phrase structure that resembles the English counterpart, and adopts Abney's (1987) DP-Hypothesis for the Chinese possessive phrase. Based on the Left Branch Condition (LBC; Ross 1986), the paper then proposes the Symmetrical Hypothesis, i.e., extraction of the possessor is equally illegal from either argument position. With respect to the occurrence of the seemingly optional RPs along with the extraction of the possessor from the subject possessive phrase, the paper posits two distinct possibilities for the extraction: extraction from the subject position directly, which is an argument position, or from the topic position instead, which is a derived position in the left periphery. LBC is at work with the former possibility, and therefore the subject-object asymmetry dissolves; LBC is violable in the latter possibility, given the specific nature of the left periphery (Rizzi 1997). The analysis for the latter possibility leads to the claim that the RP is in fact obligatory, and that the RP and the gap are in different derivations. Further data from Lu (1995) present a challenge to Huang's asymmetry as well as the proposed Symmetrical Hypothesis. That is, when the possessor is 3rd person non-human, the extraction of the possessor from the object position renders the gap grammatical, but the RP ungrammatical. The analysis of the data finds that the animacy of the possessor plays an important role in eliciting the different grammaticality judgment here. As a result, the utterance of the 3rd person non-human RP is prohibited, hence the proposed No Pronunciation Rule. In this sense, Mandarin Chinese also has null RPs.

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1. Introduction

The appearance of resumptive pronouns (RPs) is seemingly optional in some languages, i.e., although they appear obligatorily when a gap is ungrammatical, they alternate quite freely with gaps when the latter are grammatical. Nonetheless, various researchers (e.g. Shlonsky 1992 for Hebrew, Irish, and Standard Arabic; Suner 1998 for Spanish) have consistently proposed an obligatory account for the seemingly optional RPs. To these researchers, the RPs and gaps do not constitute competing forces. Rather, the RPs and the gaps result from different derivations.

In the Mandarin Chinese (MC) topic constructions, in which the possessor of a possessive phrase is left-dislocated,² RPs display the above-mentioned optional behavior.³ For example, a gap is ungrammatical in (1)a; when an RP appears in the position otherwise occupied by a gap in (1)b, the sentence is grammatical. A comma signals the topic, which is in boldface.

- (1) a. ***Zhangsan**_i, Lisi xihuan e_i (de) baba⁴
 Z., L. like GEN father⁵
 ‘As for Zhangsan_i, Lisi likes [his_i] father.’
 (Huang 1987)
- b. **Zhangsan**_i, Lisi xihuan ta_i (de) baba⁶
 Z., L. like he GEN father
 ‘As for Zhangsan_i, Lisi likes his_i father.’

Unlike (1)a and (1)b in which the possessor is extracted from an object, the possessor in (2)a and (2)b originates inside a subject. Notice that in the two examples without RPs, (1)a is ungrammatical whereas (2)a is grammatical. Huang

² Ross (1986: 253-257) discusses the difference between left-dislocation and topicalization. According to him, topicalization is subject to island constraints, whereas left-dislocation is not. He explicitly states that left dislocation is non-movement. With topicalization, a gap appears in the comment; with left-dislocation, a pronoun is inserted. Furthermore, Ross claims that the left-dislocated element must be a constituent. In the examples given below, (i) is topicalization, and (ii) is left-dislocation.

(i) John, I like.

(ii) John, I like him.

³ I will discuss the structure of the MC possessive phrase in detail in Section 4.1. For now, a brief introduction should suffice. The MC possessive phrase consists of a possessor, followed by the genitive marker *de*, and then followed by the possessum. MC does not have a structure that is similar to the English *of*-genitive, i.e., the English possessive phrase *the second chapter of the book* does not have a structural equivalent in MC.

⁴ C. Li & Thompson (1981: 115-116) observes that usually, the omission of the genitive marker *de* is allowed when the possessive relation is between two human relatives and the possessor is a personal pronoun. They also point out that the omission can happen in other cases in which neither the possessor nor the possessum is a human relative.

⁵ Abbreviations used in the gloss:

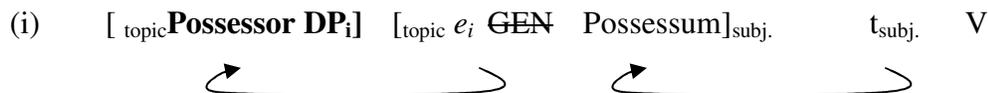
GEN=genitive; CL= classifier; ASP=aspect marker; REL=relativizer; COMP_t=trace-complementizer; COMP_{pro}=RP-complementizer; PART=pause particle; NEG=negative;

⁶ Like English, MC has three distinct 3rd person singular pronouns, and these pronouns are written in different characters in MC. However, the pronouns are homophones (*ta*), and hence the same transliteration.

(1982) first notices the difference in the extractability of the possessor, as is shown in (1)a and (2)a. He labels the difference in extractability a “subject-object asymmetry”.

- (2) a. **Zhangsan_i**, *e_i* ~~de~~ baba hen youqian⁷
 Z., GEN father very rich
 ‘As for Zhangsan, [his] father is very rich.’
 (Huang 1982)
- b. **Zhangsan_i**, *ta_i* (de) baba hen youqian
 Z., he GEN father very rich
 ‘As for Zhangsan, his father is very rich.’

This paper argues against Huang’s subject-object asymmetry. Instead, the paper presents a symmetrical hypothesis with respect to the extractability of the possessor. That is, extraction of the possessor violates the Left Branch Condition (LBC; Ross 1967), and therefore, is ungrammatical either from the subject or from the object position. How can a symmetrical hypothesis account for the grammaticality in (2)a? (2)a is given a different analysis from the one Huang does. That is, it does not constitute counter-evidence to the symmetrical hypothesis, as it is postulated to have the possessor extracted from the topic position, not from the subject position. Below is the illustration of the postulated possessor extraction in (2)a.



Also note that a gap is grammatical in (2)a and an RP is also possible in (2)b. The paper focuses on the seemingly optional behavior of RPs displayed in (2)a and (2)b. It is aligned with previous research in showing that RPs are not optional in the constructions in question.

The investigation undertaken in this paper is interesting in that besides its contribution to the typology of the “optionality” of RPs, it also postulates that the so-called subject-object asymmetry in the extractability of the possessor does not exist, and hence presents a new look at an old problem.

The paper is structured as follows. Section 2 discusses the cross-linguistic distribution, definitions, and non-optionality of RPs, as well as null RPs. I claim that true RPs occur in the topic constructions of the possessor in MC. I also propose a way to identify null RPs. Section 3 introduces the so-called subject-

⁷ The strikethrough of the genitive marker *de* indicates that *de* must be omitted. I will discuss the mandatory omission of *de* in 3.3.3.

object asymmetry in the extractability of the possessor, and posits a symmetrical account, given my hypothesis that the extraction of the possessor is equally illicit out of both argument positions in MC. In section 4, I propose a non-optionality account of RPs for data such as (2)a and (2)b, and formalize the proposal in the framework of Phase Theory. In Section 5, I present additional data that appear to contradict the asymmetry and the Symmetrical Hypothesis outlined in Section 3. By positing a No Pronunciation Rule, I claim that the MC data have a null RP. Unlike Irish (McCloskey 1990; 2000), which uses different complementizers to signal an RP or a trace, and thus to help distinguish a null RP from a trace, MC is not endowed with similar morphological cues. Instead, the judgment for the null RP is partly based on the comparison of the behavior of RPs in relation to the argument hierarchy of the possessor. Section 6 is a brief summary of the analysis presented in this paper. Section 7 discusses remaining issues.

2. Resumptive pronouns: distribution, definition, non-optionality, and null RPs

In this section, I discuss the cross-linguistic distribution, the various definitions that have been put forward for RPs, the obligatoriness of RPs, and null RPs. I make the claim that in MC, true RPs occur in the topic constructions of the possessor. I also briefly discuss how to identify null RPs.

