

A Copula Analysis of *shì* in the Chinese Cleft Construction*

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This paper, based on a cross-linguistic understanding of the concepts of “copula” and “cleft”, demonstrates that the Standard Modern Chinese *shì* is an invariant non-inflectional verb typically co-occurring with NPs whereby they together form the predicate of a copular sentence. According to Construction Grammar (theorized by Goldberg 1995, 2006, Croft 2001, 2005, etc.), a copular construction can be understood as a form and meaning pair that entails a proposition with the nominal semantics of specificational and predicational (Blom & Daalder 1977, Declerck 1988, Patten 2010, Zhan 2012). Furthermore, a constructional schematic taxonomy is proposed for the prototypical Chinese copular construction, under which the cleft construction is a subschema of the specificational copular construction. The Chinese cleft [NP COP NOM] denotes the specificational meaning (the NP and the nominalization representing a referential member and a non-referential but restricted set forming a member-class relationship) plus a contrastive focus. Finally, the cleft construction is treated to have two subschemas: cleft-sbj and cleft-obj. In a cleft-sbj sentence, the sentential subject is co-referential with the subject in the embedded nominalization, and the presence of the nominalizer *de* is optional. In a cleft-obj sentence, the sentential subject is co-referential with the object in the nominalization, and the presence of the nominalizer is obligatory. It will be shown that the treatment of *shì* as an adverb in the cleft-sbj sentence (Teng 1979, Huang 1998, etc.) falls short in explaining why *shì* can co-occur with an optional *de*. With a copula treatment of *shì*, the presence of *de* as a nominalizer logically follows from a specificational [NP COP NOM] analysis. Therefore, the Chinese cleft construction basically functions to signal, instead of a transitory process that an adverbial hypothesis implies, a non-transitory state or situation.

Key words: copula, cleft, Construction Grammar

1. Introduction

“Copula” is a Latin word meaning connection, or linking. It is generally used to

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refer to the uses of the English verb ‘to be’ and its equivalents in the world’s languages. The copula in Standard Modern Chinese (hereafter, Modern Chinese or Chinese) is *shì*, and typically occurs with a following predicative nominal, exemplified by *xuéshēng* in (1).¹

- (1) 我 是 學生
 wǒ shì xuéshēng
 SG1 COP student
 ‘I am a student.’

Example (1) is a typical copular sentence in Chinese with an NP subject, a copula *shì*, and a predicative nominal. It has the form [NP COP NP] with a copulative linking meaning, i.e., the post-copula predicate ‘a student’ indicates a property of the subject ‘I’. As for the information structure, (1) encodes informational focus (Xu 2002, K. Li 2008, see §5 for the distinction between informational focus and contrastive focus), which means that the post-copula predicate *xuéshēng* ‘a student’, the new information of the proposition.

However, non-nominals can also occur in either the subject position or the predicate position in a copular sentence. For example, in (2a), the verb phrase *kàn diànshì* ‘to watch TV’ appears in the predicate position, and a clause *tā qù Shànghǎi* ‘he goes to Shanghai’ in the subject position of (2b). Furthermore, as in any Chinese sentence, the subject can be a zero as is given in (2c).

- (2) a. 我 的 愛好 是 看 電視
 wǒ de àihào shì kàn diànshì
 SG1 ASSOC hobby COP watch TV
 ‘My hobby is to watch TV.’
 b. 他 去 上海 是 老闆 的 決定
 tā qù Shànghǎi shì lǎobǎn de juéding
 SG3 go Shanghai COP boss ASSOC decide
 ‘His going to Shanghai is the boss’s decision.’

¹ This paper uses the following abbreviations: ASSOC = Associative; CRS = Current related state; CL = Classifier; COP = Copula; EXP = Experiential; FO = Focus operator; FM = Focus marker; IMP = Imperfective; NEG = Negative; NOM = Nominalization/Nominalizer; NP = Noun phrase; PERF = Perfective; PL1 = First person Plural; PP = Prepositional phrase; PTCL = Particle; RC = Relative clause; REL = Relativizer; S = Clause; SEM = Semantics; SG1 = First person singular; SG2 = Second person singular; SG3 = Third person singular; TP = Time phrase; VP = Verbal phrase.

