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## Possessor Extraction in Mandarin Chinese

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## **Abstract**

In this paper, I argue that genitive possessors should be distinguished from possessive modifiers and that possessor extraction is allowed in Chinese. Unlike previous analyses that treat sentences with possessors at the sentence-initial position as involving base-generation, I show that the construction at issue is island sensitive. My point of departure is Bošković's (2005) generalization that adjunct extraction is not allowed in DP languages and I show that Chinese behaves in the same way. Along this line of analysis, I adopt his suggestion that a language which has DP yet allows possessor extraction, like Hungarian, does so because the whole possessor phrase is located in SpecDP in such a language. I argue that the seeming discrepancy between extraction from within subject and object arguments is only apparent: subject possessors can be extracted by either A- or A'-movement, whereas object possessors can only be extracted via A'-movement. I show that the unstable acceptability of object extraction is not due to syntactic reasons, but because of the availability of proper information structure. The result of this study suggests that Bošković's (2005) observation about English and Hungarian is correct and Chinese behaves on a par with the latter type of language.

# Possessor Extraction in Mandarin Chinese

Yu-Yin Hsu \*

## 1 Introduction

There is a long-standing puzzle concerning possessors of arguments in Mandarin Chinese: a possessor of a subject can be realized at the sentence-initial position (1a), but sentences with a possessor of an object sitting at the sentence-initial position show variable judgments (1b–c).

- (1) Subject possessors <sup>1</sup>
- a. Zhangsan<sub>i</sub> xianran [e<sub>i</sub> shoubi] hen.chang.  
Zhangsan obviously arm very.long  
'Zhangsan obviously has very long arms.'
- Object possessors
- b. ?\*Zhangsan<sub>i</sub> wo renshi [e<sub>i</sub> baba].  
Zhangsan I know father  
'Zhangsan, I know [his] father.'
- c. Na.zhi.tuzi<sub>i</sub> wo mingming kanjian.le [e<sub>i</sub> erduo]!  
that.CL.rabbit I obviously see.PERF ear  
'It is true of that rabbit that I saw its ears!'

In the literature, (1a) and (1b) are often referred to as a “subject-object asymmetry.” Sentences like (1a) are argued as involving Topic, while sentences like (1b) and (1c) are deemed as violating condition (2a) or (2b) (see Huang, 1982; Shyu, 1995, among others).

- (2) a. Ross’s (1967) Left Branching Condition (hereafter LBC): movement  
b. Huang’s (1982) Generalized Control Rule (hereafter GCR) that an empty pronoun is coindexed with the closest potential antecedent: base-generation

However, both (2a) and (2b) fail to fully account for the phenomenon shown in (1). That is, given LBC, the grammatical (1a) is left unexplained; on the other hand, according to GCR, the difference in acceptability between (1b) and (1c) becomes mysterious.

Unlike previous analyses, in this paper I will argue that there is no so-called subject-object asymmetry and that the difference between (1b) and (1c) is not syntactic but due rather to information structure. According to Bošković’s (2005) observation about left branching extraction (hence LBE), Ross’s (1967) LBC should not be treated as a condition, but an illustration of part of the facts. Therefore, I will show in section 2 that the phenomenon at issue involves movement. In section 3, I will discuss how sentences like (1) are derived. The discussion will then proceed to distinguish possessors and possessive modifiers in Mandarin Chinese from a cross-linguistic point of view in an attempt to clear up data in relation to the phenomenon at issue (section 4). Section 5 briefly concludes this paper.

## 2 Sentence-Initial Possessors are Island Sensitive

According to Ross’s (1967) LBC, sentences like (1) are mostly analyzed as base-generation (e.g., Huang, 1982 and Shyu, 1995). In this section, I show that sentences like (1) do not involve

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<sup>1</sup> The abbreviations for the glosses used in examples are: DE, marker for nominal modifiers; CL, classifier; Perf, perfective aspect marker; Exp, experienced aspect marker; SHI, emphatic marker; Q.PART, particle for questions; BEI, passive marker. In this paper, I also use “Topic” and “Focus” as labels to refer to the linguistic items that carry their informational roles.

pro/PRO, and that a movement approach should be considered.

In Mandarin Chinese, a sentence-initial Topic can be base-generated or derived.