2.1 The distribution of RPs

Cross-linguistically, RPs occur obligatorily where gaps are banned by syntactic principles such as Subjacency and the Empty Category Principle (ECP). However, languages differ in whether they also have “optional” RPs, namely, RPs that alternate freely with gaps when the latter are grammatical.⁸ In languages such as English (McKee & McDaniel 2001) and Palestinian Arabic (Shlonsky 1992), RPs and gaps are in complementary distribution. In this sense, RPs in these languages are not optional. In the following English examples, (3)a and (3)b illustrate the non-optionality of the RP *him*; (3)c and (3)d demonstrate the non-optionality of the RP *he*.

- (3) a. This is the boy_i that I just met *e_i*.
 b. *This is the boy_i that I just met *him_i*.

⁸ There are restrictions on the distribution of the “optional” RPs, though. For example, McCloskey (1990) reports that Irish RPs cannot appear in the structurally highest subject position. In addition, Irish RPs are only optional when neither Subjacency nor the ECP is violated. McDaniel (1986) observes that in Romani, RPs cannot occur in the same sentence as a *wh*-word.

- c. *This is the boy_i that I don't know where *e_i* came from.
- d. This is the boy_i that I don't know where he_i came from.

“Optional” RPs are attested in the following languages: Hebrew (Sells 1987; Shlonsky 1992), Irish (McCloskey 1990; Shlonsky 1992), Lebanese Arabic (Aoun & Li 2003), Moroccan Arabic (Elomari 1998), Romani (McDaniel 1986), Standard Arabic (Shlonsky 1992), and Spanish (Suner 1998). From the following data, we can see that Hebrew allows RPs to appear in positions in which gaps are also permitted.

- (4) a. Ha'is_i se pagasti *e_i* (Sells 1987)
 the man that I-met
 ‘the man that I met’
- b. Ha'is_i se pagasti 'oto_i (Sells 1987)
 the man that I-met him
 ‘the man that I met (him)’

2.2 The definitions of RPs

As is shown in 2.1, there are two types of RPs: one type are obligatory RPs that are in complementary distribution with gaps; the other are “optional” RPs that appear in the same positions gaps do. Given that traditionally, ‘islands’ (Ross 1967) is the term for the domains where extraction is ungrammatical, we can say that obligatory RPs reside in islands whereas “optional” RPs do not.

Aoun & Li (2003) (henceforth A&L) summarize the characteristics of RPs as follows: a true RP appears in an island, it is base-generated, it is a variable bound by a base-generated operator, and it shares the same features with the binding operator. In later sections, I argue that the RPs in the MC data are true RPs according to this definition.

McDaniel (1986) reports an interesting phenomenon in relation to Romani RPs. That is, RPs in the language do not remedy illicit movement from a relative clause, nor do they repair illegal extraction out of adverbials. This phenomenon has prompted McDaniel to speculate that some of the Romani RPs are simply spell-outs of traces at PF: they are not present in syntax at all, otherwise they would save the illicit movement.

McDaniel’s speculation originates from Kayne (1981), who posits RPs as spell-outs of traces. According to Kayne, an RP and a gap start out as one lexical entry; and they separate at Spell-out. Influenced by Kayne’s (2000, as cited in Boeckx 2001) proposal that the A-binder and the bindee set off as one constituent, and that they separate in the derivation of movement, Boeckx argues that RPs are

derived from movement. The essence of Boeckx's proposal is that an RP results from the stranding of an \bar{A} -bound element in the course of movement. Boeckx's proposal provides an adequate account for the trace-RPs in Romani as well as the Japanese resumption observed by Hoji & Ueyama (2003).⁹ After all, if RPs are the result of movement, then when movement is blocked by Subjacency or the ECP, we would expect to see RPs blocked as well.

Recall that true RPs in the sense of A&L are base-generated. McCloskey (1990; 2001) explicitly argues that Irish RPs are base-generated \bar{A} -bound variables that form \bar{A} -dependencies with base-generated operators. Heeding the insensitivity of the Irish RPs to islands, McCloskey states that Irish resumption is not movement.

So far, we have seen different opinions with respect to how RPs are derived. One school of opinion considers RPs to be the result of movement; the other proposes base-generation for RPs. Nonetheless, the two schools of opinion agree on one aspect of the behavior of RPs: that is, RPs are syntactic variables that are allowed to be interpreted at LF.

Interestingly, RPs may also occur for reasons other than syntactic well-formedness. For example, they may occur for ease of processing. Hawkins (1999) discusses the processing difficulty with filler-gap dependencies, as well as our need to hold working memory for the filler while the gap is identified. To Hawkins, such difficulty can be avoided by conventionalizing RPs in the grammar. In fact, McKee & McDaniel (2001) show that in English relative clauses where RPs are not normally allowed, the acceptability of RPs improves with depth of embedding and distance between the head and the relativized position.

2.3 The non-optionality of RPs

Recall that one type of RP is "optional", i.e., they alternate fairly freely with gaps when the latter are grammatical. The "optional" behavior of RPs has attracted much attention in recent years, and the reason is that everything else being equal, RPs are less economical. That is, compared to gaps whose phonetic features are erased at PF (Chomsky 1995: 301), overt RPs are more costly because their phonetic features are realized.¹⁰ Interestingly, recent researchers (e.g. Shlonsky 1992; Elomari 1998; Suner 1998) have proposed an obligatory account for the seemingly optional RPs. In essence, such an account does not consider RPs and

⁹ According to Hoji and Ueyama (2003), Japanese resumption is the exact opposite of the English resumption. That is, Japanese resumption is optional, and it does not repair Subjacency violations.

¹⁰ If Economy is based on actual pronunciation of an element, RPs may be less economical. Yet, in later sections, we will see that MERGE, as opposed to MOVE, is involved in the base-generation of RPs and the operators that bind the RPs. In this sense, RPs are more economical than gaps. RPs are also more economical in Hawkins' view, as they are conventionalized in the grammar to avoid the processing difficulty entailed by gaps.

gaps as two competing forces. Instead, to them, RPs and gaps are hypothesized to be in different derivations.

Let's first look at McCloskey's (1990) analysis for Irish "optional" RPs. In Irish, the complementizer a^N introduces a clause containing an RP, whereas the complementizer a^L introduces a clause with a gap. McCloskey postulates that a base-generated operator occupies the Spec of a^N , and as a result, the base-generated operator binds an RP in the clause; in contrast, a^L signals a moved operator in its Spec position, and hence a gap is left behind in the clause.¹¹ Through McCloskey's analysis, the difference between an RP and a gap becomes clear. That is, a gap is derived from movement, whereby an RP is base-generated; furthermore, the operator that binds a gap is derived from movement as well, whereas the operator that binds an RP is also base-generated. In a word, the gap and the RP are in different constructions.

In Section 3, I propose a non-optional account of the MC data. I argue that the gap in (2)a and the RP in (2)b are in different derivations: (2)a involves phrasal movement to the topic position, followed by successful extraction of the possessor from this position; (2)b involves left-dislocation of the possessor from the subject position. The seemingly optional RP in (2)b is a true RP by A&L's definition, as it saves an ungrammatical sentence that contains a gap; yet the gap that the RP replaces is a different gap from the one in (2)a, given that (2)a is a grammatical sentence and that (2)a and (2)b embody two different derivations.

2.4 Null RPs

Considering that part of my analysis of the MC data involves the postulation of a null RP, some discussion of null RPs in general is called for.

As is discussed in the introduction and Section 2.3, Irish uses complementizers a^N and a^L to introduce clauses containing an RP and a trace, respectively. Null RPs are signaled by a^N , whereas traces are introduced by a^L . In the following examples taken from McCloskey (1990), (5)a has a null RP that is

¹¹ McCloskey's analysis is based on the successive cyclic effect schematized in (i) and the pattern of a^N in (ii).

(i) $[_{NP} NP [_S a^L \dots [_S a^L \dots [_S a^L \dots t \dots]]]]$

(ii) $[_{NP} NP [_S a^N \dots [_S COMP \dots [_S COMP \dots pro \dots]]]]$

McCloskey argues that the successive cyclic effect is created through cyclic WH-movement, whereas the binding of resumptive pronouns is not through movement. McCloskey also notices 3 marked examples in which the default COMP in (ii) is replaced by a^N , as is shown in (iii) below.

