

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

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CHAPTER 2

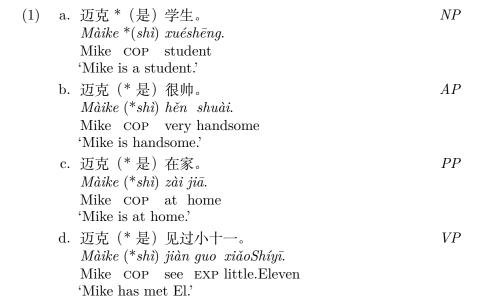
Basic properties of shì

Shì 是 is the copula in contemporary Mandarin. Its homophones also occur in various non-copular constructions. This chapter will first present a description of restrictions on the distribution of shì when it functions as the copula and then an overview of presumably non-copular use of shì in Mandarin.

2.1 The category of the postcopular constituent

In Mandarin, the use of shi is constrained for copular sentences. In principle, only nominal predicates admit the use of the copula shi. Shi is seldom used when the predicate is an AP, PP, or VP (for exceptions see the next two subsections). The examples in (1) show the contrast between the use of the copula shi when the predicates are of different lexical categories.

 $^{^{1}}$ I would like to point out again that the $sh\hat{\imath}$ under discussion here should not bear extra stress or be pronounced in a weakened way. See Section 2.3.1 in this chapter for an inventory of various prosodic patterns associated with different uses of $sh\hat{\imath}$ in Mandarin. In addition, note that, unlike its copular counterparts in some European languages, $sh\hat{\imath}$ is not used as an auxiliary in passives, the perfective, the progressive,



Section 2.1.1 will list all kinds of NPs that are allowed to occur in the postcopular position. Sections 2.1.2 and 2.1.3 will introduce two special cases in which non-nominal elements are permissible in the postcopular position.

2.1.1 Nominals

With respect to categories of predicative nominal phrases, the post-copular position allows for nearly all types of nominal phrases. The sentences in (2) through (4) show the range of NPs. Specifically, first, the postcopular nominal can be a bare NP, an indefinite NP with a numeral and classifier, or a modified NP (modified by an adjective or relative clause).²

or existential constructions.

²Postcopular bare NPs can only have the indefinite reading. The definite maximality reading is unavailable for predicate NPs (see Cheng, Heycock, and Zamparelli 2017 for an exemplary context and also examples in Cantonese).

(2) a. 迈克是学生。

Bare NP

Màike shì xuéshēng. Mike COP student 'Mike is a student.'

b. 迈克是一个学生。

Num-Cl-NP

Modified NP

Pronoun

 $M\grave{a}ike\ sh\grave{i}\ y\bar{i}$ - $ge\ xu\acute{e}sh\bar{e}ng.$ Mike COP one-CLF student 'Mike is a student.'

c. 迈克是 (一个) 聪明的学生。 *Màike shì* (yō-ge) cōngming de xuéshēng.

Mike COP one-CLF smart SUB student
'Mike is a smart student.'

d. 迈克是 (一个) 学过物理的学生。

Modified NP

Màike shì (yī-ge) xué guo wùlǐ de xuéshēng.

Mike COP one-CLF learn EXP physics SUB student

'Mike is a student who has learned physics.'

A postcopular nominal can also be a definite noun phrase, as shown in (3). Proper names, pronouns, NPs with demonstratives, and nominals with possessives are all permissible in the postcopular position.

(3) a. 迈克最好的朋友是小十一。 Proper name Màike zuì hǎo de péngyou shì xiǎoShíyī.

Mike most good SUB friend COP little.Eleven 'Mike's best friend is El.'

b. 迈克最好的朋友是她。

Màike zuì hǎo de péngyou shì tā.

Mike most good SUB friend COP 3SG
'Mike's best friend is her.'

d. 迈克是小十一的男朋友。 Possessives
Màike shì xiǎoShíyī de nánpéngyou.
Mike COP little.Eleven SUB boyfriend
'Mike is El's boyfriend.'

Lastly, quantifiers can be observed in the postcopular position, as shown in (4). Crucially, similar to English and other languages, they can only yield group readings, in the sense that groups of plural individuals are treated as entities (Partee 1986; Heycock & Kroch 1999). Note particularly that the universal quantifier $su\check{o}y\check{o}u$ 'all' is allowed in the postcopular position. In contrast, $m\check{e}i$ 'every' can never occur in the same position.³

- number-NP (4)a. 这本书的作者是两个中学生。 Zhè-běn $sh\bar{u}$ dezuòzhě shiliǎng-ge book DEM-CLF SUBauthor COPtwo-clf zhōngxuéshēng. secondary.school.student 'The authors of this book are two secondary school students.'

 - c. 疫情的受害者是所有人。

 Yìqíng de shòuhàizhě shì suǒyǒu rén.

 disease.outbreak SUB victim COP all people

 'The victims of the disease outbreak are all the people.'
 - d. *疫情的受害者是每个人。 every-NP
 *Yìqíng de shòuhàizhě shì měi-ge rén.
 disease.outbreak SUB victim COP every-CLF people
 Intended: 'The victims of the disease outbreak are every person.'

2.1.2 Exception 1: Postcopular non-nominals

The first exception to the generalisation that shi only co-occurs with nominal predicates mainly concerns bare APs, bare VPs, and IPs, as shown in (5).

(Heycock & Kroch 1999: 384)

³Similar phenomena in English have been noted in Heycock and Kroch (1999):

⁽i) ?? What she bought was every book on linguistics.

- (5) a. 我的爱好是看电视。 (Zhan & Sun 2013: 756)

 Wǒ de àihào shì kàn diànshì.

 1SG SUB hobby COP watch TV

 'My hobby is watching TV.'
 - b. 这个房子的特点是干净。 (Gao & Ji 1963: 54)

 Zhè-ge fángzi de tèdiǎn shì gānjìng.

 DEM-CLF house SUB characteristic COP clean

 'The characteristic of this house is that it is clean.'
 - c. 她的遗憾是只跑了一圈。 (Zhan & Sun 2013: 763)

 Tà de yíhàn shì zhǐ pǎo le yō-quān.