- (3) a. Base-generated Topic:  
 [<sup>TOP</sup>Zhangsan<sub>i</sub>], [<sup>SUBJ</sup>ta<sub>i</sub>] zuo.le.  
 Zhangsan he leave.PERF  
 ‘Zhangsan<sub>i</sub>, he<sub>i</sub> left.’  
 b. Derived Topic:<sup>2</sup>  
 [<sup>TOP</sup>Zhangsan<sub>i</sub>], [<sup>SUBJ</sup>ta<sub>\*i/j</sub>] bu renshi e<sub>i</sub>.  
 Zhangsan he not know  
 ‘Zhangsan, he<sub>\*i/j</sub> doesn’t know [him<sub>i</sub>].’

Since Mandarin Chinese has PRO/pro on a par with other languages (Huang, 1982), the optional pronoun *ta* suggests that sentence-initial possessors might be base-generated Topics.

- (4) Subject Possessor  
 ‘Zhangsan obviously has a very rich father.’  
 a. Zhangsan<sub>i</sub> xianran [PRO<sub>i</sub>/pro<sub>i</sub> baba] hen.youqian.  
 Zhangsan obviously father very.rich  
 b. Zhangsan<sub>i</sub> xianran [ta<sub>i</sub> baba] hen.youqian.  
 Zhangsan obviously his father very.rich  
 (5) Object Possessor  
 ‘That rabbit, I just saw (its) ears!’  
 a. Na.zhi.tuzi<sub>i</sub>, wo gang kanjian [PRO<sub>i</sub>/pro<sub>i</sub> erduo] le!  
 that.CL.rabbit I just see ear PERF  
 b. Na.zhi.tuzi<sub>i</sub>, wo gang kanjian [ta<sub>i</sub> erduo] le!  
 that.CL.rabbit I just see its ear PERF

Generally, moving part of the conjunct is prohibited, but PRO/pro can be used in conjuncts to avoid such a violation.<sup>3</sup> It is thus expected that no island effect should be observed in this construction. However, the contrasts shown between (6a–b) and between (6c–d) suggest that relating the sentence-initial possessor with its possessum in part of the conjunct incurs ungrammaticality.

- (6) Subject Possessor:  
 a. Xianran [[Zhangsan baba] han [Lisi baba]] dou hen.youqian.  
 obviously Zhangsan father and Lisi father all very.rich  
 ‘Obviously, Zhangsan’s father and Lisi’s father are all very rich.’  
 b. \*Zhangsan<sub>i</sub> xianran [[PRO<sub>i</sub>/pro<sub>i</sub> baba] han [Lisi baba]] dou hen.youqian.  
 Zhangsan obviously father and Lisi father all very.rich  
 ‘Obviously, Zhangsan’s father and Lisi’s father are all very rich.’  
 Object Possessor:  
 c. Wo renshi [Zhangsan<sub>i</sub> baba] han [ta<sub>i</sub> mama].  
 I know Zhangsan father and his mother  
 ‘I know Zhangsan’s father and his mother.’  
 d. \*Zhangsan<sub>i</sub>, wo renshi [[PRO<sub>i</sub>/pro<sub>i</sub> baba] han [ta<sub>i</sub> mama]].  
 Zhangsan I know father and his mother  
 ‘Zhangsan, I know [(his) father] and [his mother].’

I take (6) as an indication that the phenomenon at issue involves movement, i.e., the empty categories in (6b) and (6d) are not PRO/pro.

<sup>2</sup> A derived Topic has to obey island constraints, e.g., moving *Lisi* out of a complex NP is prohibited.

(i) \* [<sup>TOP</sup>Lisi]<sub>i</sub>, [<sup>SUBJ</sup>wo] renshi [henduo [[xihuan t<sub>i</sub>] de] ren].  
 Lisi I know many like DE person

‘Lisi<sub>i</sub>, I know many people who like [him<sub>i</sub>].’

<sup>3</sup> Thanks to Yoshihisa Kitagawa for pointing this out to me.

A similar point is shown by sentences with complex NPs. If such sentence-initial possessors bind a pro/PRO in the following nominal, such sentences should be immune to island effects. However, (7) shows that sentence-initial possessors cannot be related to the possessums within complex NPs, i.e., sentence-initial possessors are island sensitive.

- (7) a. Subject Possessor  
 ?\*Zhangsan<sub>i</sub> xianran [[t<sub>i</sub> baba] xie de shu] dou mai.de hen.hao.  
 Zhangsan obviously father write DE book all sell.DE very.good  
 ‘Zhangsan, obviously, books that [his] father wrote all sell very well.’
- b. Object Possessor  
 \*Zhangsan<sub>i</sub> wo nian.le [bu shao [[ t<sub>i</sub> baba ] xie ] de shu].  
 Zhangsan I read.PERF not few father write DE book  
 ‘Zhangsan, I have read quite a few books that [his] father wrote.’