(iii) $[_{NP} NP [_S a^N \dots [_S a^N \dots [_S a^N \dots pro \dots]]]]$

The intermediate a^N indicates base-generated intermediate operators and links. McCloskey's account for (iii) is that although, compared to (ii), the intermediate operators and links in (iii) are unnecessary and costly, there's no reason that the intermediate operators should not be generated. The author further speculates that (iii) may be a case in which the principle of economy is violated so that markedness can surface.

introduced by the a^N complementizer *ar*, whereas (5)b has a trace that is signaled by the a^L complementizer *a*.

- (5) a. an fear_i ar labhair tu leis **pro_i**
 the man COMP_{pro} spoke you with-3SING-MASC¹²
 ‘the man that you spoke to (him)’
- b. an fear_i a bhuail tu e_i
 the man COMP_t struck you
 ‘the man that you struck’

The crucial question arises as to how to distinguish a null RP from a trace in languages that do not provide morphological cues. Following Alexander (2001), I speculate that the identification of a null RP can be achieved through binding by a left-dislocated element in an \bar{A} -position. The speculation is schematized below.

- (ii) [CP X_i [C... [island ... Y_i ...]]]

Since left-dislocation is insensitive to island conditions, when we see a topic X that is supposedly co-referential with an element Y within an island, we can pinpoint the element Y as an RP, null or phonologically realized.¹³

In Section 5, I posit the existence of a null RP in the MC data. In addition to the tool discussed above, I also appeal to the different behavior of RPs with respect to the argument hierarchy of the possessor.

3. The topic constructions of the possessor in MC

In this section, I first briefly discuss the topic constructions in MC. Then I introduce the so-called subject-object asymmetry in the extraction of the possessor. Contrary to Huang (1982; 1984; 1987), I argue that such asymmetry does not exist. Instead, I propose that the LBC will rule out the extraction of the possessor from the subject position as well.

3.1 MC topic constructions: Cues for the topic

The ‘comma intonation’ strategy discussed in Rizzi (1997) is also used for the MC topic: in writing, a comma separates the topic from the comment; in speech, a longer pause typically follows the topic. Furthermore, MC also utilizes optional

¹² *Leis* should be construed as an inflected preposition here.

¹³ Chomsky (1977, as cited in McCloskey 1990) categorizes topicalization as a constructions in which an A'-binding relation is formed. What follows naturally is that a topic is in an A'-position, and this should include a left-dislocated topic as well. The status of the MC topic constructions will be examined in detail in Section 3.2.

pause particles *a* (*ya*), *na*, *ba*, and *me* after the topic (Li & Thompson 1981; henceforth L&T (1981)).

One additional cue is crucial to our judgment for the status of the topic in this paper. That is, in the case of the topic constructions of the possessor, a sentential adverb such as *zuotian* ‘yesterday’ can come between a topicalized/left-dislocated possessor and its possessum, whereas a non-topicalized/left-dislocated possessor cannot be separated from its possessum by such adverbs. Below is an example with a non-topicalized possessor. Note that *Zhangsan (de) erzi* ‘Zhangsan’s son’ controls the co-referential constituent deletion in the second clause.¹⁴

- (7) a. *Zuotian* *Zhangsan* (de) *erzi* *bing* *le*,
yesterday Z. GEN son be sick ASP
- suoyi \emptyset_i *mei* *lai* *shangban*.
so NEG come go to work
- “Zhangsan’s son_i was sick yesterday, so [he_i] didn’t come to work.”

If *zuotian* ‘yesterday’ comes in between *Zhangsan* and *erzi* ‘son’, *Zhangsan* becomes the topic and the controller of the co-referential constituent deletion in the second clause, as is shown in (7)b.

- (7) b. ***Zhangsan_i***, *zuotiane_i* ~~*de*~~ *erzi* *bing* *le*,
Z. yesterday GEN son be sick ASP
- suoyi \emptyset_i *mei* *lai* *shangban*.
so NEG come go to work
- “As for Zhangsan_i, [his_i] son was sick yesterday, so [he_i] didn’t come to work.”

Note that the same judgment can be made to the following example in which the RP *ta* ‘he’ replaces the gap. Therefore, we know that *Zhangsan* is a left-dislocated topic in (7)c.

¹⁴ According to Li & Thompson (1976), one of the characteristics of a topic-prominent language is that “..., the topic, and not the subject, typically controls co-referential constituent deletion” (p. 469). I withhold the need to figure out whether *Zhangsan de erzi* ‘Zhangsan’s son’ in (7)a is a topic or a subject for now.

- (7) c. **Zhangsan_i**, *zuotian* ta_i ~~de~~ erzi bing le,
 Z. yesterday GEN son be sick ASP
- suoyi Ø_i mei lai shangban.
 so NEG come go to work
- ‘‘As for Zhangsan_i, his_i son was sick yesterday, so [he_i] didn’t come to work.’’

3.2 Movement vs. base-generation

The MC topic constructions are the focus of many controversies. For example, both movement and base-generation hypotheses have been put forward. Although previous researchers all designate the clause-initial position for the topic, different proposals have been made with respect to whether the topic moves to Spec-CP or adjoins to IP (See J. Li 1996 and works cited therein).

Huang (1982), J. Li (1996), and Shi (2000) consider the topic constructions to be the result of movement. Their argument is built on the observation that the constructions are subject to locality constraints. In the following examples from Shi (2000), an element in the relative clause is topicalized, as in (8)a, and left-dislocated, as in (8)b. A gap is ungrammatical in (8)a and an RP saves the otherwise ungrammatical sentence in (8)b.

- (8) a ***Liyou_i** a, [t_j gan sha e_i] de ren_j hai mei sheng-chulai ne
 L. PART dare kill REL person still not yet born-out PART
 ‘As for Li You_i, the person who dares to kill [him_i] is yet to be born.’
- b **Liyou_i** a, [t_j gan sha ta_i] de ren_j hai mei sheng-chulai ne
 L. PART dare kill he REL person still not yet born-out PART
 ‘As for Li You_i, the person who dares to kill him_i is yet to be born.’

Two aspects of (8)a and (8)b are particularly relevant to this paper. First, the relative clause is in the subject position; therefore, we should expect to see the Complex NP Condition (CNPC; Ross 1967) and the Sentential Subject Constraint (SSC; Huang 1982) at work here.¹⁵ Although it’s hard to tell which island violation actually causes the ungrammaticality of (8)a, we can at least contend that there is no reverse effect of the SSC here. In other words, regardless of whether MC has the SSC effect or not, the CNPC is obeyed in the subject position in (8)a.

¹⁵ Huang’s (1982) interpretation of SSC is different from Ross’s (1967) definition. To Ross, SSC refers to the prohibition of extraction from a subject clause. To Huang, it refers to the prohibition of extraction from the subject position. Huang (1982) argues that Chinese does not have the SSC effect.

In later sections, whether MC has the SSC becomes crucial, for the issue is directly related to the extractability of the possessor from the subject position.

Secondly, the RP *ta* in (8)b can be replaced by an anaphoric epithet *zhege yongshi* ‘this warrior’, as is shown in (8)c.

- (8)c **Liyou_i** a, [t_j gan sha *zhege yongshi_i*] de ren_j hai mei
 L. PART dare kill this warrior REL person still not yet
- sheng-chulai ne
 born-out PART
 ‘As for Li You_i, the person who dares to kill this warrior_i is yet to be born.’

Following Lasnik’s (1991) and Aoun & Choueiri’s (2000) characterization of anaphoric epithets¹⁶, I claim that *zhege yongshi* ‘this warrior’ is both an R-expression and a pronominal, i.e., the epithet has [+referential] and [+pronominal] features. Also, considering that the RP *ta* is bound by an element that is in an \bar{A} position in (8)b, and that the RP and the epithet can appear in the same position, I argue that the RP is a special kind of variable which has the [+pronominal] and [+referential] features (see Huang (1991) for a similar approach for the status of the Chinese null object). Interestingly, the RP *ta* resembles the Irish RPs in that the latter also has a dual nature. According to McCloskey (1990), the Irish RPs give rise to strong cross-over effects because they are variables; they display \bar{A} -disjointness because they are also pronouns.