- c. 是 我 的 錯
 shì wǒ de cuò
 COP SG1 ASSOC fault
 ‘It is my fault.’

The examples in (1) and (2) suggest that the Chinese copular sentences appear to have the structure [(XP) COP XP], in which the XP can be either nominal or non-nominal. Similar to (1), examples in (2) encode informational focus. A thorough search in CCL Modern Chinese Corpus² reveals that 87.6% (4,380 sentences out of 5,000) of the copular sentences with a linking meaning are in the [NP COP NP] form, whereas non-nominal occurrences resembling those in (2)³ only take up 12.4%. This finding strongly demonstrates that [NP COP NP], in terms of frequency, is the prototypical structure of a Chinese copular sentence.

Following Paris (1979) and Li & Thompson (1981), we consider example (3) to be a copular sentence consisting of a complex predicate, namely the copula *shì* and a nominalized predicate marked by the nominalizer *de*. It is also commonly known as *shì...de* construction or the cleft construction in the Chinese linguistic literature (Li & Thompson 1981, Chao 1968, Yue-Hashimoto 1969, Teng 1979, Paris 1979, Simpson & Wu 2002, Lee 2005, K. Li 2008, Cheng 2008, Paul & Whitman 2008, Hole 2011, Prince 2012, etc.). In a sentence like (3), the linguistic form immediately after *shì*, i.e. *zuótiān* ‘yesterday’, constitutes the contrastive focus of the sentence (see §5.1 for the discussion on contrastive focus).

² The CCL Modern Chinese Corpus (http://ccl.pku.edu.cn:8080/ccl_corpus/index.jsp) is the searchable Internet version of the CCL Chinese Corpus created and managed by Peking University since 2009. CCL consists of selective texts from 10 contemporary literary categories including newspaper journals, historical biographies, movies and TV dramas, translation works, Internet articles, dramas, institutional articles and literature works. It covers a variety of literary genres, from casual spoken language in movies and TV dramas to formal institutional articles. The corpus is primarily written language and the casual spoken language only takes a very small portion (259,506 tokens) about 0.0356% in the corpus. It includes 728,909,261 tokens in total and contains 3,291,508 tokens of *shì*, which ranks the third most frequent token within the corpus next to *de* (11,523,375) and *yī* (4,140,344).

³ Paul & Whitman (2008:414) label the sentences like (2) medial bare- *shì* and initial bare- *shì* patterns, which do not involve a final deletable *de*. They also point out that bare- *shì* patterns “involve association with focus rather than a cleft focus interpretation”, which coincides with the concept of our informational focus.

- (3) 她 是 昨天 去 上海 的
 tā shì zuótiān qù Shànghǎi de
 SG3 COP yesterday go to Shanghai NOM
 ‘It was yesterday that she went to Shanghai.’

The cleft construction has always been and still is an intensively discussed topic in Chinese linguistics and there has been an extensive debate among Chinese linguists on whether *shì* is a copula when it occurs in a cleft sentence. Paris (1979), Chao (1968), Li & Thompson (1981), K. Li (2008), Cheng (2008), Paul & Whitman (2008), Hole (2011), among others, suggest that *shì* is simply a verb, thus functioning as a copula verb in cleft sentences. However, other linguists such as Teng (1979), Zhu (1997), Shi (1994), and Choi (2006) claim that *shì* in cleft sentences is not so. The major reason for the debate is the co-existence of the examples resembling (4) with those in (3). Comparing the two sentences in (3) and (4), we see that, in spite of the absence of *de* at the end of (4),⁴ they have essentially the same meaning. Based on this observation, the latter group (Teng 1979, Huang 1998, etc.) believes that examples such as (3) and (4) share the simplex predication: [NP FM VP (PTCL)], and *shì* in cleft sentences is not a copula verb, but an adverbial focus marker, or a focus operator having the status of an adverb (Huang 1998:213):

- (4) 她 是 昨天 去 上海
 tā shì zuótiān qù Shànghǎi
 SG3 COP yesterday go to Shanghai
 ‘It was yesterday that she went to Shanghai.’