 3SG SUB regret COP only run PFV one-circle
 'Her regret is that she has only run one lap.'

In fact, these bare APs/VPs and IPs can also occur in the precopular position, as shown in (6), which presents sentences with the reversed word orders of those in (5).

- (6) a. 看电视是我的爱好。

 Kàn diànshì shì wǒ de àihào.

 watch TV COP 1SG SUB hobby
 'Watching TV is my hobby.'
 - b. 干净是这个房子的特点。
 Gānjìng shì zhè-ge fángzi de tèdiǎn.
 clean COP DEM-CLF house SUB characteristic
 'That it is clean is the characteristic of this house.'
 - c. 只跑了一圈是她的遗憾。

 Zhǐ pǎo le yī-quān shì tà de yīhàn.
 only run PFV one-circle COP 3SG SUB regret
 'That she has only ran one lap is her regret.'

It is unclear whether these are real exceptions, since these VPs, APs, and IPs can appear in positions that are normally occupied by nominal constituents. One approach to analysing this phenomenon is to assume that we are dealing with nominalisation. For Mandarin, another prototypical context for the discussion of nominalisation concerns the structure [N de V/A] (Xiang 1991; G. Cheng 1999; D. Wang 2002; Lu 2003; G. Zhou 2004; Si 2004; Deng 2006; R. Zhou 2012). (7) presents the most well-known examples in the literature.

- (7) a. 这本书的出版

 zhè-běn shū de chūbǎn

 DEM-CLF book SUB publish

 'the publication of this book'
 - b. 柠檬的酸
 níngméng de suān
 lemon SUB sour
 'the sourness of lemons'

This situation, namely, non-nominal constituents occurring in positions normally reserved for nominal elements, is also comparable to similar cases in other languages. For instance, in English, APs, PPs, and CPs can sometimes occur in the subject position of copular sentences, such as in the (a) sentences in (8) to (10). Such constituents are termed 'Honorary NPs' in Safir (1983) and 'elliptical NPs' in Blom and Daalder (1977) and Den Dikken (1987).

- (8) a. Under the bed is a good place to hide.
 - b. A good place to hide is under the bed.
- (9) a. Bashful is a terrible thing to be.
 - b. A terrible thing to be is bashful.
- (10) a. What they did was fight.
 - b. Fight was what they did.

(Den Dikken 2017: 3-4)

The current study will not engage in the debates on nominalisation and related theoretical issues. I will consider nominalisation to be an open possibility for analysing cases where bare APs/VPs and IPs occur in the postcopular position. Since this phenomenon could be attributed to other independent reasons such as nominalisation or semantic effects of referentiality, the existence of the above-mentioned examples will not undermine the claim that the Mandarin copula shi typically combines with nominal constituents.

2.1.3 Exception 2: Non-gradable adjectives

It is widely acknowledged that, in Mandarin, adjective predicates do not admit the use of shi (e.g. Pustet 2003). More precisely, the simple

combination of shi and an adjective predicate is rejected, as shown in (11).⁴

(11) a. *张三是高。 Gradable adjective with an open scale *Zhāngsān shì gāo.

Zhangsan COP tall
Intended: 'Zhangsan is tall.'

b. *这个杯子是满。 Gradable adjective with a closed scale *Zhè-ge bēizi shì mǎn.

DEM-CLF cup COP full
Intended: 'This cup is full.'

c. *这个答案是错。 Non-gradable adjective *Zhè-ge dá'àn shì cuò.

DEM-CLF answer COP wrong Intended: 'This answer is wrong.'

However, as long as de appears in addition to shi, (11b) and (11c) will become grammatical, though (11a) remains ungrammatical, as shown in (12). Following Zhu (1961) (among others), de is analysed as a nominaliser. Alternatively, de is followed by an empty N. Whichever analysis is correct, the A-de structure is nominal, and thus no longer constitutes a counterexample to the claim that shi typically combines with nominals.

- (12) a. * 张三是高的。 Gradable adjective with an open scale *Zhāngsān shì gāo de.

 Zhangsan COP tall DE Intended: 'Zhangsan is tall.'
 - b. 这个杯子是满的。 Gradable adjective with a closed scale Zhè-ge bēizi shì mǎn de.

 DEM-CLF cup COP full DE 'This cup is full.'
 - c. 这个答案是错的。 Non-gradable adjective Zhè-ge dá'àn shì cuò de.

 DEM-CLF answer COP wrong DE 'This answer is wrong.'

⁴The classification of adjectives follows Kennedy and McNally (2005).

It is well known that bare adjective predicate sentences in Mandarin will either yield only the comparative reading, as in (13a) and (13b), or lead to an "incomplete/ungrammatical" sentence, as in (13c), (Zhu 1982; Sybesma 1992, 1999; Grano 2012; Y. Wu & Zhu 2013; Fang 2017, 2018; Xiong & Yang 2020). To yield the positive reading of the adjectives, gradable adjectives with an open scale such as $g\bar{a}o$ 'tall' must co-occur with a degree adverb such as $h\check{e}n$, as shown in (14a). Non-gradable adjectives, in contrast, are by their nature incompatible with degree adverbs like $h\check{e}n$, as shown in (14b). In fact, being sandwiched between $sh\grave{i}$ and de (i.e. (12c)) is the only possible predicative form for Mandarin non-gradable adjectives (Grano 2012; Fang 2017, 2018), a fact that has been long overlooked.

(13) a. 张三高。

Zhāngsān gāo.

Zhangsan tall

'Zhangsan is taller (than someone else in the discourse).'

b. 这个杯子满。

Zhè-qe bēizi mǎn.

DEM-CLF cup full

'This cup has even more water (than some other cup in the discourse, though both are almost full).'

c. *这个答案错。

* $Zh\dot{e}$ -ge $d\acute{a}$ 'àn $cu\dot{o}$.

DEM-CLF answer wrong

Intended: 'This answer is wrong.'

(14) a. 张三很高。

Zhāngsān hěn gāo.