In contrast to the movement analysis discussed above, Xu & Langendoen (1985; henceforth X&L) argue that the MC topic is base-generated. They propose the following structure for the MC topic constructions:

- (9) [_S X [_S ...Y ...]], where X is a major category and Y, possibly empty, is related to X (p. 20).

In (9), X is the base-generated topic. Y is an element in the comment which is coindexed with X. Y may be empty, or it can be a pronoun. The authors explicitly argue against treating Y as a variable; instead, they liken Y to a pronoun.

X&L’s proposal is partially correct in that they acknowledge a dependency relation between the topic and a position in the comment. In addition, their base-generation account for the topic X also works for Ys that are RPs. From the discussion in Section 2, we’ve learned that a true RP is bound by a base-generated

¹⁶ Aoun & Choueiri (2000) call anaphoric epithets resumptive epithets. They point out that in Lebanese Arabic, these epithets get their pronominal feature from the anaphoric pronominal morpheme that occurs with the epithets. In the case with the MC anaphoric epithet in (8)c, then, the epithet acquires the pronominal feature from the anaphoric proform *zhege* ‘this’.

operator. If we assume that the base-generated operator is packaged with the topic, then the topic needs to be base-generated as well.¹⁷ This also leads to the conclusion of this subsection. That is, some MC topics, in particular, the topics that are co-referential with RPs, must be base-generated.

3.3 The topic constructions of the possessor

3.3.1 The general ban on the extraction of the possessor

It is ungrammatical to extract the possessor and leave the genitive marker *de* in-situ. This is shown in (10).

- (10) a. Wo xihuan Chaoyu de juben (X&L 1985)
 I like C. GEN play
 ‘I like Chaoyu’s plays.’
- b. ***Chaoyu_i**, wo xihuan *e_i* de juben (X&L 1985)
 C. I like GEN play
 ‘As for Chaoyu, I like [his] plays.’

X&L attribute the ungrammaticality of (10)b to the stranding of the genitive marker *de*. They claim that the prohibition on the stranding of *de* is part of a general constraint on stranding prepositions and postpositions in the language (also see McDaniel 1986 and Sells 1987 for a similar constraint in Romani and Welsh, respectively).

However, there is one problem with X&L’s claim. That is, if the stranding of *de* is the sole factor to rule out (10)b, then when *de* is fronted with the possessor, the sentence should be grammatical.¹⁸ Interestingly, as (10)c shows, this is not true.

- (10) c. ***Chaoyu** **de_i**, wo xihuan *e_i* juben
 C. GEN I like play
 ‘As for Chaoyu’s, I like [his] plays.’

The ungrammaticality of (10)c seems to imply that compared to the prepositions and postpositions in MC, *de* is a different head, i.e., *de* takes a specifier, whereas a preposition or postposition does not. Below are some parallel examples of the preposition *zhai* ‘at’. Temporal adverbs such as *zhai sandian* ‘at

¹⁷ What I mean by *package* refers to the situation in which the operator moves with the topicalized element, or is base-generated with the left-dislocated element in Spec-CP.

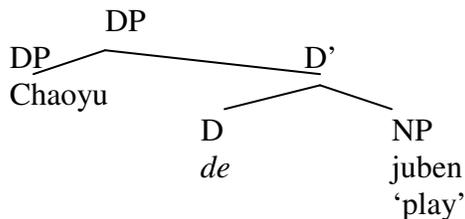
¹⁸ Like English, MC allows the combination of the possessor and the genitive marker to stand alone. Yet this does not mean that the possessor and the genitive marker form a constituent. In the case of the English combination such as *John’s*, the ‘s is cliticized to the possessor instead.

three o'clock' in (11) are called movable adverbs in L&T (1981), as they appear either before or after the topic or subject.

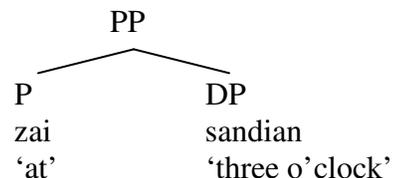
- (11) a. Wo yao zhai sandian jian wo (de) daoshi
 I will at three o'clock meet I GEN advisor
 'I will meet with my advisor at three o'clock.'
- b. * **Sandian**_i, wo yao zhai e_i jian wo (de) daoshi
 three o'clock I will at meet I GEN advisor
 'At three o'clock, I will meet with my advisor.'
- c. **Zhai sandian**_i, wo yao e_i jian wo (de) daoshi
 at three o'clock I will meet I GEN advisor
 'At three o'clock, I will meet with my advisor.'

(11)a has the prepositional phrase *zhai sandian* 'at three o'clock' between the auxiliary verb and the main verb. (11)b attempts to front the prepositional object *sandian* 'three o'clock' alone, and the sentence is ungrammatical. (11)c demonstrates that pied-piping of the preposition *zhai* 'at' saves the ungrammaticality caused by the stranding of the preposition. Comparing (10)c with (11)c, we can see that *de* is indeed a different head, i.e., it does not form a constituent with the possessor; rather, it has the possessor as the specifier. In the tree diagrams below, (iii)a illustrates the structure of the possessive phrase *Chaoyu de juben* 'Chaoyu's play', whereas (iii)b shows the structure of the prepositional phrase *zai sandian* 'at three o'clock'.

(iii)a



(iii)b



The core of X&L's explanation for the general ban on the extraction of the possessor is that the stranding of the genitive marker parallels the stranding of prepositions and postpositions, and that neither is sanctioned in Chinese. The examples in this subsection, i.e., (10)a-c, are about extraction from the object position. Next, we look at Huang's analysis of the extraction from the subject as well as the object position.

3.3.2 The subject-object asymmetry in the extractability of the possessor

Huang (1982) first notices what he calls the subject-object asymmetry in the extractability of the possessor. According to Huang, extraction of the possessor out of a subject is grammatical, whereas the extraction is not grammatical from an object. Data (1)a and (2)a are repeated below as (12) and (13), respectively. In the ungrammatical sentence in (12), the possessor *Zhangsan* is extracted from the object. In contrast, in (13) the possessor *Zhangsan* is extracted from the subject, and the sentence is a perfect sentence.

(12) ***Zhangsan**_i, Lisi xihuan e_i (de) baba
 Z., L. like GEN father
 ‘As for Zhangsan_i, Lisi likes [his_i] father.’

(13) **Zhangsan**_i, e_i de baba hen youqian
 Z., GEN father very rich
 ‘As for Zhangsan, [his] father is very rich.’

Huang (1982) analyzes the asymmetry as a pragmatic issue. That is, (12) is ungrammatical because the intervening subject *Lisi* is interpreted as the possessor of *baba* ‘father’; as a result, the comment does not say anything about the topic. Huang (1987) develops this analysis into a constraint called the Minimal Distance Condition (MDC), i.e., the possessor should be the closest NP to the possessum. The nature of the MDC can be construed as proper antecedent government, i.e., the relativized minimality in the sense of Rizzi (1990).

Huang (1984) appeals to the theta-role assignment of inalienably possessed NP. That is, he claims that the inalienably possessed NP assigns a theta-role to the possessor, and thus allows the possessor to move out. This proposal does not work since extraction from the object possessive phrase is not possible even when the possessive phrase is of inalienable possession, as is shown in (12).

One may wonder whether Huang has been aiming at a combination of the above-mentioned proposals. That is, are there actually two constraints at work here, namely, the constraint on theta-role assignment and the MDC? If the answer to the question is yes, we would expect to see successful extraction from the subject occur only with inalienable possession structures. However, this study finds that the so-called asymmetry persists with alienable possession structures as well, and this is shown in (14)a and (14)b. (14)a and (14)b replicate (2)a and (2)b, which supposedly exemplify successful extraction from an inalienable possession structure in the subject position. Therefore, we see that Huang’s proposals don’t work even when combined.

a result, as a functional head, D bears [AGR]. MC and English possessive phrases both have a lexicalized D, i.e., the genitive marker 's in English, and the *de* in MC. However, unlike English whose D is never null, D in MC can be null or overt.