In other words, movements are attested, i.e., possessors cannot be extracted out of conjuncts (e.g., (6)) or complex NPs (as in (7)). I argue that sentences at issue are derived by moving a possessor from an argument to the sentence-initial position.

In sum, although the occurrence of the pronoun *ta* in (4) suggests that licensing sentence-initial possessors *via* base-generation is possible, examples (6) and (7) indicate that sentences without overt pronouns as in (1) are island sensitive. In the following section, I will discuss how such sentences are derived.

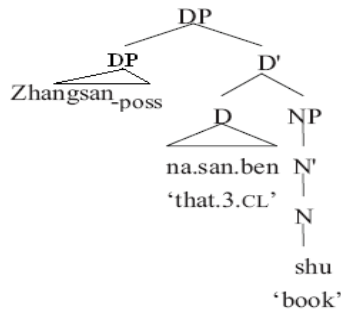
### 3 Extracting Possessors by Movement

Based on his observations about languages with different acceptability of LBE, Bošković (2005) presents two accounts to why some languages ban LBE. Concerning LBE of possessors, Bošković notes that movement of a non-constituent is banned. It is suggested that languages with the structure of DP like English ban LBE of possessors because that involves moving non-constituents (8a). However, a language which has DP yet allows possessor extraction, like Hungarian, does so because the whole possessor phrase is located in Spec,DP in such a language ((8b); cf. Bošković, 2005:4).

- (8) ‘Peter, only Mary saw [his] hat.’  
 a. \*Peter’s, only Mary saw [t<sub>i</sub> hat]  
 b. Péter-nek<sub>i</sub> csak Mari látta [a t<sub>i</sub> kalap-ja-t ]. (Szabolcsi, 1994)  
 Peter-DAT only Mari-Nom saw the hat-POSS.3.SG-ACC

According to the insight drawn from (8), I claim that a possessor in Mandarin Chinese is located in Spec,DP as a whole, not forming a constituent with its possessee, and thus extracting possessors in Mandarin Chinese is legitimate. The proposed structure of possessors is in (9).

- (9) Mandarin Chinese possessors



In the following subsections, I will discuss different types of movement in sentences with extraction of subject/object possessors.

### 3.1 Object Possessor Extraction as Topicalization/Focalization

With respect to sentences like (1c), one way to derive such sentences is by A-bar movement.<sup>4</sup>

- (1) c. Na.zhi.tuzi<sub>i</sub>      wo      mingming      kanjian.le [t<sub>i</sub> erduo].  
           that.CL.rabbit    I      obviously    see.PERF      ear  
           ‘It is true of that rabbit that I saw its ears!’

This conjecture is supported. Based on the distribution of determiners like *henduo* ‘many,’ Tsai (1995) argues that local Topicalization is not allowed within relative clauses in Mandarin.

- (10) \*[<sub>DP</sub> Henduo [<sub>CP</sub> Akiu<sub>j</sub>, e<sub>i</sub> xihuan e<sub>j</sub>] de ren<sub>i</sub>] mei lai.  
           many      Akiu      like      DE    person    not    come  
           ‘As for Akiu, many people who like [Akiu] did not come.’

Therefore, if object possessors are only moved by A-bar movement, we infer that possessors cannot be extracted as a local Topic within relative clauses. The result is shown as expected. The possessor *Akiu* in (11a) is argued to be Topicalized from the object to the sentence-initial position, and we can see that the same sequence is not allowed in a relative clause (11b).

- (11) a. Akiu<sub>i</sub>      wo      kan.guo      [t<sub>i</sub> jiaren ] (dansh mei      kanguo pengyou).  
           Akiu    I      see.EXP      family    but    not    see.EXP    friends  
           ‘Akiu, I’ve seen [his] family (, but not [his] friends).’  
       b. \*[<sub>DP</sub> Henduo [<sub>CP</sub> Akiu<sub>i</sub> wo kanguo      [t<sub>i</sub> jiaren ]]-de gongzuo] dou hen.hao.  
           many      Akiu    I    see.EXP      family    DE    job      all    very.good  
           ‘Many jobs of family members of Akiu that I’ve seen are all very good.’