Zhangsan very tall

'Zhangsan is tall.'

b. *这个答案很错。

*Zhè-qe dá'àn hěn cuò.

DEM-CLF answer very wrong

Intended: 'This answer is wrong.'

Gradable adjectives with a closed scale have two possible predicative forms. One consists of the adjective with shi...de, as shown in (15a). This yields the positive reading of the adjective predicate. The other

is composed of the adjective and a degree adverb such as $h\check{e}n$, which gives rise to an intensified reading of the adjective predicate, as shown in (15b).

- (15) a. 这个杯子是满的。

 Zhè-ge bēizi shì mǎn de.

 DEM-CLF cup COP full DE

 'This cup is full.'
 - b. 这个杯子很满。

 Zhè-ge bēizi hěn mǎn.

 DEM-CLF cup very full

 'This cup is very full.'

In short, it is true that adjectives cannot co-occur with a single shi to form an adjective predicate sentence in Mandarin. However, when de occurs in addition to shi, two types of adjective predicates are permissible, namely, gradable adjectives with a closed scale and non-gradable adjectives.⁵

Before closing this section, I will make a short remark on $h\check{e}n$. I will not go so far as to claim that $h\check{e}n$ is another copula in Mandarin that selects only gradable adjectives (e.g. B. Zhang 2011). However, I will view such an analysis as an open possibility because the use of $h\check{e}n$ indeed satisfies the definitions of copula that will be mentioned in Chapter 4 (e.g. Pustet 2003, Arche, Fábregas, & Marín 2019). It is semantically bleached, since it does not yield the intensified degree reading 'very'. Also, it plays a role in relation to predication and is in complementary distribution with $sh\grave{i}$. Cross-linguistically speaking, it is also a common phenomenon that languages adopt multiple copulas with varied selective properties (Pustet 2003; Moro 2017; Arche, Fábregas, & Marín 2019). As the current study focuses on the syntactic properties of $sh\grave{i}$ and not on all possible copular elements in Mandarin, I will not delve into a discussion about the identity of $h\check{e}n$ in adjective predicate sentences.

 $^{^5}$ Analysis of the use of shi with adjectives is more likely to require resorting to semantic accounts, which would be a large, independent project. An elaborate description of the use of shi and $h\check{e}n$ in relation to the predicative forms of Mandarin adjectives is included in Appendix A. An account for the distinction is left for future research.

 $^{^6\}mathrm{Although}$ not proposing that $h\check{e}n$ is a copula, He and Jiang (2011) and Grano

2.1.4 Interim summary

In sum, this section reviews the selectional property of postcopular constituents in Mandarin. In principle, the copula shì is only compatible with nominal predicates. Except for NPs with every-quantification, all types of noun phrases can appear in the postcopular position. Two apparent exceptions to this generalisation have also been discussed in this section. For one thing, bare APs, bare VPs, and IPs in a nominalised reading can also appear in the postcopular position. Furthermore, though gradable adjectives with an open scale do not co-occur with shi, gradable adjectives with a closed scale can co-occur with $sh\hat{i}$ if an extra de also occurs. Furthermore, the only possible predicative form for nongradable adjectives involves shi as well as de. Since, as we have seen, these exceptions may very well be only apparent (the postcopular constituent may be nominalised) and to keep the discussion clear, this thesis will focus solely on the canonical cases in which the postcopular constituents are uncontroversially nominal (or, in other words, "double-NP" copular sentences, using Moro's 1997, 2017 term).

2.2 Obligatoriness of shì

Shi is obligatory in all the examples in section 2.1. In general, it tends to be obligatory in most contexts, whether matrix or embedded. Some languages allow for omission of the copula (or "copula dropping", to use Pustet's 2003 term) in matrix sentences. For instance, the Turkish copula suffix -DIr is optional in all contexts. In another group of languages, copula dropping is restricted to specific grammatical contexts. For instance, Hebrew and Arabic do not use a copula in the affirmative present tense. The Russian copula byt' is also obligatorily omitted in the present tense. The Hungarian copula van must be omitted in the third person present tense. Kenya Luo copula ni only co-occurs with nominal subjects but must be omitted when the subjects are pronominal or demonstrative.

⁽²⁰¹²⁾ argue, respectively, that $h\check{e}n$ and $sh\grave{i}$ have comparable functions. For He and Jiang (2011), both $h\check{e}n$ and $sh\grave{i}$ are analysed as type-shifters that can convert NPs into predicates. Specifically, $h\check{e}n$ creates extrinsic properties, while $sh\grave{i}$ creates intrinsic properties. For Grano (2012), the use of both $h\check{e}n$ and $sh\grave{i}$ is required by the T head, to fulfil "the T[+V] Constraint", to use his term. Reviews of other analyses of $h\check{e}n$ are referred to in N. N. Zhang (2015) and L. Zhang (2020).

Unlike any of the above-mentioned languages, shi in Mandarin matrix copular sentences is only omissible in two contexts. Its omissibility is not influenced by the properties of the subject or the tense of the sentence.

The first context concerns multi-clausal pair-lists. Copular sentences allow gapping in a pair-list context. For instance, the copula shi in the second and third clauses in (16) can be absent, resulting in a gapping-like sentence. Crucially, in addition to the copula, additional elements can be omitted in the same contexts, as shown in (17).

- (16) 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, Zhàoliù
 Zhangsan COP maths teacher Lisi COP physics teacher Zhaoliu
 (shì) huàxué lǎoshī.
 COP chemistry teacher
 'Zhangsan is a maths teacher, Lisi a physics teacher, Zhaoliu a chemistry teacher.'
- (17) 张三是数学老师,李四物理,赵六化学。 *Zhāngsān shì shùxué lǎoshī*, *Lǐsì wùlǐ*, *Zhàoliù huàxué*.

 Zhangsan COP maths teacher Lisi physics Zhaoliu chemistry 'Zhangsan is a maths teacher, Lisi a physics teacher, Zhaoliu a chemistry teacher.'