Note that in (15), the possessor is in the leftmost position of the possessive DP. What follows from the structure in (15) is that the LBC should prohibit the extraction of the possessor.

(16) Left Branch Condition (Ross 1986: 127)

No NP which is the leftmost constituent of a larger NP can be reordered out of this NP by a transformational rule.

Given that LBC is a constraint on movement, I am tempted to postulate that the extraction site should not alter the LBC effect. However, LBC is violable. Uriagereka (1988, as cited in Gavrusseva 2000) notices a correlation between the morphological status of D and the extractability of the possessor: when D is overt, D is “rich”, and the possessor cannot be extracted; when D is null, D is impoverished, and the possessor extraction becomes possible. The proposal works for English in that D in the language is always overt, and the possessor extraction is always blocked. For MC, the proposal predicts that when D is null, the possessor should be able to extract. However, this is not always true for MC.

Boeckx (2001) appeals to non-agreement for cases in which successful extraction occurs. Recall that the DP Hypothesis assigns the [AGR] feature to D. When D is null, the possessor becomes the non-agreeing element, and extraction becomes possible. Like Uriagereka’s proposal, Boeckx’s also works for English, and for some but not for all of the MC data. Let’s see how this is so with examples (17) and (18).

(1)a is repeated as (17). Here, *de* in parentheses refers to the situation in which ungrammaticality results with or without *de*. The proposals discussed above cannot account for the example. That is, although *de* is optional, which means that D may be null, the possessor still cannot extract from the object position.

- (17) ***Zhangsan**_i, Lisi xihuan [_i (de) baba]_{obj}.
 Z., L. like GEN father
 ‘As for Zhangsan_i, Lisi likes [his_i] father.’

(2)a is repeated as (18). The strikethrough of *de* in the example refers to the situation in which *de* must be null. This time, we see that the proposals can account for the examples. That is, when D is null, the possessor can extract from the subject position.

- (18) **Zhangsan**_i, [*e*_i *de* baba]_{subj.} hen youqian¹⁹
 Z., GEN father very be rich
 ‘As for Zhangsan, [his] father is very rich.’

It seems that whether *de* is null or overt affects the extractability of the possessor, yet the morphological status of *de* is not the sole factor for successful extraction. That is, the extraction site does seem to count. In this way, it seems that we have come back to where we started, i.e., Huang’s subject-object asymmetry. More precisely, we’ve come back to Huang’s observation that Chinese does not have the SSC effect. Yet, as is discussed in 3.2, MC does have the SSC. If we assume that MC has the SSC effect in general, but the effect is absent when a leftmost DP is extracted out of a larger DP that is in the subject position, we wouldn’t be able to explain why the LBC becomes violable in the subject position, but the CNPC does not. I propose a different account instead. That is, (17) and (18) give the illusion of the asymmetry only because they have the structures in (19) and (20).

- (19) * [_{topic} **Possessor DP**_i] Subj. V [Obj. *e*_i (GEN) Possessum]
- (20) [_{topic} **Possessor DP**_i] [_{topic} *e*_i GEN Possessum]_{subj.} t_{subj.} V
-

As is shown in (20), the possessor is topicalized from the possessive phrase that is in the topic position. Phrasal movement of the subject possessive phrase happens first, followed by the possessor extraction from the topic position, not from the subject position. In contrast, in (19), the possessor is topicalized directly from the object possessive phrase. One may ask what renders the LBC violable in a language in which the condition is clearly attested. In particular, what sanctions the LBC violation from a derived position? According to Boeckx (2001), in some Austronesian languages, extraction of the leftmost element of a DP is allowed if the extraction site is within a moved element, in particular, if the moved element is in a position higher than the subject position, e.g., the topic position. Note that extraction out of moved elements contradicts the Freezing Principle proposed in Wexler & Culicover (1980).

(20) differs from (19) in the extraction site: the LBC may not be violated from an argument position, whereas it may be violated out of a non-argument position. What could be a possible reason for the difference in the extractability is

¹⁹*Youqian* ‘very rich’ literally means ‘to have money’. I treat *youqian* as a compound verb and a stative predicate here.

- b Wo bu jide ni shuo guo [**zhe ben shu**]_i ta du guo **t_i**
 I NEG remember you say ASP this CL book he read ASP
 Lit. ‘I don’t remember you said this book he had read.’
- c Wo bu jide [**zhe ben shu**]_i ni shuo guo **t_i**’ ta du guo **t_i**
 I NEG remember this CL book you say ASP he read ASP
 Lit. ‘I don’t remember this book you said he had read.’
- d [**zhe ben shu**]_i wo bu jide **t_i**” ni shuo guo **t_i**’ ta du guo **t_i**
 this CL book I NEG remember you say ASP he read ASP
 Lit. ‘This book I don’t remember you said he had read.’

From the examples in (22), we can see that *zhe ben shu* ‘this book’ starts out in the deeply embedded object position in (22)a. It moves to the topic position of its own clause in (22)b. It moves to the topic position of the next higher clause in (22)c, and then raises to the topic position of the matrix clause in (22)d. What is worthy of note is that (22)a-d are each independently grammatical. The examples also illustrate the successive cyclic movement of the topic that results in (22)d.

Furthermore, MC allows phrasal movement from the object position. What this means is that an object possessive phrase can move to the topic position, as is shown in (23)a-b.

- (23) a Zuotian, Lisi kai le **Zhangsan** **de** **che**
 yesterday L. drive ASP Z. GEN car
 ‘Yesterday, Lisi drove Zhangsan’s car.’
- b Zuotian, **Zhangsan** **de** **che**_i Lisi kai le *e_i*
 yesterday Z. GEN car L. drive ASP
 Lit. ‘Yesterday, Zhangsan’s car Lisi drove.’

When *Zhangsan* is topicalized from the topic position, we get (23) c, which is a perfect sentence in MC. Note in (23)c, the sentential adverb *zuotian* ‘yesterday’ comes between the topicalized possessor and the possessum. (23)c thus shows that extraction from a topicalized element is possible.

- (23) c **Zhangsan**_j, zuotian [*e_j* ~~*e*~~ **che**]_i Lisi kai le *e_i*
 Z., yesterday GEN car L. drive ASP
 Lit. ‘As for Zhangsan, yesterday [his] car Lisi drove.’

An RP *ta* can replace the gap in (23)c, as is shown in (23)d.

- d **Zhangsan**_j, zuotian [ta_j (de) che]_i Lisi kai le e_i
 Z. yesterday he GEN car L. drive ASP
 Lit. ‘As for Zhangsan, yesterday his car Lisi drove.’

(23)c replicates the pattern of the gap in (2)a, and (23)d copies the pattern of the RP in (2)b. From the discussion in 3.3.3, we see that (2)a is hypothesized to have the possessor extracted from a topic position, whereas (2)b is considered to have an RP in the subject position. (23)c and (23)d thus pose a problem to the above-mentioned hypothesis, as the two examples reflect extraction from the topic position and resumption in the topic position, respectively. Furthermore, the RP in (2)a is considered to be a true RP in an island, whereas the RP in (23)d is not in an island. I discuss the problem further in Section 7.

3.3.5 Theoretical consequences of the Symmetrical Hypothesis

As is discussed in Sections 3.3.3 and 3.3.4, the Symmetrical Hypothesis has two consequences: the MC RPs are true RPs residing in islands; and MC allows consecutive topicalization. A third consequence follows. That is, there should be some motivation for a double-topic construction, as is schematized in (25), as opposed to a single-topic construction, as in (24).