The next question about extraction of object possessors concerns the variation in acceptability. I claim that such disagreement of judgments comes from the availability of proper information structure. Assuming Krifka’s (2007) definition of Focus as having “a list of alternatives,” I suggest that different acceptability results from the availability of a specific contrast in speakers’ minds. Sentences (1b), (1c), and (12) have identical structures and yet they show different acceptability. Example (1b) involves a kinship term *baba* ‘father’ as the possessum, in (1c) there is a body-part term *erduo* ‘ear,’ and (12) has an alienable possessum *dianying* ‘movie.’

- (1) b. ?\*Zhangsan<sub>i</sub>      wo      renshi      [t<sub>i</sub>      baba ].  
           Zhangsan<sub>i</sub>    I      know      father  
           ‘Zhangsan, I know [his] father.’  
       c. na.zhi.tuzi<sub>i</sub>,      wo      mingming      kanjian.le [t<sub>i</sub> erduo]!  
           that.CL.rabbit    I      obviously      see.PERF      ear  
           ‘It is true of that rabbit that I saw its ears!’  
       (12) ?Li An (a),      wo      kan.guo [ t<sub>i</sub>      bushao dianying].<sup>5</sup>  
           Ang Lee      I      see.PAST      several movie  
           ‘Speaking of Ang Lee, I’ve seen several of [his] movies.’

I suggest that kinship terms, *as such*, are weak in constructing the concept of “a list of alternatives.” Therefore, when the object possessor is topicalized, it is harder for the remnant NP to get the focus interpretation. Moreover, it is observed that sentences with “disfavor” judgments always have their acceptability improved by adding contrastive components. The discourse in (13) shows this point: (1b) turns into fully acceptable as in (13b).

<sup>4</sup> A-movement wouldn’t be considered because of violating minimality constraints.

<sup>5</sup> The *a* after *Li An* ‘Ang Lee’ in (12) indicates a pause, which usually accompanies Topic.

- (13) a. Do you know Zhangsan's father?  
 b. Zhangsan<sub>i</sub> (a), wo bu renshi [t<sub>i</sub> baba] keshi renshi [t<sub>i</sub> mama].  
 Zhangsan<sub>i</sub> I not know father but know mother  
 'Zhangsan, I don't know [his] FATHER, but [I] know [his] MOTHER.'

In other words, when proper contexts are available, such a movement is licit. In addition to Topic, sentence-initial possessors can get Focus interpretation. This point is supported by cleft-sentences. In Mandarin Chinese, emphatic *shi* marks focus elements in cleft-sentences.<sup>6</sup> In the scenario in (14), Speaker A mentions that he knows Zhangsan's father, but Speaker B doesn't get the information and mishears as knowing Lisi's father. He asks Speaker A to further clarify the information and Speaker A replies in (14b).

- (14) a. Ni shuo ni renshi Lisi baba ma?  
 you say you know Lisi father Q.PART  
 'Did you say you know Lisi's father?'  
 b. ?Shi Zhangsan<sub>i</sub>, wo renshi [t<sub>i</sub> baba] (, bushi Lisi).  
 SHI Zhangsan<sub>i</sub> I know father (, not Lisi)  
 'It is Zhangsan that I know [his] father (, not Lisi).'

As shown in (14), when the sentence-initial possessor involves Focus interpretation, it is compatible with emphatic *shi*. Examples (10–14) show that possessors of objects can be extracted by Topicalization or Focalization if proper contexts are provided, while A-movement and base-generation are not available devices.

Also note that while extracting a possessor from a subject is always acceptable, extracting a *wh*-possessor from a subject, as in (15), is often assumed to be not acceptable.

- (15) ?\*Shei<sub>i</sub>, ni shuo [t<sub>i</sub> baba] juan.le hen.duo.qian?  
 who you say father donate.PERF very.many.money  
 'Whose father did you say that he donated a lot of money?'

According to Rizzi (1997), *wh*-elements as Focus cannot involve Topicalization. Thus, the acceptability of sentences like (15) is expected. However, one may wonder about the other possible A-bar movement, e.g., Focalization. I assume that "identificational Focus" should be distinguished from "information Focus" (since the latter involves no syntactic reordering and only conveys new information). Given Chinese as a *wh*-in-situ language, *wh*-words in non-default position are relatively rare, but *wh*-words can occur in a non-canonical position to convey specific identificational Focus, different from canonical *wh*-questions. The following discourse illustrates one instance. Speaker A reports that "Zhangsan said Lisi's father donated a huge amount of money." Assuming that Lisi's family is not rich, Speaker B is extremely surprised about the donor that is mentioned and wants to confirm the information. He asks:

- (16) SHEI<sub>i</sub>, ni shuo [t<sub>i</sub> baba] juan.le hen.duo.qian?  
 who you say father donate.PERF very.many.money  
 'It is WHO did you say that his father donated a lot of money?'

