All structures great and small: on copular sentences with shì in Mandarin

Cheng, H.

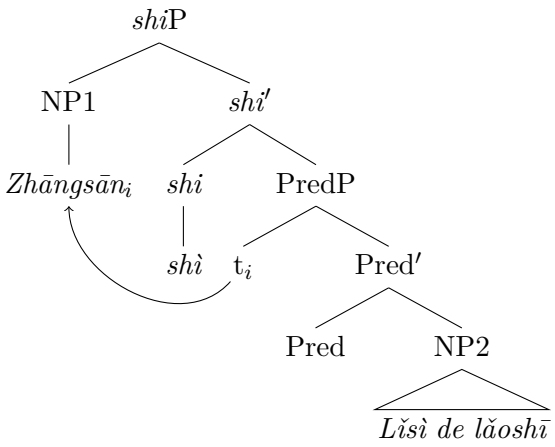
CHAPTER 5

The structure of Mandarin copular sentences

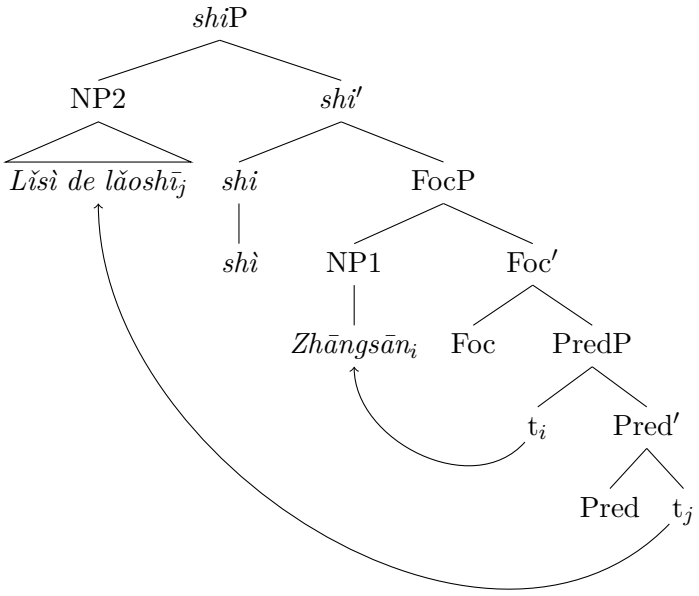
This chapter argues for a unified structural analysis of Mandarin predicational and specifcational copular sentences, aligned with Heggie (1988), Moro (1997, 2017), Mikkelsen (2005), Den Dikken (2006, 2017), and Shlonsky and Rizzi (2018). This analysis accounts for the relation between Mandarin predicational and specificational copular sentences and the distinctions between them discussed in Chapter 3. (1a) represents the structure of a canonical copular sentence, while (1b) represents the structure of an inverse copular sentence.[1]

[1] Although I showed in Chapter 2 that both positions on either side of Pred can sometimes be filled with an AP, VP, or IP, here and henceforth I only use NPs for the sake of simplicity. Also, considering the fact that Mandarin is a language that lacks subject agreement, in this work, I will continue using *shì*P instead of SUBJP for the functional projection that *shì* heads.

(1) a. *Predicational/Canonical*



b. *Specificational/Inverse*



In brief, the predicational core (or PredP, that is, an asymmetric structure for the predication relation that is mediated by a functional

head like Pred) is proposed as the base structure for both canonical and inverse sentences. The subject NP1 (i.e. the referential nominal) is the specifier of PredP, while the predicate NP2 (i.e. the predicative nominal) is the complement of Pred. Either nominal can raise to [Spec, *shi*P]. Besides, a low FocP is stipulated for inverse sentences for a number of reasons. This chapter will introduce the key elements of the structures step by step. Section 5.1 introduces the properties of the predicational core, the subject position, and the low FocP in the inverse structure. Section 5.2 discusses the motivation for predicate inversion of the inverse sentences. Section 5.3 describes the derivation of both canonical and inverse structures. Section 5.4 accounts for the canonical/inverse distinctions discussed in Chapter 3 on the basis of the proposed structures.

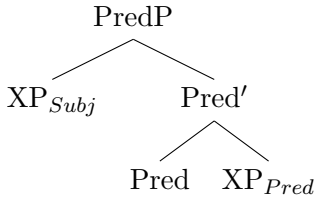
5.1 The structure

This section will discuss three key elements of the proposed structures in (1). Section 5.1.1 presents the idea that the predicational core is the base structure shared by both types of copular sentences in Mandarin. Section 5.1.2 argues that predicate inversion of Mandarin inverse sentences takes place in the manner of A-movement. Section 5.1.3 justifies the stipulation of a low FocP in the inverse structure.

5.1.1 The predicational core

The first key element of the proposed structure is "the predicational core" (Adger and Ramchand 2003: 325; Mikkelsen 2005: 166), which is the basic structure for the predicational relation.[2] Following Heggie (1988), Heycock (1995), Moro (1997, 2017), Adger and Ramchand (2003), Mikkelsen (2005), and Den Dikken (2006, 2017), the current study adheres to the assumption that both nominals in both types of copular sentences start from the predicational core and are Merged in a fixed order: the referential nominal (the subject) occupies the specifier of PredP, and the predicative one (the predicate) occupies the complement of Pred. The structure is shown in (2).

(2)



Ever since Bowers (1993), a functional projection has been proposed to mediate the predicational relation in a unified way for both small clauses and matrix clauses.[3] The functional head is labelled as "Pr" in Bowers (1993) and then as "Pred" in Svenonius (1994), Bowers (2001), Adger and Ramchand (2003), Mikkelsen (2005), and Arche, Fábregas, and Marín (2019), among others.[4] The Pred head s-selects its argument because the semantically predicative argument can be of any lexical category (Mikkelsen 2005). Although the typical category of the referential argument is DP, it can also be a CP or some other XP.

The supporting evidence for the fixed order (accordingly, an asymmetrical structure) concerns small clauses under verbs such as *consider* (Heggie 1988; Rothstein 1995; Moro 1997; Mikkelsen 2005). As shown in (4) and as we have discussed in the previous chapters, when there is a copula present in the embedded clause, both orders between the referential and the non-referential nominals are available. In contrast, when the copula is absent, only one order is available, namely with the referential element preceding the predicative one, as shown in (3). As will be discussed in later sections, the obligatory occurrence of the copula in (4b) involves an extra layer of structure on top of PredP, which makes the other order possible. When verbs such as *consider* takes PredP as its complement, as in (3), only one word order is available for the embedded clause: the referential nominal precedes the non-referential nominal. This order is the merge order of the two nominal elements in PredP.

---

[2]It is also labelled "nexus" in Svenonius (1994) and "predicative nucleus" in Moro (1997).

[3]See Matushansky (2019) for a recent analysis against the structure involving a mediating projection such as PredP. As far as the current research is concerned, it is crucial that the basic structure establishing the subject–predicate relation is asymmetric. Whether or not there is a mediating projection and whether or not this projection is PredP does not affect the current analysis.

[4]"[Pred] is less easily confused with P (for preposition) and Prt (for particle) [than Pr]" (Svenonius 1994: 35).

(3) a. I consider [[Susan] [my best friend]].
b. * I consider [[my best friend] [Susan]].

(4) a. I consider [Susan to be my best friend].
b. I consider [my best friend to be Susan].

Mandarin data show the same pattern as English in terms of the word orders available under verbs like *consider*. As shown in (5) (and as we have repeatedly seen in the previous chapters), only the canonical order, as in (5a), is allowed under *dāng* 'consider' without the copula. The embedded clause with the inverse order, as in (5b), leads to an ungrammatical sentence.

(5) a. 你当 [张三傻子] 吗?
Nǐ dāng [Zhāngsān shǎzi] ma?
2SG consider Zhangsan idiot Q
'Do you consider Zhangsan an idiot?'
b. * 你当 [傻子张三] 吗?
**Nǐ dāng [shǎzi Zhāngsān] ma*?
2SG consider idiot Zhangsan Q
'Do you consider the idiot to be Zhangsan?'

The following set of examples further shows that the small clause can only have the predicative reading. (6) shows that when both nominals in both embedded small clauses are names, only one of them can be interpreted referentially. Specifically, the first nominals in both clauses have the referential reading, denoting the person Zhangsan (in (6a)) or Lisi (in (6b)). The second nominal must be interpreted predicatively, that is, having the prototypical characteristics of Lisi (in (6a)) or Zhangsan (in (6b)). It is impossible for the first nominal in either clause to have the non-referential reading, nor can the second nominal have the referential reading.

(6) a. 你当张三李四吗?
Nǐ dāng Zhāngsān Lǐsì ma?
2SG consider Zhangsan Lisi Q
'Do you think Zhangsan is the same as Lisi?'

b. 你当李四张三吗?
Nǐ dāng Lǐsì Zhāngsān ma?
2SG consider Lisi Zhangsan Q
'Do you think Lisi is the same as Zhangsan?'

In contrast, as was mentioned in Section 3.3.1.1 in Chapter 3, when *shì* occurs, it is possible for the precopular nominals to be interpreted predicatively while the postcopular nominals are referential, if proper contexts are available. In addition, if *jiù* occurs in addition to *shì* (or put differently, when *jiùshì* occurs in the embedded clause), the equative reading is available.

(7) a. 你当张三是李四吗?
Nǐ dāng Zhāngsān shì Lǐsì ma?
2SG consider Zhangsan COP Lisi Q
'Do you think the person who behaves like Zhangsan is Lisi?'

b. 你当李四是张三吗?
Nǐ dāng Lǐsì shì Zhāngsān ma?
2SG consider Lisi COP Zhangsan Q
'Do you think the person who behaves like Lisi is Zhangsan?'

(8) a. 你当张三就是李四吗?
Nǐ dāng Zhāngsān jiù shì Lǐsì ma?
2SG consider Zhangsan exactly COP Lisi Q
'Do you think Zhangsan is Lisi?'

b. 你当李四就是张三吗?
Nǐ dāng Lǐsì jiù shì Zhāngsān ma?
2SG consider Lisi exactly COP Zhangsan Q
'Do you think Lisi is Zhangsan?'