This phenomenon is interesting because it has been reported that Mandarin lacks canonical gapping (Paul 1999; S.-W. Tang 2001b; Wei 2011). However, the acceptability of (16) and (17) indicates that for some reason, gapping is possible with shi, even though it is unavailable with regular verbs. As shown in (18), when the verb $d\bar{a}ng$ 'serve as' is used instead of the copula shi, the sentence (18) becomes ungrammatical or at least seriously degraded, even though the same interpretation is intended. The sentences in (19) are two prototypical examples showing that Mandarin lacks canonical gapping. (19a) is an example with an eventive main verb, while (19b) has a stative main verb.

- (18) */?? 张三当了数学老师,李四物理老师,赵六化学老师。⁷
 */?? Zhāngsān dāng le shùxué lǎoshī, Lǐsì wùlǐ lǎoshī,
 Zhangsan serve.as PFV maths teacher Lisi physics teacher
 Zhàoliù huàxué lǎoshī.
 Zhaoliu chemistry teacher
 Intended: 'Zhangsan is a maths teacher, Lisi a physics teacher, and Zhaoliu a chemistry teacher.'
- (19) a. * 张三吃了苹果,李四香蕉。
 * Zhāngsān chī le píngguǒ, Lǐsì xiāngjiāo.
 Zhangsan eat PFV apple Lisi banana
 Intended: 'Zhangsan ate apples, and Lisi bananas.'
 - b. * 张三喜欢苹果,李四香蕉。

 * Zhāngsān xǐhuan píngguǒ, Lǐsì xiāngjiāo.

 Zhangsan like apple Lisi banana

 Intended: 'Zhangsan likes apples, and Lisi bananas.'

Note that gapping is not observed when the clauses are negative in form. 8

⁷The use of the perfective marker le is crucial here. First, as will be discussed in Chapter 4, shi is incompatible with the perfective marker le, as shown in (ia). For the same intended reading of (ia), shi can be replaced with the verb $d\bar{a}ng$ 'serve as'. However, the perfective marker is then obligatory, as shown in (ib). In this sense, the sentence with le in addition to the verb $d\bar{a}ng$ 'serve as' constitutes a minimal pair with the copula sentence in (16). In addition, (18) without le can be taken as an instance of the pair-list bare clauses I discuss elsewhere (H. Cheng 2021), sentences with a different structure from episodic sentences, which actually do permit gapping.

⁽i) a. 张三是(* 了)数学老师。

Zhāngsān shì (*le) shùxué lǎoshī.

Zhangsan COP PFV maths teacher
'Zhangsan is a maths teacher.'

b. 张三当 * (了) 数学老师。

Zhāngsān dāng *(le) shùxué lǎoshī.

Zhangsan serve.as PFV maths teacher
'Zhangsan is a maths teacher.'

 $^{^8 \}rm Note$ that it is also impossible to only drop $sh \grave{\imath}$ because the negator $b \grave{\imath}$ in Mandarin cannot negate nominal phrases.

- (20) a. 张三不是数学老师,李四*(不是)物理老师,赵六*(不是)化学老师。 cf. (16)

 Zhāngsān bù shì shùxué lǎoshī, Lǐsì*(bù shì) wùlǐ

 Zhangsan NEG COP maths teacher Lisi NEG COP physics

 lǎoshī, Zhàoliù*(bù shì) huàxué lǎoshī.

 teacher Zhaoliu NEG COP chemistry teacher

 'Zhangsan is not a maths teacher, Lisi a physics teacher, Zhaoliu a chemistry teacher.'
 - b. *张三不是数学老师,李四物理,赵六化学。 cf. (17)
 *Zhāngsān bù shì shùxué lǎoshī, Lǐsì wùlǐ, Zhàoliù
 Zhangsan NEG COP maths teacher Lisi physics Zhaoliu
 huàxué.
 chemistry

Intended: 'Zhangsan is not a maths teacher, Lisi a physics teacher, Zhaoliu a chemistry teacher.'

The second context of shi omission in a matrix clause has received much attention in previous studies, a context that can be referred to as "nominal predicate constructions" (Chao 1968; Zhu 1982; S.-W. Tang 2001a; Wei 2007; Q. Zhang 2010). Nominal predicate constructions are generally defined as clauses in which subjects are directly predicated by nominal elements without the appearance of the copula shi or verbal elements such as $y\check{o}u$, as shown in (21).

(21) a. 孔子鲁人。 (Chao 1968: 113)

Kǒngzǐ Lǔ rén.
Confucius Lu people
'Confucius is from Lu State.'

b. 这孩子大眼睛。 (Zhu 1982: 103)

Zhè háizi dàyǎnjing.

DEM kid big.eye
'This kid has big eyes.'

c. 今天星期日。

Jīntiān xīngqīrì.

today Sunday

'Today is Sunday.'

- d. 土豆两欧元。

 Tǔdòu liǎng-ōuyuán.

 potato two-euro

 'These potatoes cost two euros.'
- e. 迈克十五岁。

 Màike shíwǔ suì.

 Mike fifteen age
 'Mike is fifteen.'

Although analyses vary in whether or not these sentences are generated by omission of shi (or other relevant verbs such as y o u 'have'), the current study views it an open possibility that the so-called nominal predicate constructions involves $sh\grave{i}$ -omission. First, nominal predicate sentences are highly constrained in Mandarin (Zhu 1982; S.-W. Tang 2001a; Q. Zhang 2010), unlike copulaless sentences in Hebrew, Arabic, and Polish, in which the copula is consistently dropped in the present tense. For instance, such shì-omission in Mandarin is only found in predicational sentences and never in specificational or equative sentences. In fact, only a small group of predicational sentences allows for omission of the copula. The predicates in these sentences normally denote nationality, appearance, or temporal/locative properties; and the nominals are preferably modified by an adjective or a numeral-classifier combination. Second, shì can be added to all the nominal predicate constructions reported in the literature. Crucially, the insertion of shiwill only give rise to pragmatic nuances for some speakers. And lastly, when forming negation, question—answer pairs, or A-not-A questions, or when combining with adverbs and modality, shì (and sometimes $y\delta u$ 'have' or other verbs) is always obligatory.