What is important for current purposes is that (16) is clearly better than (15). Granted that contexts that license extraction of object possessors are rather restricted, sentences with extraction of object possessors are thus often degraded, compared with extraction of subject possessors as discussed in the next section.

<sup>6</sup> The cleft construction in Chinese is represented in the form of *shi* ... (*de*). While there is a dispute over the function of the optional marker *-de*, it is generally assumed that *shi* shows the emphatic function. Emphatic *shi* can mark Focus sentence-initially, as in (i):

(i) Shi Zhangsan mai.le zhi.dong.fangzi (de).  
 SHI Zhangsan sell.Perf this.CL.house DE  
 'It is Zhangsan who sold this house.'

### 3.2 Subject Possessor Extraction

In the literature, it is generally assumed that sentences like (1a) have the subject possessors (e.g., *Zhangsan*) serving as a Topic in the sentence-initial position and the possessee (e.g., *shoubi* ‘arms’) as the subject of the sentence (see Huang, 1982; Shyu, 1995). The discourse (17) shows this point.

- (17) a. How does Zhangsan look like?  
 b. Zhangsan<sub>-TOPIC</sub>, [<sub>t<sub>i</sub></sub> shoubi] hen.chang (= (1a)).  
     Zhangsan           arm           very.long  
     ‘Speaking of Zhangsan, [his] arms are very long.’

Moreover, I find that sentence-initial possessors can involve Focus interpretation, and that in such contexts, they are compatible with emphatic *shi*, as in (18b).

- (18) a. Shei shoubi hen.chang? (Lisi ma?)  
     Whose arm   very.long   Lisi   Q.PART  
     ‘Whose arms are very long?’  
 b. shi Zhangsan<sub>-FOCUS</sub>, [<sub>t<sub>i</sub></sub> shoubi] hen.chang (, bu shi Lisi).  
     SHI Zhangsan           arm           very.long   not is Lisi  
     ‘It is Zhangsan whose arms are very long (, not Lisi).’

Recalling that such subject possessors are island sensitive (see (6a) and (7a)), I argue that subject possessors in (17b) and (18b) are moved to the sentence-initial position as Topic/Focus.

It is noteworthy that in addition to the analysis of A-bar movement, Hsu and Ting (2006) point out that such possessors can also serve as external subjects, similar to that in the Multiple Nominative Construction in Japanese and Korean. Based on Tsai’s (1995) generalization that local Topicalization is not available from within relative clauses in Mandarin Chinese (cf. (10)), Hsu and Ting (2006) indicate that extraction of possessors is allowed within relative clauses.

- (19) a. Akiu<sub>i</sub> xianran [<sub>t<sub>i</sub></sub> chengji] tebie hao.  
     Akiu obviously grade especially good  
     ‘Obviously, Akiu’s grades are especially good.’  
 b. [<sub>DP</sub> Henduo [<sub>CP</sub> Akiu<sub>i</sub> xianran [<sub>t<sub>i</sub></sub> chengji] tebie hao de ] xueke ] dou shi wenke.  
     many Akiu obviously grade especially good DE subject all be literature  
     ‘Many subjects that Akiu obviously has high letter grades are about liberal arts.’

The grammatical (19b) suggests that the sequence in (19a) does not have to be derived by Topicalization/Focalization. In other words, A-movement should be considered. Hsu and Ting (2006) argue that such extracted possessors can be analyzed as the external subject of the sentence, in addition to being Topic of the sentence. Their proposal is based on the fact that such possessors show A-properties. For example, sentence-initial subject possessors can undergo passivization, as in (20b).

- (20) a. Xiao.dongwu<sub>-TOPIC</sub><sup>7</sup> tuzi erduo zui.chang.  
     small.animal rabbit ear most.long  
     ‘As for small animals, rabbits have longest ears.’  
 b. Xiao.dongwu<sub>-TOPIC</sub>, tuzi<sub>-SUBJ-i</sub> bei renwei [<sub>t<sub>i</sub></sub> erduo] chang.  
     small.animal rabbit BEI considered ear long  
     ‘As for small animals, rabbits are considered to be with long ears.’ (Hsu and Ting, 2006)

Furthermore, they show that such a subject possessor can be an A-binder.