In sum, following Bowers (1993, 2001), Svenonius (1994), Adger and Ramchand (2003), and Mikkelsen (2005), the current thesis assumes that the basic structure for a predicational relation (or the "predicational core") involves an asymmetric structure, which is mediated by a functional projection, namely PredP. The subject and predicate in PredP are Merged in a fixed order; that is, the referential nominal occupies the specifier of PredP, and the predicative nominal occupies the complement of Pred. The word order of canonical copular sentences reflects the merged order of the two nominals. In Mandarin, the structures for both

types of copular sentences contain PredP. PredP can also be directly embedded under a small group of verbs including *dāng* 'consider'.

5.1.2 A-movement to the subject position

This subsection argues that the precopular elements in both canonical and inverse sentences undergo A-movement from the predicational core, targeting a derived subject position, the specifier of *shì*P. For canonical sentences, NP1 moves from [Spec, PredP] to [Spec, *shì*P]. For inverse sentences, NP2 moves from the complement of Pred to [Spec, *shì*P].

As discussed in Section 4.2.1 in Chapter 4, *shì* is not the spell-out of a Pred head. Instead, it takes PredP as its complement. The evidence, again, concerns the (non-)occurrence of *shì* in the embedded clauses under verbs such as *dāng* 'consider'. The most relevant examples are repeated below. In short, when *shì* is absent, only the canonical clause is available, as in (9). In contrast, when *shì* occurs, both canonical and inverse clauses are available, as in (10). If *shì* spells out Pred, the contrast between (9) and (10) is not expected. Additionally, negation and adverbs can only co-occur with the embedded clauses where *shì* is present, as in (11), which indicates that PredP cannot be directly negated or modified while *shì*P can.

(9) a. 你当 [张三傻子] 吗?
Nǐ dāng [Zhāngsān shǎzi] ma?
2SG consider Zhangsan idiot Q
'Do you consider Zhangsan an idiot?'

b. * 你当 [傻子张三] 吗?
**Nǐ dāng [shǎzi Zhāngsān] ma*?
2SG consider idiot Zhangsan Q
Intended: 'Do you consider the idiot to be Zhangsan?'

(10) a. 你当 [张三是傻子] 吗?
Nǐ dāng [Zhāngsān shì shǎzi] ma?
2SG consider Zhangsan COP idiot Q
'Do you consider Zhangsan an idiot?'

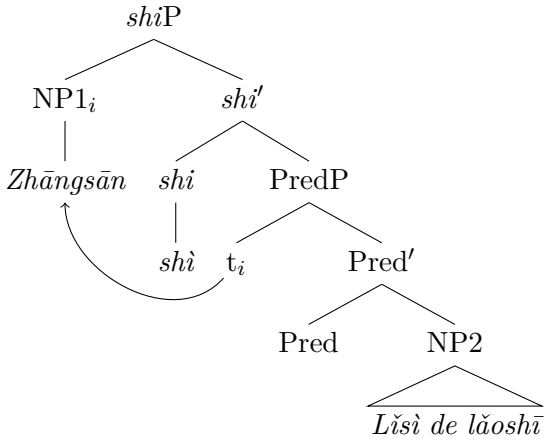
b. 你当 [傻子是张三] 吗?
Nǐ dāng [shǎzi shì Zhāngsān] ma?
2SG consider idiot COP Zhangsan Q
'Do you consider the idiot to be Zhangsan?'

(11) a. 你当 [张三不 *(是) 傻子] 吗?
*Nǐ dāng [Zhāngsān bù *(shì) shǎzi] ma*?
2SG consider Zhangsan NEG COP idiot Q
'Do you consider Zhangsan not an idiot?'

b. 你当 [张三只/也 *(是) 傻子] 吗?
*Nǐ dāng [Zhāngsān zhǐ/yě *(shì) shǎzi] ma*?
2SG consider Zhangsan only/also COP idiot Q
'Do you consider that Zhangsan is only/also an idiot?'

Assuming *shi* takes PredP as its complement and both nominals in copular sentences start out from PredP, one of the nominals must move to [Spec, *shi*P] so that the right word order of the sentences can be obtained. Presumably, the fronted nominal gets licensed there. It is straightforward that in canonical copular sentences the subject NP1 moves from [Spec, PredP] to [Spec, *shi*P], as shown in (12).

(12) Canonical sentences



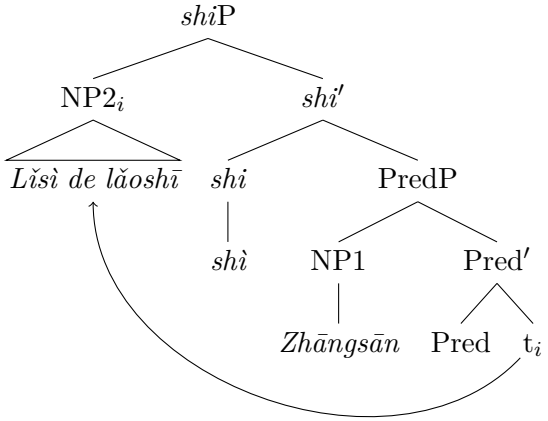
The subject can raise further to a higher subject position. In Mandarin, epistemic modal auxiliaries are assumed to be raising verbs (C.-T. J. Huang 1988; J.-W. Lin & Tang 1995; T.-H. J. Lin 2012; Chou 2013). (13) shows that the subject nominal *Zhāngsān* can undergo subject-to-subject raising, landing in the subject position of the modal auxiliary *kěnéng* 'be likely to'.[5]

[5]Recall that it was discussed in chapter 4 that *kěnéng* 'be likely to' is a modal auxiliary rather than an adverb.

(13) 张三 $_i$ 可能 t_i 是李四的老师。
Zhāngsān$_i$ kěnéng t_i *shì Lǐsì de lǎoshī.*
Zhangsan be.likely.to t COP Lisi SUB teacher
'Zhangsan is likely to be Lisi's teacher.'

When it comes to inverse sentences, NP2 undergoes predicate inversion (Moro 1997; Mikkelsen 2005), moving from the complement of Pred to [Spec, *shi*P], as shown in (14).[6] The remainder of this subsection will argue that the landing position of NP2 in inverse sentences is an A-position and that NP2 moves in the manner of A-movement, in accordance with Moro (1997, 2017), Mikkelsen (2005), and Den Dikken (2006, 2017), but contra Rothstein (2004), who treats that position as an A′-position and the relevant movement as A′-movement.

(14) Inverse sentences



I resort to the reconstruction effect with respect to anaphor binding as the diagnostic for A-movement of NP2. Assuming that A′-movement (such as topicalisation) reconstructs for the purposes of binding while A-movement does not, the fact that we do not observe reconstruction in inverse copular sentences indicates that the NP2 moves in the manner of A-movement and that the landing position of the inverted NP2 is an A-position. As shown in (15), in a canonical sentence, the postcopular

[6]The low FocP we saw in (1) is omitted in this structure for the sake of simplicity. It will be introduced to the structure after it is discussed in the following subsection.

anaphor *tā-zìjǐ* 'himself' can be bound by the subject. However, when occurring in the precopular position in an inverse sentence, the anaphor can no longer have the same index as the subject, as shown in (15b). In other words, no reconstruction effect is observed. Hence, it is A-movement that we are dealing with here rather than A′-movement.

(15) a. 张三 $_i$ 是他自己 $_i$ 的老师。
Zhāngsān$_i$ shì tā-zìjǐ$_i$ de lǎoshī.
Zhangsan COP 3SG-self SUB teacher
'Zhangsan is the teacher of himself.'

b. 他自己 $_{*i}$ 的老师是张三 $_i$。
Tā-zìjǐ$_{*i}$ de lǎoshī shì Zhāngsān$_i$.
3SG-self SUB teacher COP *Zhāngsān*

In contrast, reconstruction can be observed when the postcopular NP2 is topicalised. This is expected because topicalisation is supposed to involve A′-movement. As shown in (16), the topicalised anaphor can still be bound by the subject.

(16) ?? 他自己 $_i$ 的老师，张三 $_i$ 是。[7]
??*Tā-zìjǐ$_i$ de lǎoshī, Zhāngsān$_i$ shì.*
3SG-self SUB teacher Zhangsan COP

The structure of the sentences in (15) and (16) is presented in a simplified version below in (17). Assuming that these three sentences (namely, (15a), (15b), and (16)) share a unified underlying structure and that (15b) and (16) are derived by movement of NP2, the contrast in relation to the co-indexation relation indicates the different manners in which NP2 moves, and accordingly the different properties of its landing

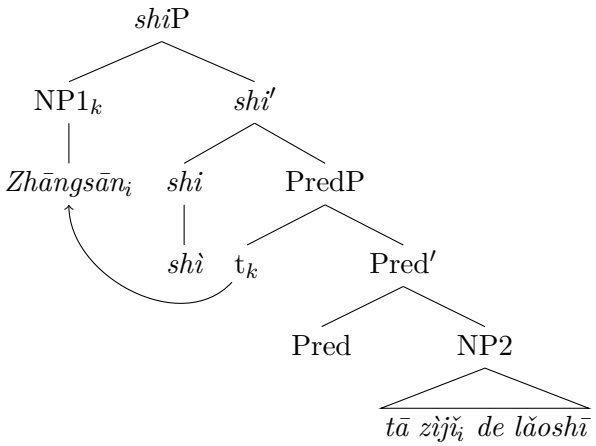
[7] As mentioned in Section 3.4.3 in Chapter 3, the oddness of (16) should be due to independent reason(s). The sentence improves greatly if a modal or a sentence-final particle is added, as shown in (i).

(i) a. 他自己 $_i$ 的老师，张三 $_i$ 是的 (呀)。
Tā-zìjǐ$_i$ de lǎoshī, Zhāngsān$_i$ shì de (ya).
3SG-self SUB teacher Zhangsan COP DE SFP

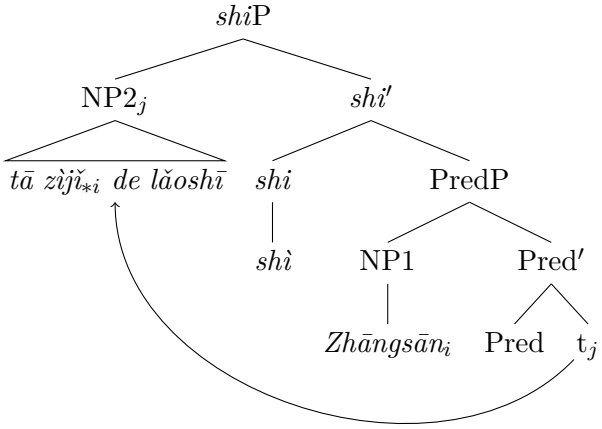
b. 他自己 $_i$ 的老师，张三 $_i$ 可能是 (的)。
Tā-zìjǐ$_i$ de lǎoshī, Zhāngsān$_i$ kěnéng shì (de).
3SG-self SUB teacher Zhangsan possibly COP DE

sites – predicate inversion involves A-movement and NP2 ends up in an A-position, whereas topicalisation of NP2 involves A′-movement and NP2 ends up in an A′-position.