In contexts where embedded small clauses without a copula are allowed in many well-studied languages, either the copula shi or a verb must occur. For instance, in English, the copula is optional in the embedded clauses in both (22a) and (22b). In fact, to be tends to be absent. However, their Mandarin equivalents require the presence of an extra element in between the subject and the predicate of the embedded clauses, as shown in (23). This extra element can be the copula shi, as in (23a). It may also be a verb, as in (23b), depending on the semantics of the matrix verb.

- (22) a. We consider John (to be) the best candidate.
 - b. We elected John (to be) the president.
- (23) a. 我们当张三 * (是)最佳候选人。

 Wǒmen dāng Zhāngsān *(shì) zuìjiā hòuxuǎnrén.

 1PL consider Zhangsan COP best candidate
 'We consider Zhangsan the best candidate.'
 - b. 我们选张三 *(做) 总统。

 Wǒmen xuǎn Zhāngsān *(zuò) zǒngtǒng.

 1PL elect Zhangsan serve.as president
 'We elected Zhangsan the president.'

I am not denying the existence of small clauses in Mandarin, but it is worth noting that Mandarin seems to have a very small inventory of verbs that can take a small clause (without shi) as their complement (S.-W. Tang 1998). For instance, both sentences in (24) can take a small clause as the complement of the matrix verb, indicated by the possibility of shi omission (cf. (23b)). In addition, Mandarin small clauses with no shi are observed mainly in non-assertive sentences, such as rhetorical questions (e.g. (24a)) or imperatives (e.g. (24b)). In a neutral context, an assertion like (25) becomes seriously degraded as compared to its non-assertive counterparts in (24).

- (24) 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. 你就当张三(是)傻子!

 Nǐ jiù dāng Zhāngsān (shì) shǎzi!

 2SG just consider Zhangsan COP idiot

 'You can just consider Zhangsan an idiot.'
- (25) ?? 李四当张三傻子。
 ??Lǐsì dāng Zhāngsān shǎzi.
 Lisi consider Zhangsan idiot
 Intended: 'Lisi considers Zhangsan an idiot.'

To summarise, this section lists three contexts where shi can be conditionally omitted. In matrix clauses, shi can be omitted in multiclausal sentences, giving rise to gapping-like sentences. In addition, with

a certain group of predicate nominals, shi can also be omitted, resulting in what has been referred to as "nominal predicate constructions". In embedded clauses, shi can also be omitted under a number of verbs. The embedded clauses without shi can be taken as small clauses.

2.3 An overview of non-copular uses of shì

The copula shi is homonymous with a couple of elements that fulfil particular meanings or functions, especially those associated closely with focus structures and elliptical structures. This section is a collection of various types of what I consider to be "non-copular" structures containing shi. Note crucially that there may be good reasons to argue that some of the structures mentioned in this section should be analysed as copular sentences even though they may display seemingly divergent properties from standard copular sentences. These possibilities will be briefly pointed out during the course of my discussion. Though essential, the current study will not delve into issues like whether these homonyms should be categorised separately or whether a unified analysis of shi should be pursued.⁹

2.3.1 Shì with different prosodic properties

Mandarin $sh\hat{\imath}$ presents different prosodic properties in different types of sentences. Although I have not conducted an acoustic analysis, the intuitive judgements are clear-cut and consistent among native speakers. There are three types of $sh\hat{\imath}$ s from the prosodic perspective. I take the standard copular sentences such as (1) as the neutral context and the pronunciation of $sh\hat{\imath}$ in a standard copular sentence as the standard. In some contexts, $sh\hat{\imath}$ bears extra stress, which I will simply term "stressed $sh\hat{\imath}$ ". In some other contexts, in contrast, $sh\hat{\imath}$ is pronounced in a weakened way. It is almost toneless and its consonant or/and vowel are not fully articulated. Interestingly, the grammatical categories of the post- $sh\hat{\imath}$ constituents in sentences with stressed $sh\hat{\imath}$ or weakened $sh\hat{\imath}$ are different from standard copular sentences. In addition to nominal constituents, stressed $sh\hat{\imath}$ can also precede APs, VPs, PPs, and IPs. The weaker $sh\hat{\imath}$

⁹Shì in this section is glossed as SHI instead of COP.

can co-occur with APs, VPs, PPs, and IPs, but not with NPs/DPs. 10

2.3.1.1 Stressed *shì*

Shi can carry extra stress to express affirmation or emphasis (Chao 1968; Zhu 1982; Lü 1999; Long & Kuang 2017; Ye 2020). For instance, the first shi in B1 indicates the affirmation of A1's assertion that 'Zhangsan is not a teacher'. B2 corrects A2 by emphasising that Zhangsan IS a teacher. Shi in both cases is pronounced with stronger intensity than that of shi in a standard copular sentence. The boldface type indicates the extra stress.

(26) a. A1: 张三不是老师,对不对?

Zhāngsān bù shì lǎoshī, duì-bù-duǐ? Zhangsan NEG COP teacher correct-NEG-correct

'Zhangsan is not a teacher, right?'

B1: 对,张三是不是老师。

Duì, Zhāngsān shì bù shì lǎoshī. correct Zhangsan SHI NEG COP teacher

'Yes, it is true that Zhangsan is not a teacher.'

b. A2: 张三不是老师吧?

Zhāngsān bù shì lǎoshī ba? Zhangsan NEG COP teacher SFP

'Is Zhangsan not a teacher?'

B2: 不,张三是老师。

 $B\dot{u}$, $Zh\bar{a}ngs\bar{a}n$ **shì** $l\check{a}osh\bar{\imath}$.

NEG Zhangsan COP teacher

'No, Zhangs IS a teacher.'

Note that when functioning as an emphatic marker, the post-shi constituent is not restricted to be nominal. The sentences in (27) are examples containing different types of post-shi constituents.

 $^{^{10}\}mathrm{Note}$ that weakened shi cannot occur in nominal predicate constructions like those in (21). I mentioned in the previous section that shi can be added to all the nominal predicate sentences one can find in the literature. When added, shi is pronounced in the same way as in standard copular sentences.