- (24) [_{topic} **Possessor DP** (GEN) Possessum]_{subj.} t_{subj.} V

- (25) [_{topic} **Possessor DP_i**] [_{topic} e_i GEN Possessum]_{subj.} t_{subj.} V


First, I claim that there is a subtle, yet detectable semantic difference between these two constructions. Namely, with the double-topic constructions, the second topic, the possessum, becomes a contrastive topic.²² That is, the possessor topic sets up a general frame for the comment, whereas the possessum topic reduces the range of the comment to some entity that forms a possessive relationship with the possessor, by contrasting with some other entity that also holds a possessive relationship with the same possessor. Take the following sentence as an example.

²² One may ask whether the constructions under discussion are instead focus constructions. Rizzi (1997) discusses the differences between topic and focus constructions, of which two differences are relevant to our data. A topic can have a resumptive pronoun/clitic in the comment, whereas the focus cannot. Also, a clause can have multiple topics, but it can only have one focus. Based on the data we’ve seen so far, I contend that we are dealing with topic constructions here. Also see Lambrecht (1994) for discussions on contrastive topics.

- (26) **Zhangsan**_i, *e_i* **de** baba hen youqian
 Z., GEN father very rich
 ‘As for Zhangsan, [his] father is very rich.’

The sentence has two topics, namely, the possessor and the possessum. It may mean that as for Zhangsan, his *father* is very rich; yet his *mother* may not. Compare (26) with (27), which has only one topic. The comment in (27) is about Zhangsan’s father, and we do not detect a different frame for the comment.

- (27) **Zhangsan** (**de**) **baba**, hen youqian
 Z., GEN father, very rich
 ‘As for Zhangsan’s father, [he] is very rich.’

Let’s look at examples in which the object possessive phrase is topicalized.

- (28) **Zhangsan** (**de**) **meimei**_i, Lisi xihuan *e_i*
 Z. GEN younger sister, L. like
 ‘As for Zhangsan’s younger sister, Lisi likes [her].’

- (29) **Zhangsan**_j, [*e_j* **de** **meimei**]_i Lisi xihuan *e_i*
 Z., GEN younger sister L. like
 ‘As for Zhangsan, his younger sister Lisi likes.’

(28) has one topic whereas (29) has two. (29) can be interpreted as the following: as for Zhangsan, his *younger sister* Lisi likes; yet his *younger brother* Lisi may not like. With the single-topic sentence in (28), the meaning is simpler, for it only talks about Zhangsan’s younger sister.

The semantic difference manifests itself in syntax, and motivates a double-topic construction, in contrast to a single-topic construction. This is illustrated in Section 4.2.

4. The non-optionality of the MC RPs

In Section 3, I argued that the extraction of the possessor is ungrammatical, and therefore the RPs that appear in the topic constructions of the possessor reside in islands. In this section, I revisit the data introduced at the beginning of the paper, and argue that the RPs are not optional.

4.1 The non-optionality of MC RPs

Let’s first look once again at (1)a and (1)b, repeated below as (30)a and (30)b, respectively.

- (30) a ***Zhangsan_i**, Lisi xihuan e_i (de) baba
 Z., L. like GEN father
 ‘As for Zhangsan_i, Lisi likes [his_i] father.’
- (30) b **Zhangsan_i**, Lisi xihuan ta_i (de) baba
 Z., L. like he GEN father
 ‘As for Zhangsan_i, Lisi likes his_i father.’

As is discussed in the last section, the Symmetrical Hypothesis states that extraction of the possessor should be equally illegal from either the subject or the object position. (30)a illustrates the ungrammaticality of extraction from an object; the ungrammaticality of (30)a disappears in (30)b, in which the RP *ta* replaces the otherwise existent gap.

The data with the subject possessive phrase is more complicated. Recall that the data appear to have optional RPs. (2)a and (2)b are repeated below as (31)a and (31)b, respectively.

- (31) a **Zhangsan_i**, e_i ~~de~~ baba hen youqian
 Z., GEN father very rich
 ‘As for Zhangsan, [his] father is very rich.’
- (31) b **Zhangsan_i**, ta_i (de) baba hen youqian
 Z., he GEN father very rich
 ‘As for Zhangsan, his father is very rich.’

Also in Section 3, I proposed a schema for (31)a. The schema is repeated in (32), which outlines a two-step derivation: phrasal movement of the subject possessive phrase happens first, followed by the topicalization of the possessor from the topic position.

- (32) [_{topic} **Possessor DP_i**] [_{topic} e_i ~~GEN~~ Possessum]_{subj.} $t_{subj.}$ V
-

Next, I posit the structure in (33) for (31)b ((33)=(21)b), in which the possessor DP binds an RP contained in the subject. Given the Symmetrical Hypothesis, the RP is in an island. Therefore, I propose that (33) saves (34), which contains an ungrammatical gap.

- (33) [_{topic} **Possessor DP_i**] [_{subj.} RP_i (GEN) Possessum] V
-

- (34) *_{[topic} **Possessor DP_i**] [_{subj.} *e_i* (GEN) Possessum] V
- 

Comparing (32), (33), and (34), we can see that the RP in (33) is obligatory because it is in complementary distribution with the gap in (34). Furthermore, the RP in (33) does not vary with the gap in (32); the reason is that the RP and the gap are in different derivations, given the distinct structures in (32) and (33).

So far, we have arrived at the conclusion that RPs in the constructions under investigation are not optional: they appear obligatorily where gaps are ungrammatical; when they appear to vary with gaps, for example, in (32) and (33), they are in different derivations from the gaps.

The analysis of the RPs sheds light on the nature of the topic constructions of the possessor. Next, I formalize the constructions in the framework of Phase Theory (Chomsky 1999).

4.2 The topic constructions of the possessor: A formal approach

In this section, I generate patterns that reflect the MC data we have seen so far, and formalize the patterns in the frame work of Phase Theory.

Recall that topicalization results from movement, whereas resumption derives from non-movement. Below are patterns of the topicalization of the possessor. In (35), the subject possessive phrase gets topicalized first, followed by the topicalization of the possessor from the topic position. In (36), the object possessive phrase moves to the lower topic position, followed by the topicalization of the possessor to a higher topic position.

- (35) [_{topic} **Possessor DP_i**] [_{topic} *e_i* ~~GEN~~ Possessum]_{subj.} t_{subj.} V
- 

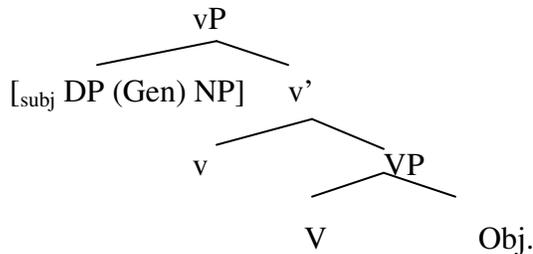
- (36) [_{topic} **Possessor DP_i**] [_{topic} *e_i* ~~GEN~~ Possessum]_{obj.} Subj. V
- t_{obj.}
- 

Following Rizzi (1997), I assume that the topic occupies Spec-TopP, and that in correspondence to the MC data, there are two consecutive TopPs above IP. To motivate the topicalization process, I adopt McCloskey's (2000) analysis. McCloskey (2000) postulates that C can have the EPP feature, or Op-feature, or both. For the *a^L* complementizer, he posits both features: the Op-feature agrees with an element in IP that also bears the Op-feature; the EPP feature triggers the overt movement of the element to Spec-CP. Applying McCloskey's proposal to the MC topicalization patterns, I assign the EPP feature and the Topic feature to

the Top head, and also assign the Topic feature to the element that is to be topicalized. Take the pattern in (35) for example.

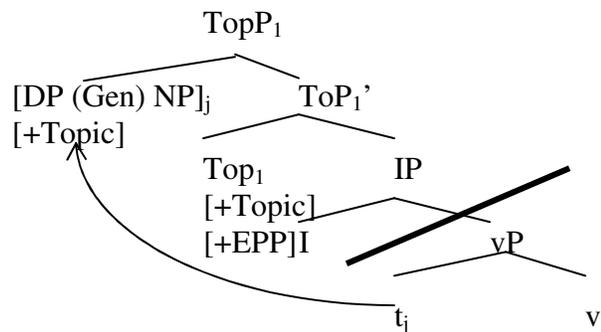
In Phase 1, the subject possessive phrase is in Spec-vP. Notice that the subject is at the edge of this phase, therefore it can access the next phase if there is one. The interpretation computed at this phrase has not included any topic reading yet.