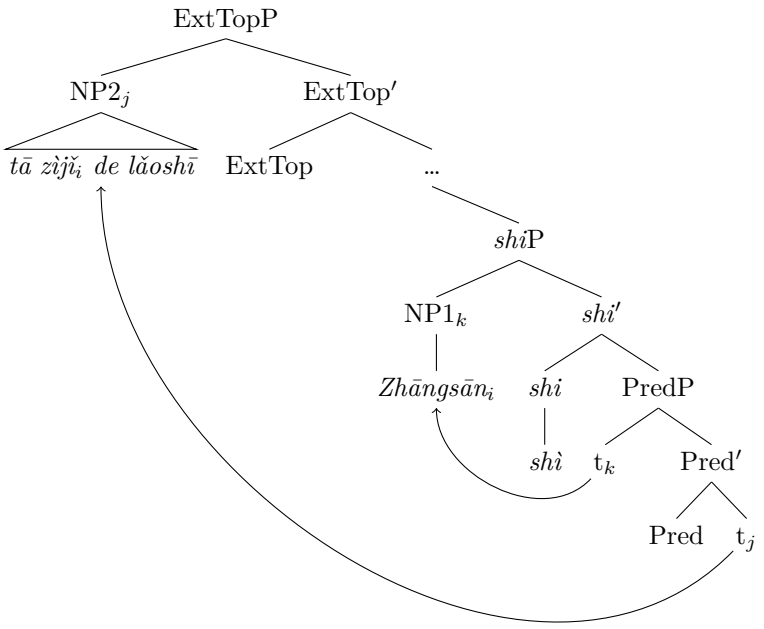
(17) a. Canonical sentences



b. Inverse sentences



c. Canonical sentences with topicalising NP2



Moreover, similar to the precopular nominal in a canonical sentence, the precopular nominals in an inverse sentence can also undergo subject-to-subject raising to the subject position of the epistemic modal auxiliary *kěnéng* 'be likely to', as shown in (18).

(18) 李四的老师 $_i$ 可能 t$_i$ 是张三。
Lǐsì de lǎoshī$_i$ kěnéng t$_i$ *shì Zhāngsān.*
Lisi SUB teacher be.likely.to t COP Zhangsan
'Lisi's teacher is likely to be Zhangsan.'

In sum, assuming that *shì* takes PredP as its complement, NP1 in a canonical sentence and NP2 in an inverse sentence move from inside PredP to [Spec, *shi*P]. Crucially, [Spec, *shi*P] is an A-position. The movement of the nominals under discussion is A-movement.

5.1.3 A low FocP and the freezing effect

This subsection proposes a low FocP in the inverse structure. A low FocP has been proposed to be relevant for the focalised interpretation and the "freezing effect" of the postcopular constituent in inverse copular sentences (Rizzi 2015a, 2015b). I will first present Rizzi's analysis of the freezing effect observed in both the subject position and the postcopular position in inverse copular sentences. Then I will show that the freezing effect in relation to the low FocP is crucial for the numeration of Mandarin inverse copular sentences, an issue that will be addressed in the following sections.

The "freezing effect" is first noted to relate to subject–object asymmetry in terms of extraction. For instance, as shown in (19) and (20), in the same embedding contexts, an object can be extracted whereas a subject cannot. In other words, subjects are "frozen" in these positions and can no longer be extracted.

(19) a. * Who$_i$ do you think [that [t$_i$ will come]]?
b. Who$_i$ do you think [that [Mary will meet t$_i$]]?

(20) a. * Which mechanic$_i$ do you wonder [whether [t$_i$ could fix the car]]?
b. ? Which car$_i$ do you wonder [whether [the mechanic could fix t$_i$]]?

(Rizzi 2015b: 27)

Rizzi (2015a, 2015b) proposes that when a subject moves to the [Spec, SUBJ] position and satisfies the Subject Criterion, it is frozen there and can no longer be extracted. Recall that, as was introduced in Section 4.1.4 in Chapter 4, criterial features are features that express properties of scope–discourse semantics such as topics, focus, or Q. The subject feature is also one of the criterial features. A criterial configuration is proposed by Rizzi to solve labelling problems of the newly created node when two phrases (e.g. the subject DP and another functional phrase) merge – they agree in terms of a criterial feature and the node created by Merge is labelled by the criterial feature. In effect, the criterial positions provide necessary "halting sites" for subject movement. In other words, "criterial freezing" takes place when the

subject moves to a criterial configuration: the subject does not move further.

In line with SUBJP and other discourse-related projections in the left periphery, the low focus projection proposed in Belletti (2004) is also identified as a criterial configuration in Rizzi (2015b) and in Shlonsky and Rizzi (2018). Belletti (2004) argues that the postverbal subject in a VOS-order sentence in Italian occupies a low focus position in the structure. It is called as a "low" FocP because it follows low adverbs such as *completamente* 'completely'. The postverbal subject can be interpreted as a new information focus. As shown in (21), to answer questions like A, the subject must be postverbal. Furthermore, the postverbal subject domain is not extractable (see (22)).

(21) A: *Chi ha parlato*?
who has spoken
B1: *Ha parlato Gianni.*
has spoken Gianni.
B2: # *Gianni ha parlato.*
Gianni has spoken.

(Belletti 2004: 21)

(22) a. *Ha telefonato il direttore del giornale al presidente.*
has phoned the director of the.newspaper to the.president
'The director of the newspaper has phoned to the president.'
b. ?? *Il giornale di cui ha telefonato il direttore al presidente.*
the newspaper of which has phoned the director to the.president

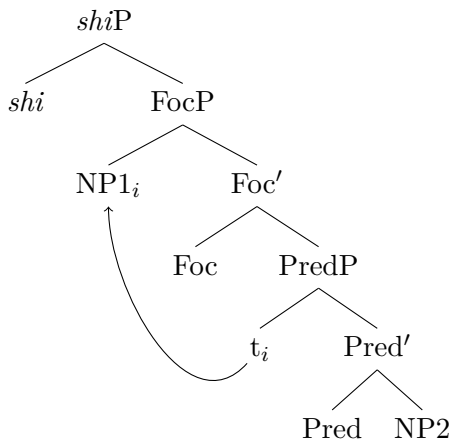
(Belletti 2004: 20)

Rizzi (2015b) and Shlonsky and Rizzi (2018) apply the low FocP to the analysis of inverse copular sentences in Italian and Hebrew. For one thing, as has been observed in various languages, the postcopular nominal in inverse copular sentences is in focus (Bresnan 1994, Heycock 1995, Mikkelsen 2005, Den Dikken 2006, Rizzi 2015, Shlonsky and Rizzi 2018, and also Section 3.4.1 in Chapter 3 of this thesis). Also, the postcopular

nominal cannot be extracted (Heycock 1995, Moro 1997, Den Dikken 2006, Rizzi 2015, Shlonsky and Rizzi 2018, and also Section 3.4.3 in Chapter 3 of this thesis), which can be explained by assuming that the low FocP is a criterial configuration – [Foc], the criterial feature, is checked there. Furthermore, Rizzi (2015b) and Shlonsky and Rizzi (2018) argue that focalising the subject in the low FocP avoids a Relativized Minimality violation in the course of inverting the predicate nominal over its subject.

Taking into consideration the properties of the postcopular nominal in Mandarin inverse copular sentences, a low FocP is also stipulated for inverse sentences in the current analysis. Again, as described in Chapter 3, the postcopular nominals in inverse copular sentences are always in focus. Also, they are not extractable. The focus motivates the subject NP1 to move from [Spec, PredP] to [Spec, FocP]. Assuming Rizzi's (2015a, 2015b) idea that the low FocP also creates a criterial configuration, the moved NP1 gets frozen there and cannot be extracted. As I will discuss in Section 5.4.2, this structural analysis can account for the observation that the postcopular nominal in an inverse sentence cannot be topicalised, as opposed to the postcopular nominal in canonical sentences, which can be topicalised. (23) presents the relevant part of the proposed structure of inverse sentences containing the low FocP. The movement of the subject NP1 from [Spec, PredP] to [Spec, FocP] is also illustrated.

(23)



5.2 Motivation for Predicate Inversion in Mandarin

Various reasons have been proposed for the motivation of predicate inversion in different languages. There are two major lines of reasoning: one resorts to information-structural drives (Bresnan 1994; Mikkelsen 2005), while the other sticks to mechanisms within the narrow syntax (Moro 2000; Den Dikken 2006). This section will show that Mandarin data lend support to the former approach (while differing a bit from both Bresnan and Mikkelsen) that predicate inversion is motivated by focus associated with the subject nominal and also regulated by the topic/focus feature in relation to the subject position of the sentence.

5.2.1 Previous studies

5.2.1.1 Information structural approach

The first approach, espoused by Bresnan (1994) and Mikkelsen (2005), assumes that information structure may impinge on the syntactic derivation of copular sentences. In brief, their analyses follow the functional generalisation across languages that the subject is in principle the unmarked discourse topic and that the focus tends to associate with the postverbal constituent (see Andrews 1985, as cited from Bresnan 1994; Prince 1992; Birner 1996). When the referential NP1 is the focus, it cannot stay in the preverbal/precopular position, a position reserved for topics. Meanwhile, as the predicative NP2 is discourse-old, it should aim at the preverbal/precopular position instead of the postverbal/postcopular position. As a result, the NP2-preceding-NP1 order (derived via predicate inversion) is expected, which accords with the topic–focus information structure.