(27)	a.	张三 是 老师。	NP
		$Zh\bar{a}ngs\bar{a}n$ shì $l\check{a}osh\bar{\imath}.$	
		Zhangsn SHI teacher	
		'Zhangsan IS a teacher.'	
	b.	迈克 是 很聪明。	AP
		Màike shì hěn cōngming.	
		Mike SHI very smart	
		'Mike IS very smart.'	
	c.	小十一 是 喜欢吃华夫饼。	VP
		$Xi\check{a}oSh\acute{i}y\bar{\imath}$ shì $x\check{\imath}huan\ ch\bar{\imath}\ hu\acute{a}f\bar{u}b\check{\imath}ng.$	
		little.Eleven shi like eat waffle	
		'El DOES like eating waffles.'	
	d.	迈克 是 在家。	PP
		$M\grave{a}ike\ \mathbf{sh}\grave{\imath}\ z\grave{a}i\ ji\bar{a}.$	
		Mike SHI at home	
		'Mike IS at home.'	
	e.	迈克 是 去过实验室。	IP
		Màike shì qù guo shíyànshì.	
		Mike SHI go EXP lab	
		'Mike DID go to the lab once.'	

Shì can be pronounced with even stronger intensity and obvious longer duration when a concessive reading is implied in addition to the emphatic meaning. A special melody or contour over shì can also be observed. 11 If shì in (27) is pronounced in such a way, the discourse must be associated with a concessive implication in addition to simple affirmation. The concessive reading can be explicitly presented by adding an extra clause, as shown in (28). For instance, the first clause in (28a) confirms and emphasises the statement that Zhangsan is a teacher. However, the second clause denies the fact that he teaches chemistry, which might be more crucial to the discourse.

 $^{^{11}\}mathrm{It}$ may be the case that the stress on shi is linked to the emphatic or affirmative reading and that the special melody is associated with the concessive implication. The stronger intensity and longer duration of shì here result from the combination of two prosodic mechanisms.

(28) a. 张三是老师, 但是不教化学。

Zhāngsān shì lǎoshī, dànshì bù jiāo huàxué. Zhangsn SHI teacher but NEG teach chemistry 'Zhangsan IS a teacher, but he does not teach chemistry.'

b. 迈克是很聪明, 但是不会做这道题。

Màike shì hěn cōngming, dànshì bù huì zuò Mike SHI very smart but NEG be.able.to do $zh\grave{e}-d\grave{a}o$ tí.

DEM-CLF puzzle

'Mike IS very smart, but he cannot solve this puzzle.'

c. 小十一是喜欢吃华夫饼, 但是现在买不到。

 $Xi\check{a}oSh\acute{i}y\bar{\imath}$ **shì** $x\check{\imath}huan$ $ch\bar{\imath}$ $hu\acute{a}f\bar{u}b\check{\imath}ng$, $d\grave{a}nsh\grave{\imath}$ $xi\grave{a}nz\grave{a}i$ $m\check{a}i$ little. Eleven shi like eat waffle but now buy $b\grave{u}$ $d\grave{a}o$.

NEG arrive

'El DOES like eating waffles, but she cannot buy them anywhere.'

d. 迈克是在家, 但是他在睡觉。

Màike shì zài jiā, dànshì tā zài shuìjiào. Mike SHI at home but 3SG PROG sleep 'Mike IS at home, but he is sleeping.'

e. 迈克是去过实验室, 但是没有做实验。

Màike shì qù guo shíyànshì, dànshì méiyŏu zuò shíyàn.

Mike SHI go EXP lab but NEG do experiment 'Mike DID go to the lab once, but he did not conduct / participate in the experiment.'

Stressed shi should not be simply viewed as a copular shi plus an extra stress for at least two reasons. First, stressed shi cannot be negated (Long & Kuang 2017). For instance, the addition of a negator as shown in (29) gives rise to unparable sentences.

(29) a. * 张三不**是**老师。 cf. (27a)

*Zhāngsān bù shì lǎoshī. Zhangsn NEG SHI teacher

b. *迈克不**是**很聪明。

cf. (27b)

*Màike bù shì hěn cōngming. Mike NEG SHI very smart Second, stressed $sh\hat{\imath}$ can co-occur with the copula $sh\hat{\imath}$ as long as they are separated by other elements. For instance, as shown in (30), stressed $sh\hat{\imath}$ co-occurs with the copula $sh\hat{\imath}$ when the copula is negated or combined with modality.

(30) a. 张三是不是老师。

Zhāngsān shì bù shì lǎoshī.

Zhangsan SHI NEG COP teacher
'Zhangsan ISn't a teacher.'

b. 张三**是**可能是骗子。

Zhāngsān shì kěnéng shì piànzi.

Zhangsan SHI be.likely COP liar

'Zhangsan IS possibly a liar.'

2.3.1.2 Weakened *shì*

The co-occurrence of the "weakened" shi and verbal predicates or adjectival predicates has also been noticed in the literature, such as by Zhu (1982) and Lü (1999). This shi is pronounced in a "weakened" way in the sense that it is almost toneless and the consonant and/or the vowel is not fully articulated. The most frequently attested contexts for the use of weakened shi involve juxtaposed contrastive clauses. (31a) exemplifies sentences with VP predicates and (31b) exemplifies sentences with AP predicates. Monoclausal sentences also allow for this use of shi, as shown in (32).

- (31) a. 他是去接人,不是去送人。 (Zhu 1982: 105) $T\bar{a}$ shì qù jiērén, bù shì qù sòngrén.

 3SG COP go pick.up.people NEG COP go see.off.people 'He is going to pick someone up, not to see someone off.'
 - b. 张三是聪明,李四是帅。

 Zhāngsān shì cōngming, Lǐsì shì shuài.

 Zhangsan COP smart Lisi COP handsome 'Zhangsan is smart while Lisi is handsome.'
- (32) a. 他是没钱。 (Pustet 2003: 60) $T\bar{a}$ shì méi qián. 3SG COP NEG money '(It is the case that) he does not have money.'