(37)a Phase 1



If the Topic feature is added in the numeration to the subject possessive phrase, and that the Top head has the EPP and the Topic feature, Phase 2 starts. The result is the movement of the possessive phrase to Spec-TopP. Once the operation in this phase is finished, interpretation takes place within this phase, the result of which is a topic reading for the possessive phrase. Note that in the diagram below, the Spec-IP is not filled. This is due to a language-specific property of Chinese, i.e., the EPP in the sense of Chomsky (1981: 27) may not be satisfied by the raising of a VP-internal subject. Aoun & Li (1989) argue that the Chinese subject is either base-generated VP-internally or at Spec-IP. In other words, the Chinese subject does not raise out of VP. I assume that the subject starts out at Spec-vP in (37)a and (37)b, and that the subject does not need to stop at Spec-IP in (37)b.

(37)b Phase 2

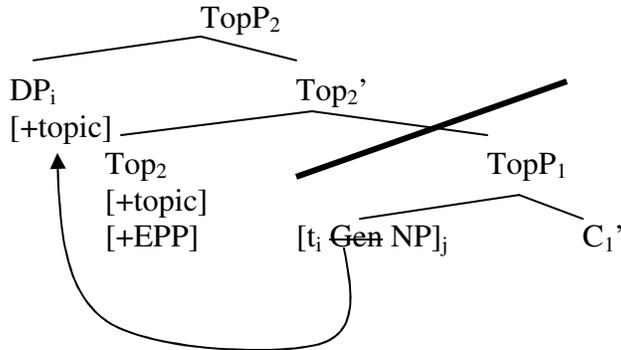


What is worthy of note is that if the derivation stops at Phase 2, the following pattern surfaces, i.e., the pattern of the single-topic constructions.

(38) [_{topic} **Possessor DP** (GEN) Possessum]_{subj.} t_{subj.} V

Likewise, if a Topic feature is added in the numeration to the possessor DP, which is raised with the possessive phrase to Spec-TopP in Phase 2, and if the Top head bears the EPP and Topic feature, Phase 3 starts. Once interpretation is taken care of, the possessor DP has assumed a topic reading.

(37)c Phase 3

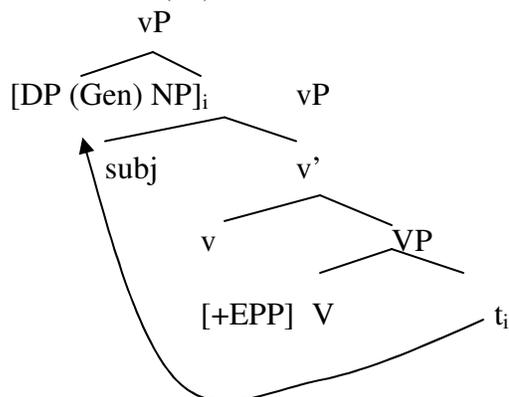


(36) is repeated below. What differentiates (36) from (35) is that for (36), movement begins in the first phase.

(36) [_{topic} **Possessor DP_i**] [_{topic} e_i GEN Possessum]_{obj.} Subj. V

In Phase 1 for (36), the object possessive phrase is base-generated as the complement of V. The EPP feature on v forces the movement of the possessive phrase to adjoin to vP. No topic reading is obtained when the construction of this phase is finished. Notice that the possessive phrase has moved to the edge of the phrase, so it can access the next phase if there is one. The rest of the derivation in (36) replicates that of (35), as is illustrated in (37)b-c.

(39) Phase 1 for (36)



Patterns with resumptive pronouns are given below. In (40), the left-dislocated possessor forms a binding chain with the RP in the subject possessive phrase, whereas in (41) the left-dislocated possessor forms a binding chain with the RP in the object possessive phrase.

- (40) [_{topic} **Possessor DP_i**] [_{subj.} *RP_i* (GEN) Possessum] V
-
- (41) [_{topic} **Possessor DP_i**] Subj. V [_{obj.} *RP_i* (GEN) Possessum]
-

Following McCloskey (2000), I assume that the Top head bears only the EPP feature, the result of which is the insertion of the possessor DP in Spec-TopP through MERGE. The binding chain between the topic and the RP is formed through c-command of the latter by the former.

In the next section, I present data that challenge the so-called subject-object asymmetry in extractability. Given that the data appear to demonstrate successful extraction of the possessor from the object position, the data also pose a problem to the Symmetrical Hypothesis I proposed in Section 3.

5 Additional Data

5.1 Lu's (1995) data and the No Pronunciation Hypothesis

Lu (1995) reports that sometimes, it is also grammatical to extract the possessor from the object possessive phrase. For example, in (42)a the possessor is topicalized from the object possessive phrase and the sentence is grammatical. When the RP *ta* is added in (42)b, the sentence is ungrammatical.

- (42) a Zhe zhi ji, wo zhi chi le ~~de~~ chibang (Lu 1995)
 this CL chicken I only eat ASP GEN wing
 ‘As for this chicken, I only ate [its] wings.’
- b *Zhe zhi ji, wo zhi chi le *ta_i* (de) chibang
 this CL chicken I only eat ASP it GEN wing
 ‘As for this chicken, I only ate its wings.’

At a first look, the data seem to challenge the subject-object asymmetry observed by Huang (1982; 1984; 1987). In addition, the data appear to challenge the Symmetrical Hypothesis, or more precisely, the LBC effects, given that the hypothesis predicts the opposite result with respect to the grammaticality of (42)a and (42)b.

(45) MC No Pronunciation Rule

Do not pronounce the 3rd person nonhuman RP *ta* in the topic constructions of the possessor.

Next, I discuss previous research on similar data and argue that the No Pronunciation Rule is an instantiation of the argument hierarchy defined in Jelinek & Carnie (2003).

5.2 Previous research on similar data

Examples (46) and (47) are adapted from Shi (2000).²³ In (46) an element is topicalized from a relative clause and the sentence is grammatical without an RP. In (47) a gap occurs in the subject clause and the sentence is also grammatical.

(46) **Zhexiehua_i**, wo dou mei jian-guo [xihuan *e_i*] de ren
 these pictures I all NEG see-ASP like DE person
 ‘As for all these pictures, I have not seen a person who likes them.’

(47) **Zhexieshi_i**, wo juede [ta shuo *e_i*] bu heshi
 these thing I think he say NEG proper
 ‘As for these things, I think it’s not proper for him to say.’

Interestingly, Shi uses these examples to argue against the claim that Chinese topic constructions are not subject to locality conditions. Following Li & Thompson (1981), Shi claims that the gaps in (46) and (47) are actually phonetically null realizations of the third person nonhuman RP *tamen*, which is plural.²⁴

X&L point out that unlike English, Chinese disallows an inanimate personal pronoun to coindex with the topic. To X&L, (49)b is bad because of the inanimate personal pronoun *ta* ((48) and (49) are taken from X&L).

(48) **This book**, I read *it*.

(49) a **Zhe ben shu**, wo du guo
 this CL book I read ASP
 ‘As for this book, I have read [it].’

²³ These examples are from Cheng (1991) and Xu & Langendoen (1985) originally.

²⁴ *Men* is a bound morpheme meaning ‘plural’. It is attached to singular personal pronouns.

- b *Zhe ben shu_i, wo du guo ta_i
this CL book I read ASP it
'As for this book, I have read it.'

The rationale behind the claims made by Shi and by X&L becomes clear if we consider the argument hierarchy of the possessor.

5.3 The argument hierarchy of the possessor

Keenan & Comrie (1977; henceforth K&C) propose the Accessibility Hierarchy, i.e., the hierarchy of grammatical relations with respect to how difficult it is for elements holding the grammatical relations to be relativized. For example, subjects are the highest on the hierarchy, and thus the easiest to be relativized. The authors find that languages differ in what positions in the hierarchy are cut off for relativization. They also claim that what position is cut off is conventionalized in the grammar.