Bresnan (1994) bases her analysis on Lexical Mapping Theory. According to that theory, the subject function is by default assigned to the most prominent semantic role in the argument structure. Note crucially that the majority of the examples Bresnan discusses are labelled as locative inversion constructions and do not contain *be*, but she does not, in fact, distinguish the copula *be* from motion verbs in constructions containing a locative expression and a referent theme. In other words,

she does not seem to differentiate predicate inversion from locative inversion.[8] The trigger for both types of inversion constructions appears to be the same for her.

In locative constructions Bresnan (1994) mainly concentrates on, in neutral contexts, themes in locative constructions are more prominent than locatives and a theme will be mapped onto the subject, while a locative will be mapped onto an oblique. A *theme*-preceding-*locative* order is expected. Meanwhile, the semantic roles are assumed to be lexically underspecified for the possible surface syntactic functions they can assume, themes can be alternatively mapped onto subjects or objects, and locatives can alternate between subjects and obliques. Hence, it is permissible for the locative to be mapped onto the subject while the theme is mapped onto an object. Assuming that information structure can impinge on the syntactic derivation, when the theme has presentational focus and the locative expresses the scene that is set in

[8]Predicate inversion is often discussed in relation to locative inversion for many languages (for instance, Bresnan 1994, Den Dikken 2006 Chapter 4 and references therein). However, Mandarin copular sentences and locative inversion structures (if they exist at all) may be derived via different structures. First, as introduced in Chapter 2, Mandarin copular sentences standardly do not permit a PP predicate. (1c), repeated here as (i), is ungrammatical if *shì* is present.

(i) 迈克（* 是）在家。
Màike (**shì*) *zài jiā.*
Mike COP at home
'Mike is at home.'

In addition, the so-called locative inversion structure in Mandarin may not involve inversion at all. Here is one crucial piece of evidence. The occurrence of a preposition such as *zài* 'at' is obligatory in the postverbal position but is rejected in the sentence-initial position (for more evidence see Paul, Lu, and Lee (2020); cf. C.-T. J. Huang 1982; T.-H. J. Lin 2001; and Xu and Pan 2019; among others).

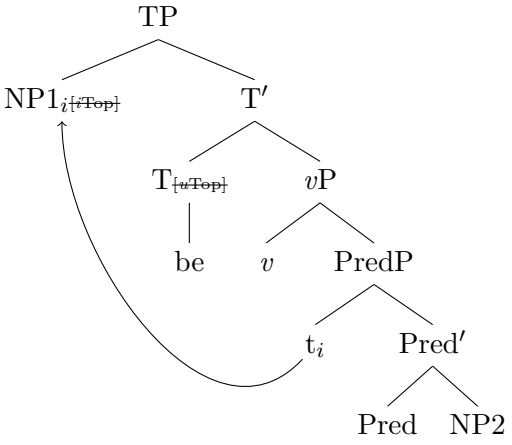
(ii) a. 主席团坐 *(在) 台上。
Zhǔxítuán zuò *(*zài*) *tái-shang.*
committee sit at stage-on
'The committee members are sitting on the stage.'

b. (* 在) 台上坐着主席团。
(**Zài*) *tái-shang zuò zhe zhǔxítuán.*
at stage-on sit PROG committee
'On the stage sit the committee members.'

the discourse, the *locative*-preceding-*theme* order satisfies both Lexical Mapping Theory and the requirements of the information structure. As a result, a locative inversion construction is generated.

Mikkelsen (2005) implements the idea by stipulating feature checking between the interpretable topic feature on the moved DPs and the uninterpretable topic feature on T. The DP with the interpretable [Top] moves to [Spec, TP] for feature checking reasons, eliminating the uninterpretable feature on T.[9] The core idea can be schematised in (24). The structures are simplified from those in Mikkelsen (2005: Chapter 9).[10] In short, when NP1 bears [Top], it moves to [Spec, TP], giving rise to a canonical sentence. In contrast, when NP2 bears [Top], it is NP2 that moves to [Spec, TP] instead of NP1, giving rise to an inverse sentence.

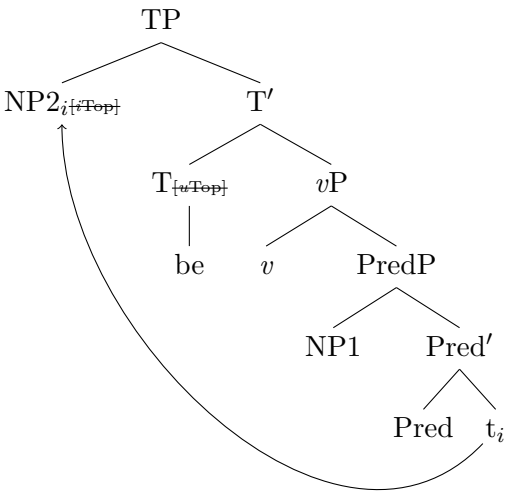
(24) a. Canonical sentences



[9]Mikkelsen (2005) patterns this process with Adger's (2003) proposal that C in V2 languages bears an uninterpretable topic feature [*u*Top], forcing the XP with interpretable feature [*i*Top] to move to [Spec, CP].

[10]It is worth pointing out that though Mikkelsen's (2005) core idea in terms of topic feature checking is adopted in the current analysis, the structures proposed in this chapter differ from those presented in (24) in at least three respects. First, as argued in Chapter 4, *shì* does not instantiate T. Second, no *v*P is proposed for Mandarin copular sentences. Third, as discussed in Section 5.1.3, a low FocP is proposed for inverse sentences in Mandarin.

b. Inverse sentences



Mikkelsen regards the specificational structure as the marked structure in comparison to the predicational structure, because in the seven possible numerations listed in (25) only one gives rise to specificational structures. She proposes that either the NP1 or the NP2 (DP_{ref} and DP_{pred} in her work) can have the interpretable [Top] feature. Meanwhile, T sometimes bears the uninterpretable [Top] feature and sometimes does not (depending on the discourse). When T bears the [*u*Top] feature, it attracts the (closest) NP/DP that bears the [Top] feature to its spec position so as to eliminate the uninterpratable feature. When the NP1/DP_{ref} bears the [Top] feature, it is attracted to [Spec, TP]. The result of the numeration (i.e. numeration 6) is a predicational sentence. When the NP2/DP_{pred} bears the [Top] feature, it is then attracted to [Spec, TP], yielding a specificational sentence (i.e. numeration 4). If both NP/DPs bear the [Top] feature, the closest one, that is NP1/DP_{ref}, is attracted to [Spec, TP]. The result is again a predicational sentence (i.e. numeration 8). If neither NP/DP bears the [Top] feature, the numeration (i.e. numeration 2) crashes. When T does not bear the [*u*Top] feature, the numerations (i.e. numerations 1, 3, 5, 7) always give rise to predicational sentences, since [Spec, TP] always attracts the closest NP/DP, namely, NP1/DP_{ref}.

(25)

Numeration	NP1	NP2	T	Clause
1	–	–	–	Predicational
2	–	–	uTop	*
3	–	Top	–	Predicational
4	–	Top	uTop	Specificational
5	Top	–	–	Predicational
6	Top	–	uTop	Predicational
7	Top	Top	–	Predicational
8	Top	Top	uTop	Predicational

Mikkelsen (2005: 176)

In sum, both analyses capture crucial properties in terms of the information structure of both types of copular sentences. As will be shown in Section 5.2.2, Mandarin data show some disparities from Mikkelsen's (2005) observation based on English and Danish. On the grounds of the topic–focus pattern observed in Mandarin, I will follow the information-structural approach. An analysis is proposed incorporating elements from both Bresnan's (1994) and Mikkelsen's (2005) analyses.

5.2.1.2 Syntactic approach

The idea that syntactic numeration can be regulated by information-structural properties is rejected in Den Dikken (2006). He insists that the pragmatic functions can only be determined at the level of discourse analysis. In addition, as has also been pointed out in Bresnan (1994), Den Dikken argues that languages always have alternative mechanisms to focalise the subject in addition to movement to an object position. Hence, it remains unexplained for Bresnan why other methods are not applied. In contrast to the approach from the information structure aspect, Den Dikken (2006) proposes that inversion takes place when an empty-headed predicate needs to be licensed. The same account applies to predicate inversion and canonical locative inversion, as well as to so-called "beheaded" locative inversion. I will briefly present his analysis of predicate inversion below.

In the spirit of Moro's (1997) analysis of *it* in the English *it*-cleft structure and Adger and Ramchand's (2003) proposal of the pronominal augement *e* in the Augmented Copular Construction (ACC) in Scottish Gaelic, Den Dikken (2006) analyses the precopular constituent in an

inverse sentence as a reduced free relative. For instance, the precopular constituent *the best candidate* in (26a) is analysed as the predicate of the small clause embedded in a reduced free relative clause, which serves as the predicate of the postcopular subject *Brian*, as shown in (27a).[11] In addition, equative sentences (defined in some other studies, such as Higgins 1979 and Heycock and Kroch 1999) are taken to be inverse sentences. The analysis of the precopular constituent *Cicero* in (26b) is presented in (27b). A free relative analysis is similarly proposed. Unlike *the best candidate* in (26a), *Cicero* in (26b) is analysed as the subject of small clause embedded in the reduced free relative clause, which also serves as the predicate of the postcopular subject *Tully*.

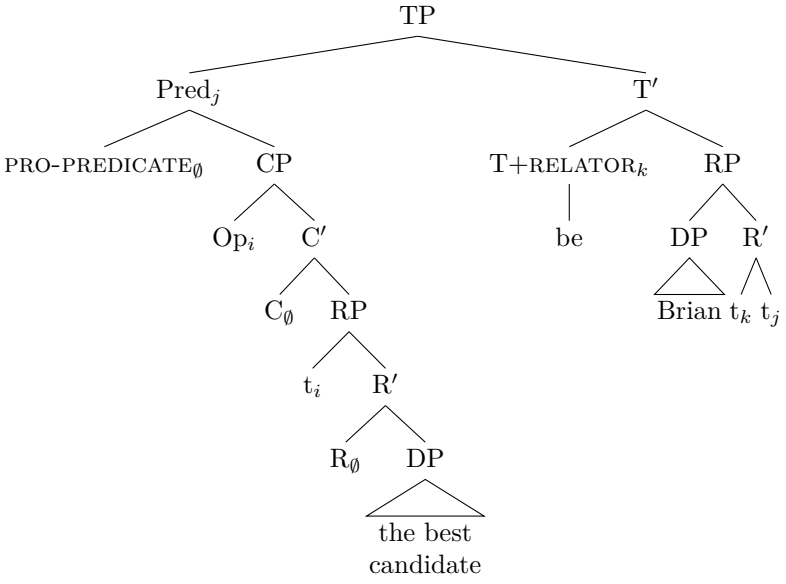
(26) a. The best candidate is Brian.
b. Cicero is Tully.