- b. 谁也是送他一本书? (Soh 2007: 186)

 Shuí yě shì sòng tā yī-běn shū?

 who also COP give 3SG one-CLF book

 'Who also gave him a book?'
- c. 你是在担心他吗?

 Nǐ shì zài dānxīn tā ma?

 2SG COP PROG worry 3SG Q

 '(Is it true) that you are worrying about him?'

Weakened shi is frequently associated with (contrastive) focus but it behaves differently from stressed shì and shì in clefts, which are also linked to focus. First, they have different prosodic properties. I share the judgements in Zhu's (1982) description that the shì in these cases tends to be pronounced in a weakened way as compared to that of a standard copular sentence with a nominal predicate or that of a copular sentence with a bare AP/VP or IP predicate. In contrast, stressed shialways bears extra stress, and shì in cleft sentences is always pronounced in the same way as the one in standard copular sentences. Second, unlike the stressed shì discussed in the previous subsection, this weakened shì can be negated, such as the second shì in (31a). It is worth noting, however, that sentences containing weakened shì (especially monoclausal sentences) do not necessarily imply contrastiveness. For instance, shì in (32c) simply conveys a sense of affirmation, which is possibly associated to the positive polarity. More investigation of the nature of this weakened shì is needed in regards to its acoustic features, contexts of use, and structural properties. Considering the fact that this weakened shì never co-occurs with a post-shì nominal and that the post-shì elements are always VPs/APs/PPs, it seems that this shì is in complementary distribution with the copula shi.

2.3.2 Cleft

The most crucial non-copular use of shi discussed in the literature is shi in cleft constructions. Shi is widely used in Mandarin cleft sentences, in many cases co-occurring with de (postverbal or sentence-final). It is pronounced in the same way as the copula shi in standard copular sentences. Shi can float in the sentence, above VP, and appear adjacent to the left of the focused constituent (L. L.-S. Cheng 2008). As shown

in (33), the temporal phrase $qùni\acute{a}n$ 'last year', the locative phrase $z\grave{a}i$ $shiy\grave{a}nsh\grave{i}$ 'in the lab', and the subject Mike are the focused constituents in each sentence in (33), respectively. $Sh\grave{i}$ is immediately attached to the left of these focused constituents in each case.

- (33) a. 迈克是去年在实验室遇到小十一的。

 Màike shì qùnián zài shíyànshì yùdào xiǎoShíyī de.

 Mike SHI last.year at laboratory meet little.Eleven DE

 'It is last year that Mike met El in the lab.'
 - b. 迈克去年是在实验室遇到小十一的。

 Màike qùnián shì zài shíyànshì yùdào xiǎoShíyī de.

 Mike last.year SHI at laboratory meet little.Eleven DE

 'It is in the lab that Mike met El last year.'
 - c. 是迈克去年在实验室遇到小十一的。
 Shì Màike qùnián zài shíyànshì yùdào xiǎoShíyī de.
 SHI Mike last.year at laboratory meet little.Eleven DE
 'It is Mike who met El last year.'

The identity of this $sh\hat{\imath}$ and the analysis of Mandarin cleft structures have long been under debate. Many current studies analyse this $sh\hat{\imath}$ as a copula (L. L.-S. Cheng 2008; Paul & Whitman 2008; Zhan & Sun 2013; W. Li 2016; J. Chen 2017). However, it has also been viewed as some other head in the literature. For instance, $sh\hat{\imath}$ in cleft constructions has been analysed as an inflectional element (C.-T. J. Huang 1988), a modal verb (D. Shi 1994), or the head of a FocP on top of IP (Ye 2020). Although it is intriguing to explore whether or not the $sh\hat{\imath}$ in clefts is the copula and what the function of the de is, this thesis will not touch upon on these issues but rather focus solely on standard copular sentences in Mandarin. One crucial reason is that the post- $sh\hat{\imath}$ constituent in a cleft construction is not nominal except when the subject is the focus, as in (33c). When the subject is the focus, however, the pre- $sh\hat{\imath}$ position is empty. In other words, Mandarin cleft constructions do not show an obvious NP- $sh\hat{\imath}$ -NP structure.

2.3.3 Ellipsis

Shì appears in elliptical constructions in Mandarin. For instance, shì obligatorily accompanies a stripping remnant. It is also obligatory in

sluicing when arguments are elided. Shi in these two structures is pronounced in the same way as the copula shi in standard copular sentences.

2.3.3.1 Stripping

Shi is obligatory in the elided clause in a stripping-like structure, cooccurring with the additive morpheme $y\check{e}$ 'too, also'. The combination of the additive morpheme $y\check{e}$ and shi is used regardless of whether the antecedent is affirmative or negative in form, as shown in (34), as opposed to the English stripping structure exemplified in (35).

- (34) a. 小十一吃了一盒华夫饼,迈克也是。

 XiǎoShíyī chī le yī-hé huáfūbǐng, Màike yě shì.
 little.Eleven eat PFV one-box waffle Mike too SHI
 'El ate a box of waffles, and Mike, too.'
 - b. 小十一没吃华夫饼,迈克也是。
 XiǎoShíyī méi chī huáfūbǐng, Màike yě shì.
 little.Eleven NEG eat waffle Mike too SHI
 'El did not eat waffles, and Mike, neither.'
- (35) a. John read the book, and Bill, too.
 - b. John did not read the book, and Bill, neither.

Mandarin stripping (or PolP Ellipsis, to use Soh's 2007 term; see below) differs from canonical VP-ellipsis (VPE) in Mandarin in two respects. First, in canonical VPE, the change of polarity in the antecedent clause will lead to the change in form in the elided clause. In other words, as shown in (36b), when the antecedent is negative in form, the remnant must contain a negator.