<sup>7</sup> The first nominal *xiao.dongwu* ‘small animal’ in (20) is a base-generated Topic in order to highlight the “non-Topic” status of the subject possessor. Thanks to Yoshihisa Kitagawa for this suggestion.



- (21) Na.ge.ren<sub>i</sub> haizi<sub>j</sub> bu rende ziji<sub>i/j</sub>.  
 that-CL-man child not recognize self  
 ‘That person<sub>i</sub>’s child<sub>j</sub> cannot recognize himself<sub>i/j</sub>’

The ambiguity shown in (21) indicates that both the possessor *na.ge.ren* ‘that person’ and the possessum *haizi* ‘child’ are subjects, so that they can each bind the reflexive *ziji* ‘self.’ Given examples (20) and (21), the A-properties of sentence-initial subject possessors are testified.<sup>8</sup>

Based on the foregoing discussion, I argue that it is legitimate to derive sentence-initial subject possessors *via* either A- or A-bar movement, but that object possessors are only derived *via* A-bar movement. In the following section, in an attempt to clear up data that tangle the phenomenon at issue, I will argue that in Mandarin Chinese, possessors should be distinguished from possessive modifiers.

#### 4 Possessors vs. Possessive Modifiers

In Mandarin Chinese there is no overt Case marking and *-de* in nominals is the marker for nominal modifiers. There are two ways to express the possessive relation, as in (22a) and (22b), but no obvious semantic difference is shown between them.

- (22) ‘Zhangsan’s/my friend.’  
 a. Zhangsan.de / wo.de pengyou.  
    Zhangsan.DE I.DE friend  
 b. Zhangsan / wo pengyou.  
    Zhangsan I friend

In general, phrases like (22b) are often simplified as the omission of *-de* marker. Differently, in the spirit of Tasseva-Kurkchieva (2005) that the semantic possessor can be realized by different syntactic means, I argue that in Mandarin Chinese, possessive modifiers (e.g., *Zhangsan.de* and *wo.de* in (22a)) should be distinguished from possessors (e.g., *Zhangsan* and *wo* in (22b)). Focusing on the nominal structure, Hsieh (2005) shows that Mandarin nominal modifiers can modify DP or NP.

- (23) Adjectives: ‘that beautiful girl’  
 a. [<sub>DP</sub> piaoliang.de [<sub>DP</sub> na.ge [<sub>NP</sub> nuhai ]]]  
    beautiful.de that.CL girl  
 b. [<sub>DP</sub> na.ge [<sub>NP</sub> piaoliang.de [<sub>NP</sub> nuhai ]]]  
    that.CL beautiful.DE girl  
 (24) Relative clauses: ‘those three books I bought yesterday’  
 a. [<sub>DP</sub> [wo zuotian mai de] [<sub>DP</sub> na.san.ben [<sub>NP</sub> shu ]]]  
    I yesterday buy DE that.three.CL book  
 b. [<sub>DP</sub> na.san.ben [<sub>NP</sub> [wo zuotian mai de] [<sub>NP</sub> shu ]]]  
    that.three.CL I yesterday buy DE book

In addition, as we can see in (25), expressions of the type “possessor.DE” have a distribution identical to that of adjectives (23) and relative clauses (24).

- (25) Possessive phrases: ‘those three books of Zhangsan’  
 a. [<sub>DP</sub> Zhangsan.de [<sub>DP</sub> na.san.ben [<sub>NP</sub> shu ]]]  
    Zhangsan.DE that.three.CL book  
 b. [<sub>DP</sub> na.san.ben [<sub>NP</sub> Zhangsan.de [<sub>NP</sub> shu ]]]  
    that.three.CL Zhangsan.DE book

<sup>8</sup> For more concrete discussion about possessors in the Multiple Nominative Construction, see Hsu and Ting (2006).

Unlike examples (23–25), the distribution of possessors without the *-de* marker is more restricted: a possessor, e.g., *Zhangsan* in (26a), can sit before a cluster of determiner-number-classifier, but cannot occur between a noun and the cluster (26b).