(27) a. [NULL pro-predicate [$_{CP}$ Op$_i$ [C$_\emptyset$ [$_{RP}$ t$_i$ [Relator$_\emptyset$ the best candidate]]]]]
b. [pro-predicate$_\emptyset$ [$_{CP}$ Op$_i$ [C$_\emptyset$ [$_{RP}$ Cicero [Relator$_\emptyset$ t$_i$]]]]]
(Den Dikken 2006: 92, 95)

[11] "R(elator)" in Den Dikken's (2006) system is to a certain extent equivalent to the Pred head. However, RP differs from PredP as it is supposed not to be a specific projection in the structure. Instead, Den Dikken (2006) proposes that any functional projection mediating the predication relation can be viewed as an instance of RP.

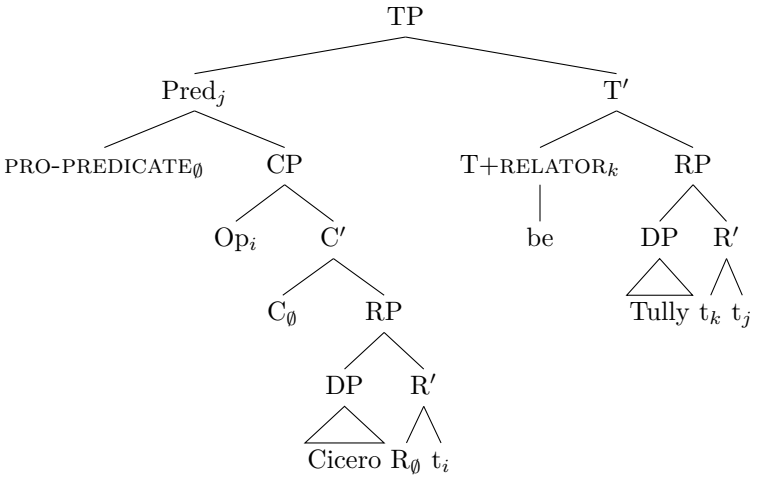
The structure analysis of the two sentences is shown in (28).

(28) a.



(Den Dikken 2006: 95)

b.



(Den Dikken 2006: 73)

Based on the analysis that the precopular constituent is a reduced free relative clause, headed by a null pro-predicate, Den Dikken argues

that the null head of the reduced free relative must invert its subject and raise to [Spec, TP] to get licensed. According to him, both canonical and "beheaded" locative inversion are triggered for the same reason that the empty-headed predicate must get licensed in [Spec, TP]. However, though appealing, Mandarin data do not show positive evidence in favour of his approach. Crucially, there is no empirical evidence for the existence of reduced free relatives in Mandarin.

Unlike Den Dikken's complicated analysis of inverse copular sentences, Moro (2000) provides a simple unified account for both canonical and inverse copular sentences, based on the assumption that copular sentences start from a symmetric bare small clause. However, the symmetry inside the small clause must be broken in the course of derivation of a copular sentence. Otherwise, Kayne's (1994) Linear Correspondence Axiom (LCA) will be violated. To this end, the subject and the predicate NP are equally driven to raise because the raising of either NP can break the symmetry. As shown repeatedly in the previous chapters, as well as in the previous sections in this chapter, the small clauses observed in Mandarin only permit the canonical order. Henceforth, the current study favours an asymmetric predicational core as the base for both types of copular sentences and will not adopt Moro's (2000) approach which may account for phenomena in other languages.

As a result, the current study adopts neither Moro's (2000) nor Den Dikken's (2006) analysis.

5.2.2 Information structure and inverse sentences

The current thesis will resort to the regulation of information structure, in the spirit of Bresnan (1994) and Mikkelsen (2005), but differ from them with regards to some details. First, I agree with Bresnan's (1994) view that identificational focus associated with the postcopular nominal is essential for inverse sentences. In addition, the proposed analysis also aligns with Mikkelsen (2005) that the topic feature checking is crucial for the numerations of both types of copular sentences. However, I will show that the Mandarin data suggest that, for one thing, the precopular position is associated with feature checking of not only topic but also information focus. Furthermore, the topic/focus feature in the precopular position does not motivate predicate inversion *per se*, but it

does play a decisive role for numeration.

To start with, as introduced in Section 3.4.1 in Chapter 3, Mandarin data show a comparable pattern with cross-linguistic data presented in Heycock (1995) and Mikkelsen (2005), among others, in terms of the pattern of focus in copular sentences. They observe that the postcopular element in an inverse sentence must be in focus while the precopular element must be discourse-old. When it comes to Mandarin, the same pattern can be observed when alternative questions are concerned. However, when wh-question answer pairs are taken into consideration, Mandarin present two crucial distinctions from English. First, the precopular wh-element cannot be the equivalent of *what*, i.e. *shénme* (see (45) on page 68). Second, the precopular nominal in an inverse sentence can be an information focus when the wh-element in the question is also precopular.

Note again that as Mandarin is a wh-in-situ language, a wh-element can occur on the either side of the copula. This complicates the pattern of interaction between the position of the wh-element and the position of the information focus in the answers. The full pattern of focus in both predicational/canonical and specificational/inverse sentences was presented in Section 3.4.1 in Chapter 3. Examples in relation to wh-question answer pairs are repeated below and their information structure will be further discussed.

(29) *Precopular wh-; canonical question*
A: 谁是李四的老师?
Shéi shì Lǐsì de lǎoshī?
who COP Lisi SUB teacher
'Who is Lisi's teacher?'
B1: 张三是李四的老师。 *Canonical answer*
Zhāngsān shì Lǐsì de lǎoshī.
Zhangsan COP Lisi SUB teacher
'Zhangsan is Lisi's teacher.'
B2: 李四的老师是张三。 *Inverse answer*
Lǐsì de lǎoshī shì Zhāngsān.
Lisi SUB teacher COP Zhangsan
'Lisi's teacher is Zhangsan.'

(30) *Precopular wh-; inverse question*
A: 谁是张三?
Shéi shì Zhāngsān?
who COP Zhangsan
'Who is Zhangsan?'
B1: 李四的老师是张三。 *Inverse answer*
Lǐsì de lǎoshī shì Zhāngsān.
Lisi SUB teacher COP Zhangsan
'Lisi's teacher is Zhangsan.'
B2: ? 张三是李四的老师。 *Canonical answer*
?*Zhāngsān shì Lǐsì de lǎoshī.*
Zhangsan COP Lisi SUB teacher
'Zhangsan is Lisi's teacher.'

(31) *Postcopular wh-; canonical question*
A: 张三是谁?
Zhāngsān shì shéi?
Zhangsan COP who
'Who is Zhangsan?'
B1: 张三是李四的老师。 *Canonical answer*
Zhāngsān shì Lǐsì de lǎoshī.
Zhangsan COP Lisi SUB teacher
'Zhangsan is Lisi's teacher.'
B2: * 李四的老师是张三。 **Inverse answer*
**Lǐsì de lǎoshī shì Zhāngsān.*
Lisi SUB teacher COP Zhangsan
'Lisi's teacher is Zhangsan.'

(32) *Postcopular wh-; inverse question*
A: 李四的老师是谁?
Lǐsì de lǎoshī shì shéi?
Lisi SUB teacher COP who
'Who is Lisi's teacher?'
B1: 李四的老师是张三。 *Inverse answer*
Lǐsì de lǎoshī shì Zhāngsān.
Lisi SUB teacher COP Zhangsan
'Lisi's teacher is Zhangsan.'

B2: * 张三是李四的老师。 *Canonical answer*
**Zhāngsān shì Lǐsì de lǎoshī.*
Zhangsan COP Lisi SUB teacher
'Zhangsan is Lisi's teacher.'

As shown in (29) and (30), when the wh-element in the question occupies the precopular position, the answer can have both orders. In contrast, when the wh-element in the question occupies the postcopular position, the new information in the answer must be postcopular, as shown in (31) and (32). The table summarising the pattern is also repeated below as Table 5.1.

Table 5.1: Types of question–answer pairs (with *wh*-questions)

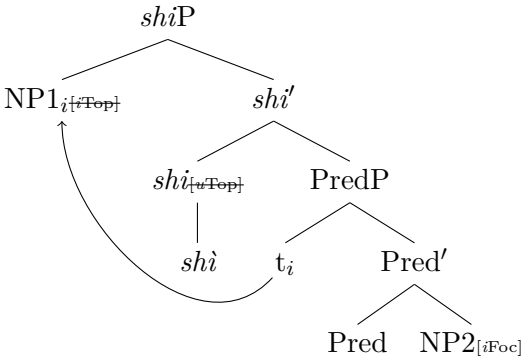
Question / Answer	Precopular *wh*-		Postcopular *wh*-	
	Canonical	Inverse	Canonical	Inverse
Canonical	+	?	+	-
Inverse	+	+	-	+

+: felicitous; -: infelicitous; ?: marked

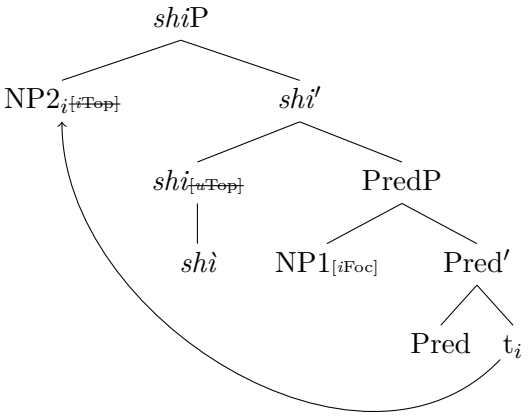
When the *wh*-elements occur in the postcopular position, as in (31) and (32), the order of the topic and information focus complies with the cross-linguistic generalisation that Bresnan (1994) mentions. That is, by default, the subject is the unmarked discourse topic and the object is the focus. The word order of the felicitous answers to these questions mimics that of the questions. The numerations of the answers are presented as in (33), following Mikkelsen's implementation of [Top] feature checking.[12]

[12]The low FocP is omitted in the structure in (33b) for simplicity. It also applies to (34b) and (35a).