(36) a. 小十一会唱那首歌,迈克也会。

 $Xi\check{a}oSh\acute{i}y\bar{\imath}$ $hu\grave{\imath}$ $ch\grave{a}ng$ $n\grave{a}-sh\check{o}u$ $g\bar{e}$, $M\grave{a}ike$ $y\check{e}$ little. Eleven be able to sing DEM-CLF song, Mike too $hu\grave{\imath}$.

be.able.to

'El can sing that song, and Mike also can.'

b. 小十一不会唱那首歌, 迈克也不会。

 $Xi\check{a}oSh\acute{v}y\bar{\imath}$ $b\grave{u}$ $hu\grave{\imath}$ $ch\grave{a}ng$ $n\grave{a}$ -sh\acute{o}u $g\bar{e}$, $M\grave{a}ike$ $y\check{e}$ little. Eleven NEG be. able. to sing DEM-CLF song, Mike too $b\grave{u}$ $hu\grave{\imath}$.

NEG be.able.to

'El cannot sing that song, and Mike cannot, either.'

Second, canonical VPE in Mandarin allows for the combination of an affirmative clause and a negative clause when $qu\grave{e}$ 'but' is used instead of $y\check{e}$ 'also, too'. For instance, (37) shows that a negative clause can serve as the antecedent to an affirmative clause and vice versa. However, as shown in (38), such combinations are unavailable in stripping even though $qu\grave{e}$ 'but' is used.

(37) a. 小十一会唱那首歌, 迈克却不会。

 $Xi\check{a}oSh\acute{i}y\bar{\imath}$ $hu\grave{\imath}$ $ch\grave{a}ng$ $n\grave{a}$ - $sh\check{o}u$ $g\bar{e}$, $M\grave{a}ike$ $qu\grave{e}$ $b\grave{u}$ little. Eleven be. able. to sing DEM-CLF song, Mike but NEG $hu\grave{\imath}$.

be.able.to

'El can sing that song, but Mike cannot.'

b. 小十一不会唱那首歌, 迈克却会。

XiǎoShíyī bù huì chàng nà-shǒu gē, Màike què little.Eleven NEG be.able.to sing DEM-CLF song, Mike but huì.

be.able.to

'El cannot sing that song, but Mike can.'

- (38) a. *小十一吃了一盒华夫饼,迈克却不是。
 - *XiǎoShíy $\bar{\imath}$ ch $\bar{\imath}$ le $y\bar{\imath}$ -hé huáf $\bar{\imath}$ bǐng, Màike què bù little.Eleven eat PFV one-box waffle Mike but NEG shì.

 $_{\mathrm{SHI}}$

- b. *小十一没吃华夫饼,迈克却是。
 - *XiǎoShíyī méi chī huáfūbǐng, Màike què shì. little.Eleven NEG eat waffle Mike but SHI

On the basis of above-mentioned core properties of this shi, Soh (2007, 2018) analyses it as the Polarity head, which differs from the canonical copula use of shi. Specifically, this polarity head is supposed

to occupy a higher position than that of negation. Hence, in the case of negation, the elided structure contains negation, with the consequence that the negator never surfaces with stripping. As this shì is never followed by a nominal constituent (actually, it is never followed by anything), the structural analysis of it will not be addressed in the current study.

2.3.3.2 (Pseudo-)sluicing

what

Mandarin sluicing is argued to be a pseudo-sluicing construction involving a base-generated [pro-COP-wh] structure (Y.-H. A. Li & Wei 2014, 2017). One crucial property of this construction in Mandarin is the obligatory appearance of shi when the wh-element is an argument, as shown in (39). When the wh-element is an adjunct, shi is optional, as shown in (40). Considering the obligatoriness of the use of shi in these two conditions and its pronunciation property, shi in the Mandarin pseudo-sluicing construction is very much like the canonical copula use of shi. However, as a pseudo-sluicing construction does not contain a nominal precopular constituent, the analysis of shi in pseudo-sluicing constructions will not be addressed in this thesis, either.

(39) a. 迈克买了一包东西,但我不知道*(是)什么。

Màike mǎi le yī-bāo dōngxi, dàn wǒ bù zhīdào*(shì)

Mike buy PFV one-bag thing but 1sg NEG know shi

shenme.

'Mike bought a bag of things, but I do not know what.'

b. 有个人喜欢迈克,但我不知道*(是) 谁。
Yǒu ge rén xihuan Màike, dàn wǒ bù zhīdào*(shì)
have CLF people like Mike but 1sg Neg know shi
shéi.
who
'Someone likes Mike, but I do not know who.'

(40) a. 迈克去了一个地方,但我不知道 (是) 在哪里。

Màike qù le yī-ge dìfang, dàn wǒ bù zhīdào (shì) zài

Mike go PFV one-CLF place but 1SG NEG know SHI at
nǎlǐ.

where

'Mike went somewhere, but I do not know where.'

b. 迈克去了一个地方,但我不知道(是)什么时候。

Màike qù le yī-ge difang, dàn wǒ bù zhīdào (shì)

Mike go PFV one-CLF place but 1SG NEG know SHI

shénme shíhou.

what time

'Mike went somewhere, but I do not know when.'

c. 迈克去了一个地方,但我不知道(是)为什么。

Màike qù le yī-ge dìfang, dàn wǒ bù zhīdào (shì)

Mike go PFV one-CLF place but 1SG NEG know SHI

wèishénme.

whv

'Mike went somewhere, but I do not know why.'

2.3.4 Interim summary

This section briefly reviewed five non-copular uses of shi in Mandarin. First, in different structures, shì can be pronounced in distinguishable ways. In addition to the standard pronunciation in copular sentences, shì can either bear an extra stress or be pronounced in a weakened way. Among the above-mentioned five uses, one is relevant to stressed shi, one is relevant to weakened shì, and the rest should be pronounced in the same way as in standard copular sentences. Second, as mentioned at the beginning of this section, the current section is a collection of various apparent "non-copular" structures containing shì. Among all these uses of shì, stressed shì with an emphatic function and the so-called 'dummy' shì (Soh 2007) in stripping should be distinguished from standard copula shì. Shì in the other three uses, namely, weakened shì, the shì in cleft constructions, and the shì in (pseudo-)sluicing, can all be argued to be the copula or have been argued to be the copula in the literature. However, as these three types of shì do not typically occur in the NPshì-NP environment that is the primary focus of this thesis, they will not be discussed in the current study.