- (26) Possessor: ‘Zhangsan’s three books’  
 a. [<sub>DP</sub> Zhangsan [<sub>D</sub> na.san.ben [<sub>NP</sub> shu ]]]  
     Zhangsan      that.three.CL      book  
 b. \* [<sub>DP</sub> na.san.ben [<sub>NP</sub> Zhangsan [<sub>N</sub> shu ]]]  
     that.three.CL      Zhangsan      book

However, the contrast between (23–25) and (26) does not get much attention in the literature. Apart from previous studies, I propose that Mandarin Chinese licenses possessors in Spec,DP (cf. (26a) vs. (26b)) and argue that possessive *de*-phrases as pre-nominal modifiers should be distinguished from possessors that are licensed at Spec,DP.

The distinction between modifiers and possessors is also shown by examples with two possessive phrases. In order to convey the interpretation ‘my three books by Chomsky,’ only (27a) is possible; (27b) does not work.

- (27) ‘my three books by Chomsky’  
 a. [<sub>DP</sub> wo [<sub>D</sub> na.san.ben [<sub>NP</sub> Chomsky.de [<sub>NP</sub> shu ]]]]  
     I      that.three.CL      Chomsky.DE      book  
 b. \* [<sub>DP</sub> Chomsky [<sub>D</sub> na.san.ben [<sub>NP</sub> wo.de [<sub>NP</sub> shu ]]]]<sup>9</sup>  
     Chomsky      that.three.CL      I.DE      book

Based on examples (26) and (27), I suggest that Spec,DP obligatorily assigns structural possessor. Therefore, when the structural possessor is assigned, this semantic role cannot be overwritten by modifiers, e.g., (27b).

Another piece of supporting evidence comes from phenomena of LBE. Concerning the LBE of modifiers, Bošković (2005) provides two possible analyses. The first account relies on the notion of phase. According to the Phase Impenetrability Condition (that only the head and the edge of a phase are accessible to move out of the domain of that phase) and the anti-locality hypothesis (that movements cannot be too short), Bošković proposes that extracting a modifier requires moving it to the edge of DP, and yet such movement violates anti-locality.

- (28) \* [<sub>DP</sub> AP<sub>i</sub> [<sub>D</sub> D [<sub>NP</sub> t<sub>i</sub> [<sub>NP</sub> N]]]]

Therefore, languages with DP structures (e.g., English and Bulgarian) ban extractions of modifiers, whereas this issue is irrelevant to languages that do not have DP (e.g., Russian and Serbo-Croatian). An alternative account proposed by Bošković (2005) is that languages like English have the AP-over-NP structure (29a), following Abney (1987), whereas languages without determiners like Serbo-Croatian have the NP-over-AP structure (29b).

- (29) a. [DP D [AP Adj [NP N]]]  
     b. [NP AP N]

Thus, moving a modifier from a structure like (29a) involves moving a non-constituent, but extracting an AP from a structure like (29b) is legitimate.

Although Bošković (2005) does not take a position on which of the two accounts is superior, the generalization about LBE of modifiers is clear. That is, no matter which account is adopted, it is shown that NP languages allow extractions of modifiers (30a), but DP languages do not (30b).

- (30) a. Lijep<sub>e</sub>, je vidio [t<sub>i</sub> kuće]. (Serbo-Croatian)  
     beautiful is seen house  
     ‘Beautiful houses, he saw.’

<sup>9</sup> Example (27b) can be grammatical but means ‘Chomsky’s three books written by me.’

- b. \*Beautiful<sub>i</sub>, he saw [<sub>t<sub>i</sub></sub> house]  
 c. \*Magas(-ak-at)<sub>i</sub> látta [<sub>t<sub>i</sub></sub> lány-ok-at] (Hungarian)  
 tall-PL-ACC saw girl-PL-ACC  
 ‘\*Tall, he saw girls. (He saw tall girls.)’

Based on the preceding discussion, one would expect Mandarin to show the same restriction as is observed in DP languages. Such a prediction is borne out. An adjective, like *ruanruo.de* ‘feeble’ in (31a), cannot be extracted, nor a possessive modifier, e.g., *Zhangsan.de* in (31b).

- (31) a. \*Ruanruo.de xianran [<sub>t<sub>i</sub></sub> Zhangsan ] hen.shaojian (Hsu and Ting, 2006) → Adjectives  
 feeble.DE obviously Zhangsan very.rare  
 ‘Obviously, it’s rare to see Zhangsan being so feeble.’  
 b. \*Zhangsan-de xianran [<sub>t<sub>i</sub></sub> shoubi] hen.chang → Possessive modifiers  
 Zhangsan-DE obviously arm very.long  
 ‘Zhangsan obviously has very long arms.’