(33) a. see (31)B1



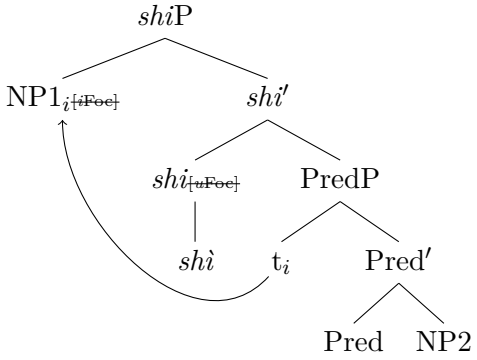
b. see (32)B1



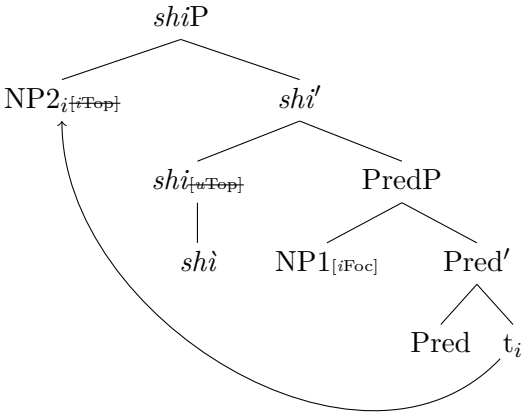
In contrast, when the *wh*-element appears in the precopular position, as in (29) and (30), the order between the new information and the old information is the opposite of the default order. The word orders in the answers can alternate between the two types of orders: i) information focus as the subject and old information expressed by the postcopular constituent, as in the two B1 answers; and ii) topic as the subject and information focus as the postcopular constituent, as in the two B2 answers. In other words, the precopular position in the reply sentences can be filled by either the topic or the information focus. That is, both the [Top] and the [Foc] feature can attract the NP that bears the corresponding feature to [Spec, *shi*P] for feature checking reasons.

Accordingly, the current thesis proposes that in addition to the [Top] feature as addressed by Mikkelsen (2005), the [Foc] feature can also regulate the derivation of Mandarin copular sentences. Note crucially that, first, the topic feature associated with the subject position is distinct from the topic feature associated with left-dislocation or hanging topics. As mentioned in footnote 4 on page 93 (Chapter 4), Rizzi (2015b) argues that subjects express pure aboutness whereas topics express both aboutness and discourse links. Second, the focus feature under discussion here is associated with information focus, and it is independent from the exhaustiveness understanding discussed in Section 3.4.1 in Chapter 3. The numerations of the relevant answers (i.e. those in (29) and (30))are respectively presented below in (34) and (35).

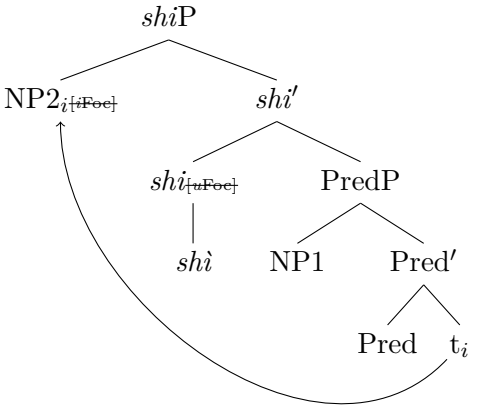
(34) a. see (29)B1



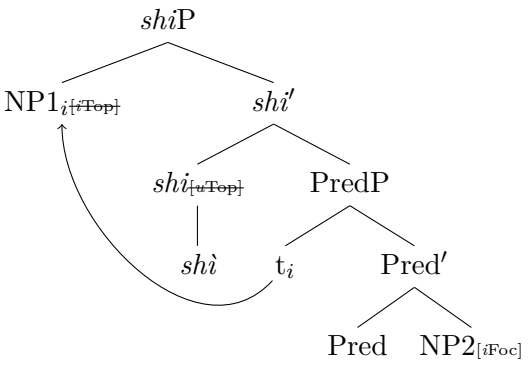
b. see (29)B2



(35) a. see (30)B1



b. see (30)B2



Interestingly, equative sentences behave differently from both predicational and specificational sentences. As shown in (36) and (37), when the wh-element occurs in the postcopular position, both orders of equative sentences can function as answers to the questions. This phenomenon can be accounted for by the analysis presented above. As discussed in Section 3.3.1.3 in Chapter 3, both nominals in equatives are discourse-old topics. In other words, both of them bear an interpretable topic feature, which can thereby be checked at [Spec, *shi*P].

(36) A: 张三是谁?
Zhāngsān shì shéi?
Zhangsan COP who
'Who is Zhangsan?'
B1: 张三就是那个人。
Zhāngsān jiù shì nà-ge rén.
Zhangsan exactly COP DEM-CLF person
'Zhangsan is that person.'
B2: 那个人就是张三。
Nà-ge rén jiù shì Zhāngsān.
DEM-CLF person exactly COP Zhangsan
'That person is Zhangsan.'

(37) A: 李四的老师是谁?
Lǐsì de lǎoshī shì shéi?
Lisi SUB teacher COP who
'Who is Lisi's teacher?'

B1: 李四的老师就是那个人。
Lǐsì de lǎoshī jiù shì nà-ge rén.
Lisi SUB teacher exactly COP DEM-CLF person
'Lisi's teacher is that person.'

B2: 那个人就是李四的老师。
Nà-ge rén jiù shì Lǐsì de lǎoshī.
DEM-CLF person exactly COP Lisi SUB teacher
'That person is Lisi's teacher.'

In sum, the current analysis incorporates the proposal of Bresnan (1994) and Mikkelsen (2005). I propose that the focus on the referential nominal motivates its movement from [Spec, PredP] to [Spec, FocP]. As the low FocP is a criterial configuration in the sense of Rizzi (2015a, 2015b), the moved nominal gets frozen in FocP and cannot move further to [Spec, *shi*P]. The predicative NP must then move to [Spec, *shi*P] to satisfy the EPP. In addition, the uninterpretable [Top] or [Foc] feature on *shi* must also be eliminated. On the condition that NP2 bears the corresponding feature, the numeration succeeds, giving rise to a well-formed inverse structure. In contrast, if NP2 does not bear the corresponding feature, the numeration crashes. The derivation of canonical and inverse sentences will be presented at length in the next section.

Before moving to the derivation of canonical and inverse structures, I make a short remark again on the functional head that bears the uninterpretable topic/focus feature. In Mikkelsen's (2005) proposal, it is T that bears the uninterpretable topic feature, and the DP moves to [Spec, TP] for feature checking reasons. As the current study argues that *shì* does not instantiate T (see Section 4.2.2 in Chapter 4) and, moreover, since Chapter 6 will propose that T does not always appear in Mandarin copular sentences, I deviate from Mikkelsen's discussion about English in that in the Mandarin structures, it is not T that bears the topic/focus feature.

5.3 Deriving the structures

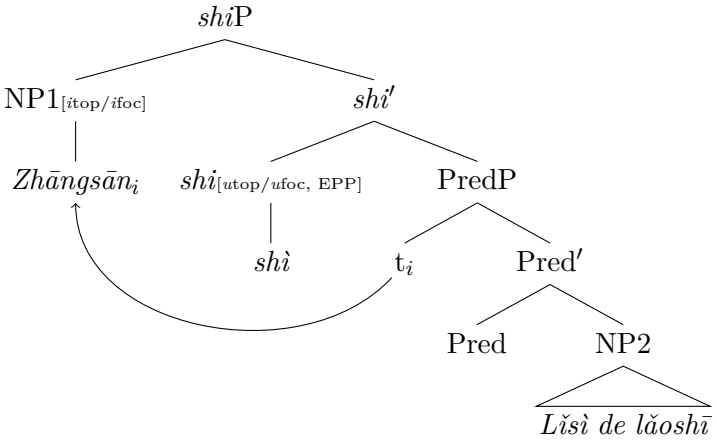
As introduced in the previous sections, the structure of Mandarin copular sentences is simple. The basic structure of both canonical and inverse

structures is the predicational core (PredP). The referential and predicative nominals are merged in a fixed order: the referential nominal occupies the specifier of PredP, and the predicative nominal is the complement of Pred. This PredP is taken as the complement of the head of *shi*P, a functional projection comparable to SUBJP proposed by Rizzi (2015b) and Shlonsky and Rizzi (2018), a functional projection for the Subject-Criterial feature checking. The head of *shi*P normally bears an uninterpretable [Top] or [Foc] feature and a standard EPP feature. Either nominal may raise to the [Spec, *shi*P] position to get licensed; meanwhile, the topic/focus and the EPP feature get checked there. Which nominal eventually raises up is regulated by the information-structural configuration. When the referential NP1 bears the corresponding [Top]/[Foc] feature, it is this NP that moves to [Spec, *shi*P] so that the [Top]/[Foc] feature can be checked. The corresponding uninterpretable feature on *shi* as well as the EPP feature can be eliminated. Meanwhile, the predicate NP2 remains put.

(38) Canonical sentences

a. 张三是李四的老师。
Zhāngsān shì Lǐsì de lǎoshī.
Zhangsan COP Lisi SUB teacher
'Zhangsan is Lisi's teacher.'

b.