This paper, on a cross-linguistic understanding of the concept of copula, demonstrates a systematic treatment of *shì* in Modern Chinese as a copula verb. We define the Chinese copula *shì* as an invariant non-inflectional verb typically co-occurring with an NP when they together form a predicate. In light of the theory of Construction Grammar (Goldberg 2006, Croft 2001, etc.), we treat the copular construction as a form and meaning pairing: [(XP_i) COP XP_j] ↔ [SEM_i copulative linking SEM_j]⁵ with the prototypical form [NP COP NP]. The copulative linking involves two subschemas: specificational and predicational (see §4 for detailed discussion).

⁴ Sentences like (4) are labeled bare- *shì* sentences by Lee (2005), Cheng (2008) and bare- *shì* focus sentences by Hole (2011).

⁵ We adopt Booij’s (2010) schematization of [FORM] ↔ [SEM (MEANING)] to illustrate construction as a form and meaning pair.

Recent researches on the cleft construction have various insights revealing the nature of the construction from different perspectives. Cheng (2008) proposes incisive descriptive generalizations and argues that there is actually no *shì...de* construction, although she does use the term *shì...de* sentences as a cover term. Paul & Whitman (2008) add new insights to the set of descriptive generalizations in the context of the *shì...de* cleft by claiming that the *shì...de* cleft (they call it *shì...de* pattern proper) does not involve an A' movement like the English cleft and propose that its basic semantic property is logically independent from A' movement. In addition to the *shì...de* proper, they propose three patterns that are easily confused with the *shì...de* proper: medial *shì*-bare, initial *shì*-bare, and the propositional assertion pattern. Hole (2011) compares the recent insights from the above studies and provides syntactically informed proposals for lexical entries of *shì* and *de* as found in the *shì...de* cleft from a formal semantics perspective. His compositional analysis renders the semantics of the *shì...de* cleft similar to that of definite determiners. Likewise, Prince (2012) gives a formal semantic account of the mapping relations between syntactic structure and information structure, referred to as the Predicate-Comment Mapping Hypothesis (PCMH), concentrating on the role of the copula and focus marker *shì* as well as on the different types of polarity questions such as *ma*, *shì-bú-shì* and A-neg-A questions. All these studies have theoretically important significance, though a complete review of all of them would have taken the current study far afield. We will, however, relate our analysis of the *shì...de* construction to the relevant points of the above studies in the following sections. In this paper, we provide a functional perspective different from all of the above formal analyses by claiming that the cleft construction is a subschema of the specificational copular construction (see §4 for detailed discussion) and that it is a complex predication that can be schematized as $[NP_i \text{ COP } NOM_j]$ ($NOM=(ADV/TP/PP) \text{ VP/S/NP } de$) \leftrightarrow $[SEM_i \text{ specificational} + \text{contrastive } SEM_j]$. “Complex” here is understood as a structure that involves a subordinate nominalization (NOM). Semantically, the cleft construction is specificational and the immediate post-copula element encoding contrastive focus (the discussion on contrastive focus is presented in §5.1).

Huang's simplex predication treatment of *shì* as an adverb in this construction are problematic as it fails to take into account of the fact that the cleft construction entails the specificational meaning, rather than a transitory event, or process, that the simplex predication may encode.

The paper is structured as follows: §2 explains the syntactic concept of “copula”, §3 discusses the semantics of the Chinese copula, in §4, we provide a constructional schematic taxonomy for the prototypical copular construction. Section 5 discusses the concept of “cleft”, introduces the adverb analysis proposed by Huang (1998) along with our counterarguments, and proposes a new analysis on the cleft construction, §6 is the conclusion.