Examples (30) and (31) support the claim that Mandarin Chinese behaves on a par with DP languages, contrary to Bošković’s (2005) claim about Mandarin Chinese. The difference between possessive modifiers and possessors is made clearer by the contrast between (31b) and (32). While the possessive modifier *Zhangsan.de* in (31b) cannot be extracted, a possessor phrase can be extracted to the sentence-initial position, e.g., *Zhangsan* in (32).

- (32) Zhangsan<sub>i</sub> xianran [<sub>t<sub>i</sub></sub> shoubi] hen.chang → Possessor  
 Zhangsan obviously arm very.long  
 ‘Zhangsan obviously has very long arms.’

As suggested in Bošković (2005), possessors in Hungarian are a constituent in Spec,DP, so that possessors can be extracted out of DP (33a). This is unlike English, where such an extraction involves moving a non-constituent (33b).

- (33) ‘Peter, only Mary saw [his] hat.’  
 a. Péter-nek<sub>i</sub> cask Mari látta [ a <sub>t<sub>i</sub></sub> kalap-ja-t ] (Hungarian, Szabolcsi (1994))  
 Peter-DAT only Mari-NOM saw the hat-POSS.3.SG-ACC  
 b. \*Peter’<sub>s<sub>i</sub></sub>, only Mary saw [<sub>t<sub>i</sub></sub> hat].

In other words, while LBE of modifiers is strictly prohibited in DP languages, some DP languages allow possessor extraction (like Hungarian) and some do not (like English). Mandarin Chinese LBE data for modifiers and possessors show that Mandarin Chinese is a DP language and behaves on a par with Hungarian. Therefore, I agree with Bošković’s (2005) generalization about DP and NP languages, but disagree with his claim about Mandarin Chinese as a NP language (e.g., banning LBE of modifiers and no scrambling attested).

In sum, the preceding discussion shows that Mandarin Chinese as a DP language bans LBE of modifiers, while possessor extraction is allowed. The similarity between Mandarin Chinese and Hungarian is also shown in extraction of object possessors. As discussed in section 3.1, Mandarin Chinese object possessors can only be extracted by Topicalization/Focalization. We find similar phenomena in Hungarian as well. According to Szabolcsi (1994), a dative-marked possessor within an object DP can be extracted from Spec,DP to the sentence-initial position (e.g., (33a)), but a nominative possessor cannot (e.g., (34)).

- (34) ‘As for Peter, only Mari saw his hat.’  
 \*Peter<sub>i</sub> cask Mari látta [<sub>DP t<sub>i</sub></sub> a kalap-já-t ].  
 Peter-NOM only Mari saw the hat-POSS.3.SG.ACC

Based on this contrast between (33a) and (34), Gavrusseva (2000) argues that dative object possessors in Hungarian are extracted out of Spec,DP through A-bar movement. This echoes the preced-

ing discussion on extraction of object possessors in Mandarin in that only A-bar movement is available.

## 5 Concluding Remarks

This paper dealt with sentences with sentence-initial possessors in Mandarin Chinese. I centered the discussion on two points: the sentences at issue involve movement and possessors are syntactically different from possessive modifiers. I started off by showing that the construction is island sensitive and thus a movement approach should be considered. Based on the detailed examination of DP/NP languages in Bošković (2005), I argued that Mandarin Chinese as a DP language is similar to Hungarian in that a possessor as a whole sits in Spec,DP and is legitimate to undergo extractions (unlike English). Furthermore, this paper showed that the seeming subject-object asymmetry is apparent. Mandarin Chinese object possessors can only be extracted via topicalization/focalization (similar to the Hungarian data), while A- and A-bar movements are both able to extract subject possessors. It is shown that the unstable acceptability of object possessors is due to the limit of available information structure, rather than a violation of Ross's (1967) Left Branching Condition. Furthermore, I argued that Mandarin Chinese has different types of possessive phrases that should be distinguished, i.e., possessive modifiers and possessors. The present study confirmed the modifier status of pre-nominal *de*-phrases, and showed that such modifiers should be distinguished from possessors, based on their different syntactic behaviors. In turn, the distinction between modifiers and possessors clarified data related to the construction at issue. I showed that the difference between DP and NP languages given in Bošković (2005) is supported by the Mandarin Chinese data. The difference between English and Mandarin Chinese in possessor extraction suggests that Bošković's (2005) observation about English and Hungarian is correct and that Chinese behaves on a par with the latter type of language.

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