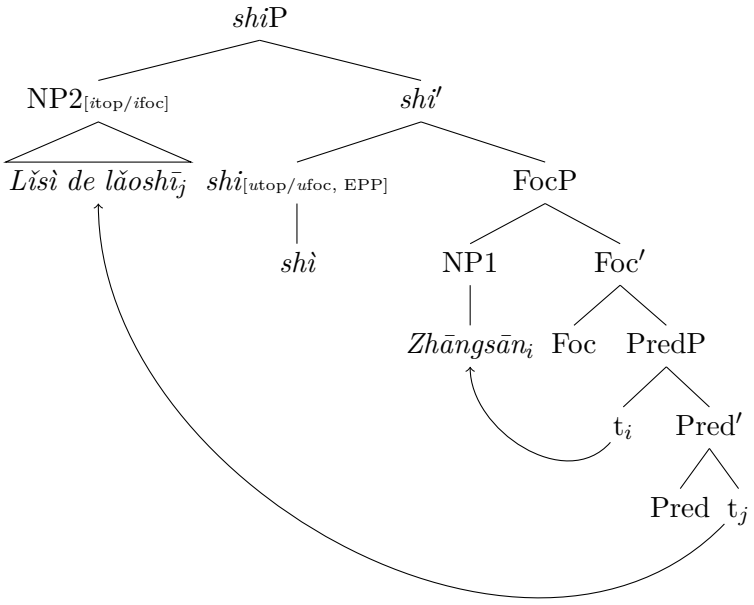
To derive the inverse structure, subject NP1, which is always associated with a focus, moves from [Spec, PredP] to [Spec, FocP]. It then gets frozen in FocP. Consequently, the EPP feature of the head of *shi*P

requires the predicative NP2 to move to the specifier of *shi*P to eliminate the EPP feature. Crucially, as *shi*P forms a criterial configuration, the nominal it can attract must have the same criterial feature as it. In other words, the NP2 must bear the corresponding [Top] or [Foc] feature; otherwise the derivation crashes. Note that, as argued in Rizzi (2015b) and Shlonsky and Rizzi (2018), focalising the subject in the low FocP also avoids a Relativized Minimality problem in the course of inverting the predicate nominal NP2 over its subject. The spell-out of such a structure is a canonical copular sentence, as shown in (38).

(39) Inverse sentences

a. 李四的老师是张三。
Lǐsì de lǎoshī shì Zhāngsān.
Lisi SUB teacher COP Zhangsan
'Lisi's teacher is Zhangsan.'

b.



5.4 Accounting for the canonical/inverse distinctions

This section will account for the distinctions between canonical and inverse sentences discussed in Chapter 3 on the basis of the structures and derivation proposed in the previous sections in this chapter.

5.4.1 The pattern of focus

The reason that canonical and inverse sentences present different patterns of focus (Heycock1995, 2012, Rizzi 2015, and Shlonsky and Rizzi 2018; see also 3.4.1 in Chapter 3 of this thesis) is straightforward on the grounds of the discussion in the previous section. Recall that the postcopular nominal in an inverse sentence is always in focus, associated with the exhaustive interpretation. Arguably, it is exhaustivity that motivates the referential nominal to move to the low FocP.

In addition, as presented by examples (29) through (32) and the summary in Table 5.1, in Mandarin, canonical and inverse sentences show the same pattern for topic and information focus. These two features do not motivate displacement of the nominals. However, only the nominal bears the corresponding topic or focus feature, as the head of *shi*P can be attracted to [Spec, *shi*P] for feature checking reasons.

5.4.2 The extraction constraints

The restrictions on extraction of the postcopular nominal in inverse sentences have also been observed in many languages (Heycock 1995, Moro 1997, Den Dikken 2006, Shlonsky and Rizzi 2018; and see also Section 3.4.3 in Chapter 3 of this thesis). Specifically, in Mandarin, canonical copular sentences allow for topicalisation of the predicate NP2. In contrast, inverse sentences do not allow for topicalisation of the subject NP1. The relevant pairs of examples are repeated below as (40) and (41).

(40) a. 张三是李四昨天见到的那个人。
Zhāngsān shì Lǐsì zuótiān jiàn-dao de nà-ge
Zhangsan COP Lisi yesterday see-arrive SUB DEM-CLF
rén.
person
'Zhangsan is the person Lisi met yesterday.'

b. 李四昨天见到的那个人是张三。
Lǐsì zuótiān jiàn-dao de nà-ge rén shì
Lisi yesterday see-arrive SUB DEM-CLF person COP
Zhāngsān.
Zhangsan
'The person Lisi met yesterday is Zhangsan.'

(41) a. 李四昨天见到的那个人啊，张三可能是。
Lǐsì zuótiān jiàn-dao de nà-ge rén a, Zhāngsān
Lisi yesterday see-arrive SUB DEM-CLF person TM Zhangsan
kěnéng shì.
be.likely.to COP
'As for the person Lisi met yesterday, Zhangsan is likely to be him.'

b. *张三啊，李四昨天见到的那个人可能是。
**Zhāngsān a, Lǐsì zuótiān jiàn-dao de nà-ge*
Zhangsan TM Lisi yesterday see-arrive SUB DEM-CLF
rén kěnéng shì.
person be.likely.to COP

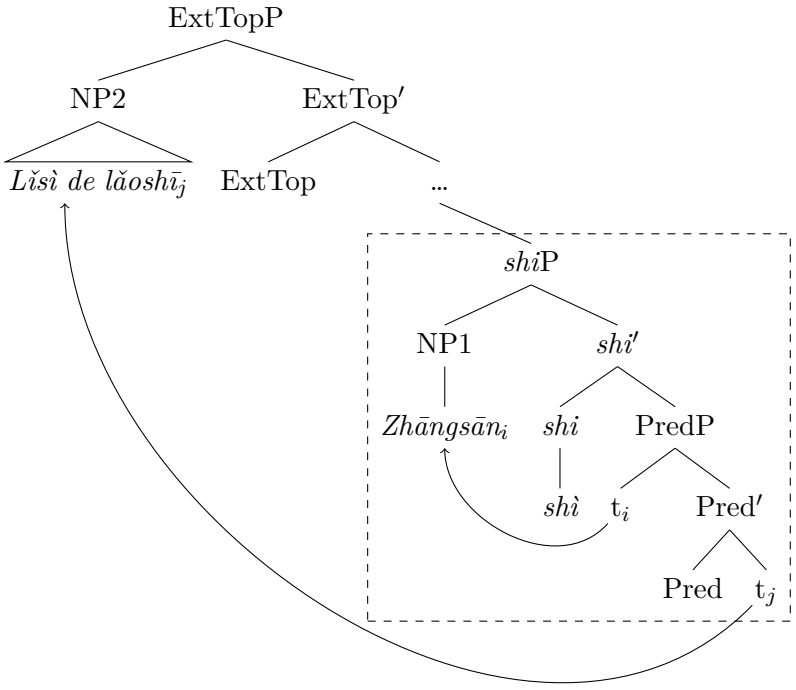
The constraints on extraction of and from the postcopular subject DP has been discussed in Moro (1997) in terms of barrierhood. On the one hand, extraction of the full DP violates the locality condition. On the other, extraction from the nominal violates the subjacency condition, since the full DP itself counts as a barrier, assuming that the copula is unable to L-mark the subject DP in the embedded small clause.[13]

[13]Heycock (1995) also ascribes the ban on extraction to an ECP violation with respect to the trace of NP1, which cannot be properly governed. Heycock and Kroch (1999) attribute the immobility of the postcopular element in inverse sentences to the issue of referentiality. They point out that Moro has overlooked the fact that the precopular element in an inverse sentence cannot itself be extracted or be extracted from. Admittedly, their argumentation may undermine Moro's analysis of English and Italian.

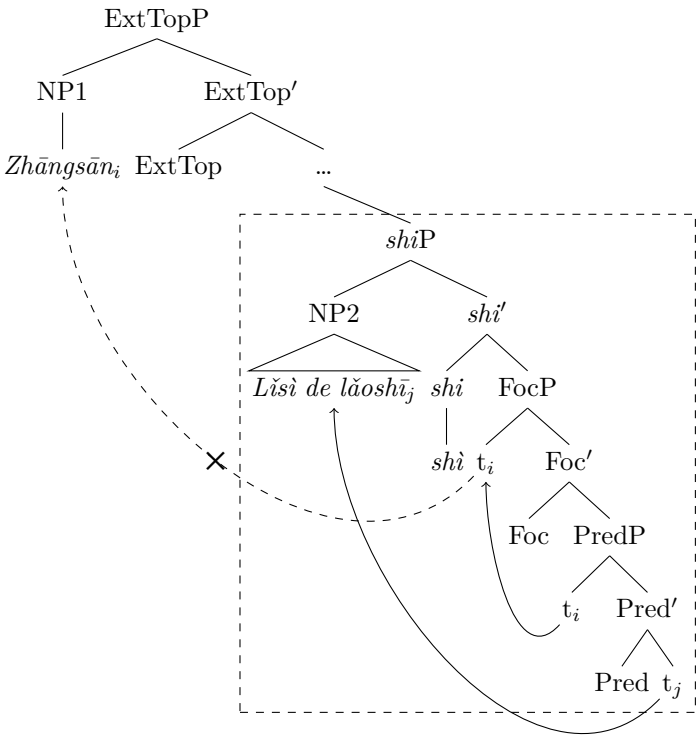
Den Dikken (2006) questions Moro's analysis because it cannot be carried over to the parallel extraction constraints in the postverbal DP in locative inversion constructions. Even if Moro is correct that the copula is unable to L-mark the subject DP, the motion verb in a locative inversion can. Consequently, the ban on extraction from the postverbal nominal in a locative inversion can no longer be accounted for using the subjacency condition violation, as the postverbal DP should not be viewed as a barrier. Den Dikken (2006) then turns to the freezing effects in a focus position. His reasoning is simple: a focus cannot serve as input for topicalisation or relativisation operations, as that would lead to a pragmatic anomaly. Rizzi (2015b) and Shlonsky and Rizzi (2018) also resort to focushood. On the one hand, Rizzi and Shlonsky, in a way similar to Den Dikken, also incorporate the freezing effect into their analysis. On the other hand, unlike Den Dikken, they stipulate a FocP to instantiate focushood. Particularly, as they stipulate a lower FocP on top of PredP, they argue that the referent NP moves to FocP and gets frozen there since this FocP creates a criterial configuration.

As the structures proposed in the current study involve the low FocP for the interpretative and structural reasons discussed in the previous sections, I follow Rizzi (2015b) and Shlonsky and Rizzi's (2018) reasoning. Namely, when the subject NP1 moves to FocP, it gets frozen there. As a result, no extraction is then available. For instance, (42a) represents the structure of a canonical sentence with a topicalised predicative NP2. The fact that the subject NP1 raises to [Spec, *shi*P] position does not affect the extraction of NP2. In contrast, in the course of deriving an inverse structure like (42b), the subject NP1 of the small clause will move to [Spec, FocP] and get frozen there. Thus, it cannot be topicalised.