2. The syntactic concept of “copula”

A common definition of “copula” found in dictionaries, as well as in the linguistic literature, is as follows:

- (5) A copula is “a word that links a subject and a predicate”. (Narahara 2002:16)

Furthermore, the terms “subject” and “predicate” need to be specified to fully understand the above definition of “copula”. In the generative literature, subject is the category that occupies the specifier position of IP ([Spec, IP]), and the predicate is the projection of a lexical category that assigns a theta-role to an argument. According to a typical definition in some functional descriptive linguistics, the subject of a sentence is the “phrase that has a ‘doing’ or ‘being’ relationship with the verb in that sentence” (Li & Thompson 1981:87). The predicate is the part of a sentence containing what is said about the subject. “The word ‘predicate’ is a functional term in opposition with the functional term ‘subject’, ... it commonly refers to the function of a verb phrase ... A predicate, however, is not necessarily a verb phrase” (Li & Thompson 1981:140). In terms of a copular sentence, traditionally, the term “predicate” can be taken, in a broad sense, to consist of a copula verb and a post-copula element(s), or, in a narrow sense to exclude the copula, only contains the post-copula element(s). The familiar terms such as nominal predicate, adjectival predicate, and verbal predicate all apply to the narrow sense of “predicate” (Kahn 1973, Wang 1937[1958]). Jespersen (1924) introduced the term “predicative” to apply to the predicates in this narrow sense to avoid ambiguity. However, most linguists find that once recognized, the ambiguity is harmless, and they keep using the term “predicate” for both the narrow and broad senses. In our discussion, following this tradition, we use the term “predicate” to signify either sense without making any distinction.

The definition in (5) implies that in a copular sentence, the copula links up the subject and the predicate. However, the definition does not characterize the grammatical category of “copula”, and the grammatical relations among “subject”, “copula”, and “predicate” are unclear. Radford (1997), applying the minimalist approach, modifies the definition in (5) and defines “copula” as:

- (6) A verb used to link a subject with a non-verbal predicate.

The definition in (6) explicitly identifies “copula” as a verb and suggests that the predicate (the broad sense) of a copular sentence consists of both a copula verb and a non-verbal predicate (the narrow sense). Radford further defines “verb” in certain languages as:

- (7) A category of word that has the morphological property that can carry a range of inflections including past tense.

To specify the category of the predicate as non-verbal in (6) amounts to saying that the function of a copula as a predicate marker is added to the elements that normally do not form predicates on their own. The following examples present the occurrences of the Standard English copula.

- (8) a. This is a cup.
b. *This a cup
- (9) a. The cups are full.
b. *The cups full.
- (10) a. The cup is on the desk.
b. *The cup on the desk
- (11) a. *He was break the cup.
b. He broke the cup.

The above examples show that in Standard English, nominal, adjectival and prepositional phrases cannot function as predicates on their own but must be combined with a copula in the predicate position, as exemplified in (8)-(10). On the other hand, verbal phrases that function as a predicate on their own are not compatible with a copula, as in (11).

Hengeveld (1992) considers the copula to be meaningless, “semantically empty”, and a mere carrier of inflectional features for predicate phrases. Stassen (1997:66) proposes the Dummy Hypothesis and argues that the idea underlying the hypothesis is that the copula is basically a “hat-rack” for categories of verbal morphology. This idea coincides with Lyons’ who claims that the principal function of the copula verb ‘to be’ in Russian, Greek and Latin is to serve as the locus in surface structure for the marking of tense, mood and aspect (Lyons 1968:322).

Radford’s definition in (6) and Hengeveld, Stassen and Lyons’ proposals unravel the syntactic functions of a copula:

- a. A copula functions as a linker between subject and non-verbal predicate.
- b. A copula functions as a syntactic “hat-rack” to attach tense and other verbal inflectional features to a clause that contains a non-verbal predicate.
- c. A copula functions as a predicate marker that is added to lexemes that do not form predicates on their own.

Two interpretations can be inferred from the above discussion:

- a. First, a predicate in which verbal inflectional categories are coded should never contain a copula.
- b. Second, all copulas should carry verbal inflectional categories.

In the following discussion, however, we will show that the Chinese copula is incompatible with both of these two interpretations.

In Modern Chinese, nominal phrases cannot function as predicate on their own and can only be combined with a copula in the predicate position, as is exemplified in (12). Other than nominal phrases, adjectival, prepositional and verbal phrases can function as a predicate on their own, as in (13).