Since K&C, efforts have been made to explain what drives the conventionalization of the hierarchies in the grammar. Among the efforts are Bresnan & Aissen (2002; henceforth B&A) and Jelinek & Carnie (2003; henceforth J&C).

B&A explore the driving force in the framework of the Functional Optimality Theory, in which linguistic phenomena are analyzed as output of markedness constraints with functional motivations. To the authors, the argument hierarchies (i.e., the animacy hierarchies in their terms) are purely morphosyntactic.

In contrast, J&C consider the argument hierarchies to result from the interaction between semantic prominence and syntactic prominence. To them, the argument hierarchies refer to the ranking of arguments on the basis of presuppositionality, i.e.,

“More local, more specific, more definite, and more human arguments are more likely to be presupposed by the speaker in discourse. Such arguments outrank non-local, non-specific, less human etc., elements” (p. 266).

In the case of MC topicalization of the possessor, I find the following examples very interesting in relation to the argument hierarchy of the possessor.

- (50) a Wo renshi zhe zhi gou de zhuren
I know this CL dog GEN owner
'I know the owner of this dog.'

- b ??**Zhe zhi gou**_i, wo renshi *ta*_i (de) zhuren
 this CL dog I know it GEN owner
 ‘As for this dog, I know its owner.’

In (50), the possessor is nonhuman whereas the possessum is human. (50)b sounds odd to me. Part of the reason is that the possessor is low on the argument hierarchy while the possessum is higher, and as a result, topicalizing the nonhuman possessor is odd. Compare (50) with (51), in which both the possessor and the possessum are human, the oddity disappears in (51)b.

- (51) a Wo renshi Zhangsan (de) muqin
 I know Z. GEN mother
 ‘I know Zhangsan’s mother.’

- (51) b **Zhangsan**_i, wo renshi *ta*_i (de) muqin.
 Z. I know he GEN mother
 ‘As for Zhangsan, I know his mother.’

These examples show that a nonhuman possessor is not as good as a human possessor, i.e., the former is less likely to hold the possession of the possessum. Interestingly, English also distinguishes a more preferred possessor from a less preferred one, yet in a different way. That is, with a preferred possessor, English uses ‘s-genitive, in contrast with the *of*-genitive for a less preferred possessor. Comparing (52)a with (52)b, we can see that a human possessor appears in the ‘s-genitive structure, whereas a nonhuman possessor appears in the *of*-genitive structure.²⁵

- (52) a John’s second chapter²⁶
 b the second chapter of the book

Moreover, J&C also point out that arguments that are low ranked on the hierarchies are not as desirable topics as those higher on the hierarchies. According to this view, the oddity in (50)b may have to do with the topicality of the possessor as well. That is, the nonhuman topic *zhe zhi gou* ‘this dog’ is not a good topic.

Taking these factors into account, I propose that the argument hierarchies are manifested in the MC topic constructions of the possessor in the form of the No

²⁵ Previous research on the two genitive structures is cited in B&A. According to B&A, the research shows that the different structures reflect the topicality and animacy hierarchies in English.

²⁶ The possessive phrase may refer to the second chapter of John’s work, for instance, his book, dissertation, etc.

Pronunciation Rule. In this sense, the No Pronunciation Rule is an instantiation of the argument hierarchies.

6 Summary

This paper began with examples that seemingly demonstrate the subject-object asymmetry in the extractability of the possessor. The examples also showed that there may be “optional” RPs in the MC topic constructions of the possessor. Nonetheless, the paper argued against the asymmetry, and instead posited the Symmetrical Hypothesis, which states that the extraction of the possessor should be equally illegal from either argument position. One consequence of the Symmetrical Hypothesis is that the MC RPs are true RPs in the sense of A&L, and therefore are not optional. Then the paper introduced additional data that appear to challenge both the asymmetry view and the Symmetrical Hypothesis. Through the discussion on how to identify a null RP, as well as the comparison of the behavior of the RPs with respect to the argument hierarchy of the possessor, the paper argued for the existence of a null RP in the data.

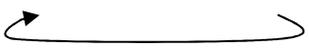
7 Remaining issues

Two closely related issues remain unresolved, and call for deliberation. One issue has to do with the speculation that the LBC is violable in the left periphery. The speculation needs more supporting evidence. The other issue is concerned with (2)b and (23)d.

Recall that in 3.3.3, I hypothesized that extraction of the possessor should be equally ungrammatical from argument positions, given the possessive structure proposed in (15) and the LBC. I also speculated that LBC is violable in the left periphery, considering that LBC is a constraint on representation, and that the need to topicalize a left-peripheral element may present recalcitrant resistance to the LBC. The Symmetrical Hypothesis and the speculation prompted me to generate three patterns for data containing a subject possessive phrase. These patterns are presented in (53), (54), and (55) below.

- (53) [_{topic} **Possessor DP_i**] [_{topic} *e_i* GEN Possessum]_{subj.} *t*_{subj.} V

- (54) * [_{topic} **Possessor DP_i**] [_{subj.} *e_i* (GEN) Possessum] V

- (55) [_{topic} **Possessor DP_i**] [_{subj.} *RP_i* (GEN) Possessum] V


(53) hypothesizes that LBC is violable in a topic position, whereas (54) posits the ungrammaticality for the extraction from a subject position. In (55), a left-dislocated topic binds an RP in the subject position.

Supporting evidence for (53) comes from (23)c, in which the possessor is topicalized from the object possessive phrase that is in a topic position. (23)c is schematized in (56).

(56) [_{topic} **Possessor DP_i**] [_{topic} *e_i* GEN Possessum]_{obj.} Subj. V *t*_{obj.}

(56) supports the postulated pattern in (53), as it shows successful extraction out of the topic position. (23)d suggests that RPs can appear in a derived position, and that the RP in (23)d is not a true RP, in contrast to the RP in (55). (23) d is schematized in (57).

(57) [_{topic} **Possessor DP_i**] [_{topic} RP_i (GEN) Possessum]_{obj.} Subj. V *t*_{obj.}

Now the analysis presented in this paper faces a dilemma. On the one hand, we see that the LBC can be violated in a derived position. On the other hand, in (57), we also see an RP that does not reside in an island. This challenges the claim made early in the paper that the RPs in the MC data are all true RP in the sense of A&L.

The gap in (54) and the RP in (55) are in complementary distribution, which reflects the LBC effect in the subject position. (1)a and (1)b also show the complementary distribution of the RP and the gap, and are schematized in (58) and (59), respectively.

(58) * [_{topic} **Possessor DP_i**] Subj. V [_{Obj.} *e_i* (GEN) Possessum]

(59) [_{topic} **Possessor DP_i**] Subj. V [_{Obj.} RP_i (GEN) Possessum]

Now we have seven patterns. The gap in (54) and (58) are in complementary distribution with the RP in (55) and (59), respectively. The RPs in (55) and (59) are true RPs. The RP in (57) seems to vary with the gap in (56), yet it is neither a true RP nor an optional RP. It is not a true RP, as it is not in an island. From the discussion in Section 2, we learned that RPs and gaps are in different derivations, on the assumption that RPs are base-generated. In this sense, the RP in (57) is not optional, either.

What is left is (53). It seems reasonable to posit the pattern in (60). After all, if as (57) shows, a possessor that originates inside an object can be left-dislocated and binds an RP in a topic position, then a possessor that originates inside a subject should also be able to bind an RP in a topic position. The RP in (60) resembles the RP in (57) in that both are in the topic position, and neither is a true RP.



The postulation in (60) has one consequence. That is, I need to revise the claim made early in the paper, and instead suggest that some RPs in the MC data appear in the topic position, and that these RPs are neither true RPs nor optional RPs.

In the meantime, patterns that show successful possessor extraction, namely, (53) and (56), also demonstrate that Huang's MDC should be combined with the consideration of the morphological status of the genitive marker *de*. In other words, both distance and AGREE play a role in the MC topic constructions of the possessor.

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