(42) a. Canonical sentences



b. * Inverse sentences



5.4.3 The obligatoriness of *shì*

The last distinction regards the obligatoriness of *shì*. As introduced in Section 3.4.2 in Chapter 3, an omission of *shì* can sometimes be observed with a predicational structure, while *shì* is always obligatory in specificational copular sentences. The relevant examples are repeated here. Three contexts are concerned here. First, as shown in (43), the small clause under a verb meaning 'consider' sometimes allows for omission of *shì* for a canonical order. In contrast, the reversed order of the same two nominals in the embedding clause requires the presence of *shì*.

(43) a. 你当张三 (是) 傻子吗?
Nǐ dāng Zhāngsān (*shì*) *shǎzi ma*?
2SG consider Zhangsan COP idiot Q
'Do you consider Zhangsan an idiot?'

b. 你当傻子 *(是) 张三吗?
Nǐ dāng shǎzi *(*shì*) *Zhāngsān ma*?
2SG consider idiot COP Zhangsan Q
'Do you consider the idiot to be Zhangsan?'

Second, a nominal predicate sentence without *shì*, such as (44a), is possible in Mandarin. However, an overt *shì* is obligatory in inverse sentences, as shown in (44b).

(44) a. 今天 (是) 星期日。
Jīntiān (*shì*) *Xīngqīrì*.
today COP Sunday
'Today is Sunday.'

b. 星期日 *（是）今天。
Xīngqīrì *(*shì*) *jīntiān*.
Sunday COP today
'Sunday is today.'

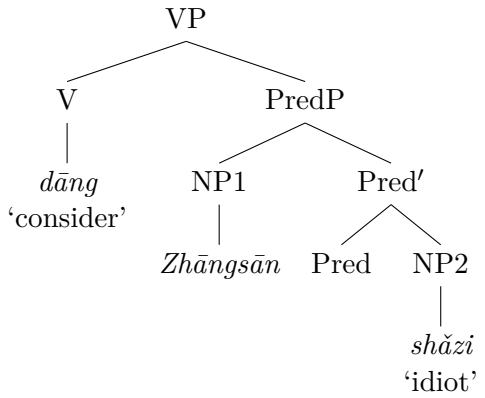
Lastly, as shown in (45), *shì* can gap in a canonical structure while it cannot gap if the word order reverses, even when the contexts remain the same.

(45) a. 张三是数学老师，李四（是）物理老师，赵六（是）化学老师。
Zhāngsān shì shùxué lǎoshī, *Lǐsì* (*shì*) *wùlǐ lǎoshī*,
Zhangsan COP math teacher Lisi COP physics teacher
Zhàoliù (*shì*) *huàxué lǎoshī*.
Zhaoliu COP chemistry teacher
'Zhangsan is a maths teacher, Lisi a physics teacher, and Zhaoliu a chemistry teacher.'

b. 数学老师 *(是) 张三，物理老师 *(是) 李四，化学老师 *(是) 赵六。
Shùxué lǎoshī *(*shì*) *Zhāngsān*, *wùlǐ* *lǎoshī* *(*shì*) *Lǐsì*,
math teacher COP Zhangsan physics teacher COP Lisi
huàxué *lǎoshī* *(*shì*) *Zhàoliù*.
chemistry teacher COP Zhaoliu
'The maths teacher is Zhangsan, the physics teacher is Lisi, and the chemistry teacher is Zhaoliu.'

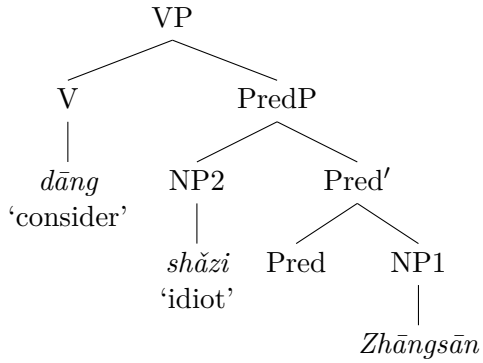
Assuming that *shì* is obligatory when the structure contains *shi*P, I propose that clauses allowing for the absence of *shì* only contain a bare PredP. In contrast, clauses containing *shì* have a larger structure than PredP, such as *shi*P. For instance, when *shì* does not occur, the structure of the embedded clause under *dāng* 'consider' in (43) is PredP. As introduced in Section 5.1.1, PredP is merged in a fixed order; only the predicational structure is allowed. When *shì* does occur, *dāng* actually takes a full-fledged sentence containing *shi*P as its complement. The occurrence of *shi*P in the structure provides a landing site for the fronted NP2. Hence, both orders are available. The relevant part of the structures is shown in (46) through (49).

(46) a. 你当张三傻子吗?
Nǐ *dāng* *Zhāngsān* *shǎzi* *ma*?
2SG consider Zhangsan idiot Q

b.


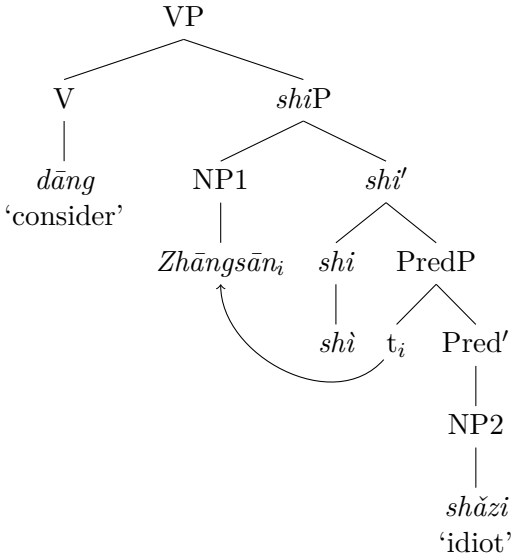
(47) a. *你当傻子张三吗?
*Nǐ dāng shǎzi Zhāngsān ma?
2SG consider idiot Zhangsan Q

b. *



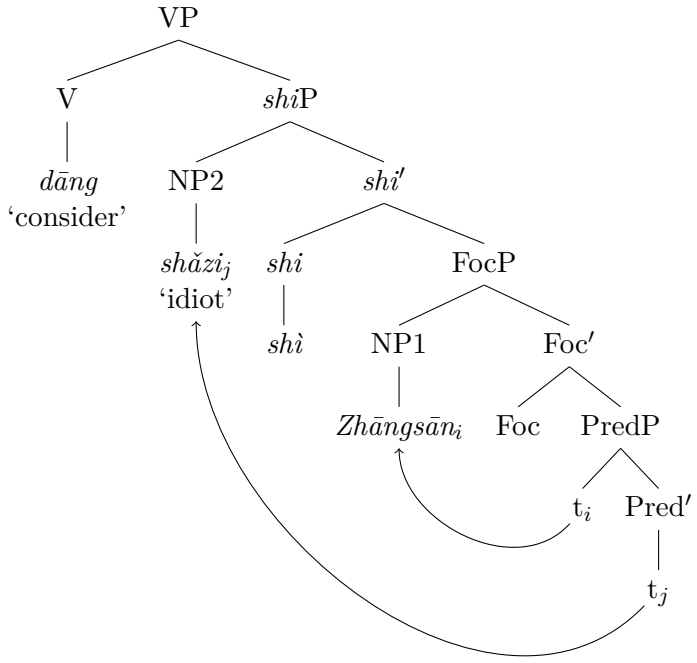
(48) a. 你当张三是傻子吗?
Nǐ dāng Zhāngsān shì shǎzi ma?
2SG consider Zhangsan COP idiot Q

b.



(49) a. 你当傻子是张三吗?
Nǐ dāng shǎzi shì Zhāngsān ma?
2SG consider idiot COP Zhangsan Q

b.



Similarly, the nominal predicate sentences can be viewed as PredPs while standard copular sentences involve a larger structure.[14] Also, when *shì* gaps, what we see is actually coordination of PredP. Again, as PredP is merged in a fixed order, gapping is only observed with predicational copular sentences, and not with specificational copular sentences.

5.5 Conclusion

This chapter has argued for a unified analysis towards the structure of Mandarin canonical and inverse copular structures. First of all, the two

[14]It remains unclear to me how nominal predicate sentences are licensed to stand alone if they can be regarded as structures containing only PredP.

types of sentences share the same base structure: the predicational core. It is an asymmetric structure mediated by a functional head Pred. The two NPs flanking *shì* are merged in a fixed word order. The referent nominal is the specifier of PredP, and the predicative nominal is the complement of the Pred head. *Shì* is not the spell-out of the Pred head but a higher functional head that takes PredP as its complement. Both of the nominals can raise to [Spec, *shi*P] via A-movement. In addition, a low FocP on top of PredP is proposed for the inverse structure. Stipulation of this FocP on the one hand accounts for the fact that the postcopular nominal in an inverse sentence is always in focus. On the other hand, it accounts for why the postcopular nominal in an inverse sentence cannot be topicalised.

The derivation of copular sentences is regulated by information-structural rules. Predicate inversion is motivated by the focus on NP1 which attracts it to [Spec, FocP] from [Spec, PredP]. In addition, the precopular nominal must bear the corresponding [Top]/[Foc] feature as a *shi* head. Specifically, when the referential NP1 bears the corresponding [Top]/[Foc] feature, it is this NP that moves to [Spec, *shi*P] so that the [Top]/[Foc] feature can be checked. The corresponding uninterpretable feature on *shi* as well as the EPP feature can be eliminated. Meanwhile, the predicate NP2 remains put. The spell-out of such a structure is a canonical copular sentence. When the subject NP1 has the identificational focus, it moves to the low FocP on top of PredP. As NP1 gets frozen in FocP, the EPP feature of the head of *shi*P requires that the predicative NP2 move to the specifier of *shi*P to eliminate the EPP feature. Crucially, as *shi*P forms a criterial configuration, the nominal it attracts must have the same criterial feature as it. In other words, the NP2 must bear the corresponding [Top] or [Foc] feature; otherwise the derivation crashes.

The proposed structures account for the distinctions between predicational and specificational copular sentences in Mandarin, such as the ban on the topicalisation of the postcopular nominal in an inverse sentence, the distinctions regarding the optionality of *shì* in the two types of sentences, and the pattern of focus. The next chapter will investigate the temporal interpretation of copular sentences.