- (12) a. *我 學生
wǒ xuéshēng
SG1 student
- b. 我 是 學生
wǒ shì xuéshēng
SG1 COP student
'I am a student.'
- (13) a. 她 很 漂亮
tā hěn piàoliàng
SG3 very pretty
'She (is) very pretty.'
- b. 她 在 北京
tā zài Běijīng
SG3 at Beijing
'She (is) at Beijing.'
- c. 她 打了 小王
tā dǎ-le Xiǎowáng
SG3 hit-PERF Xiaowang
'She hit Xiaowang.'

Examples in (12) show that the copula is added to the phrases that do not form a predicate on their own. In colloquial spoken Chinese, (12a) can be acceptable with a prosodic pause between *wǒ* 'I' and *xuéshēng* 'student'. In fact, the copula can always be dropped in non-standard spoken Chinese as well as in many other languages (Li & Thompson 1981:588).⁶ However, in standard or written Chinese, (12a) is ungrammatical.

⁶ We suggest that the bare-*de* sentences labeled by Cheng (2008) as well as the bare-*de* focus sentences in Hole (2011) are the cleft sentences with the copula dropped.

The adjectives are treated as intransitive verbs in Chinese (Li & Thompson 1981:141) and prepositions are considered as coverbs (Li & Thompson 1981:356), both of them belong to the category of non-nominal and can form a predicate on their own.

According to Radford's definition of "verb" in (7), the non-verbal predicates are those that do not have the morphological property of inflection, the non-inflecting category. In English and other European languages, nominal, adjectival and prepositional phrases are not subject to tense, modal, or aspect inflections, and they are referred to as the non-inflecting categories here. Since only the non-inflecting categories occur in the predicate position of a copular sentence, the copula's function of linking subject and non-verbal predicate holds. However, in some languages, Chinese included, not only nominal predicates can occur in copular sentences, non-nominal predicates with coded verbal inflectional categories such as aspects can also be found following the copula. The following examples illustrate the difference:

- (14) *What makes him happy is has been to Beijing.
- (15) a. 我 的 愛 好 是 看 電 視
 wǒ de àihào shì kàn diànshì
 SG1 ASSOC hobby COP watch TV
 'My hobby is to watch TV.'
- b. 她 的 遺 憾 是 只 跑 了 一 圈
 tā de yíhàn shì zhǐ pǎo-le yì quān
 SG3 ASSOC regret COP only run-PERF one lap
 'Her regret is that she has only run one lap.'

In (15a-b), the predicates of the copular sentences contain the copula and a verbal phrase. In (15b), the verbal predicate has a perfective marker *-le* attached to it. The fact that an inflected verbal category is found grammatical in the predicate position of a copular sentence marks a significant distinction between the European and Chinese copular sentences.

In Standard English, the copula's "hat-rack" function holds, as the copula verb 'to be' supplies tense and other verbal inflectional categories to the clauses that have nominal, adjectival and prepositional phrases as the predicates. However the Chinese copula never carries any verbal morphology, and therefore it is invariant. The following English and Chinese examples demonstrate the difference:

- (16) a. I am his student.
 b. I was his student last year.

- (17) a. 我 是 他 的 學生
 wǒ shì tā de xuéshēng
 SG1 COP SG3 ASSOC student
 ‘I am his student.’
- b. 去年 我 是 他 的 學生
 qùnián wǒ shì tā de xuéshēng
 last year SG1 COP SG3 ASSOC student
 ‘I was his student last year.’

In (16a), the copula *was* expresses past tense, while in (17b), there is no past tense inflection attached to the copula *shì*. The sense of past in Chinese is coded only by the temporal phrase *qùnián* ‘last year’ in (17b). As for (16b), if the temporal phrase ‘last year’ is not specified, the clause is still past with the past tense marker in *was*. However, if *qùnián* ‘last year’ is not present in (17b), the sentence does not encode the meaning of the past.

- (18) 他 是 *了/*過/*著 老師
 tā shì *-le/*-guò/*-zhe lǎoshī
 SG3 COP PERF/EXP/IMP teacher

In Chinese a typical verb can be morphologically marked to denote different aspects, such as the verb *pǎo* ‘run’ in (15b). As an invariant non-inflectional copula verb, *shì* is not subject to any of the Chinese aspect markers in (18), be it perfective *-le*, experiential *-guò*, or imperfective *-zhe*.

The asymmetry between (14) and (15), as well as that between (16b) and (17b) suggests that the definition in (6) and its derived functions of “copula” are not cross-linguistically applicable. Therefore, we propose the following definition for the Chinese copula:

- (19) Chinese copula *shì* is an invariant non-inflectional verb that co-occurs with certain lexemes whereby they together form the predicate of a copular sentence. Semantically, it functions to signal either a predicational or a specificational meaning.

Based on the definition (19), in (17a), *wǒ* ‘I’ is the subject, the copula *shì* marks the noun phrase *tā de xuéshēng* ‘his student’ as a nominal predicate, and they together function as the predicate of the sentence. In (15a), the copula *shì* co-occurs with the verbal phrase *kàn diànshì* ‘watch TV’, and they together form the predicate of the sentence. In the following, we will discuss the basic semantic functions of the Chinese copula *shì*.

3. The semantics of copula

As stated in the previous section, Hengeveld (1992) considers the copula to be meaningless, ‘semantically empty’, a mere carrier of inflectional features for predicate phrases. Stassen (1997) proposes that the copula is a dummy, and does not contain any meaning. Pustet (2003:5) also points out that “a copula does not add any semantic content to the predicate phrase it is contained in”.

However, many linguists hold that although copula itself is a semantically null verb, copular sentences express a variety of copulative meanings. Blom & Daalder (1977) propose that copular sentences in the languages of the world fall into two semantic classes based on the relationship between the objective information encoded in the subject and predicate, which are often referred to as “predicational” and “specificational” (Declerck 1988:2).

A predicational sentence predicates a non-referential property of the referential subject. “Predicational” has also been called “attributive” (Gundel 1977, Lyons 1968, Halliday 1967a, 1967b), “characterizational” (Kuno & Wongkhamthong 1981, Quirk et al. 1985), “ascriptive” (Kahn 1973), etc. Higgins (1979:214) suggests that predicational is “being about” something. The following examples can be said to be predicational:

- (20) a. Mary is a student.
b. The cup is full.

The predicate in (20a), ‘a student’ signals the characteristic of Mary ‘being a student’, and in (20b) ‘being full’ is a description of the cup.

The semantics of the specificational relationship is not as straightforward as that of the predicational relationship. The term “specificational” has been adopted in a broader sense for “identificational” (Kuno & Wongkhamthong 1981, Quirk et al. 1985), “equative” (Halliday 1967a, 1967b, Huddleston 1971, Kahn 1973), etc. Higgins (1979) argues that specificational sentences function like lists: the subject of a specificational sentence acts as the heading of the list and the post-copula elements serve as items on that list. Higgins suggests that specificational sentences involve a “value-variable” relation. He notes, “the heading of a list provides a ‘variable’, thereby delimiting a certain domain, to which the items on the list conform as ‘values’ of that variable” (Higgins 1979:155). Higgins (1979:214) argues that specificational sentences do not involve a predication relationship, since “the whole notion of being ‘about’ something is alien to a list”. Likewise, Declerck (1988:2) defines a specificational sentence as one whose semantic function is to specify a value for a variable.

Patten (2010), however, aiming at the definition of specificational meaning, argues that the “value-variable” relation is purely information-structural and is not the product of the semantic contribution of its components, consequently “the definition of specificational meaning as a ‘value-variable’ relationship cannot help us identify what distinguishes specificational (identifying) copular sentences from predicational (descriptive) copular sentences” (Patten 2010:64). She proposes that specificational meaning is the product of a special type of nominal predication relation. Unlike predicational sentences, specificational sentences involve a restricted set (existentially presupposed or asserted) that enters into a class-membership relation with a referential expression. In other words, the crucial characteristic for creating specificational meaning is that a copular sentence denotes a universally quantified restricted or existentially presupposed set, which is inherent to the semantics of definite noun phrases, and a referential member that specifies the set. Example (21) presents what Patten calls the canonical specificational sentence:

(21) The best student we have is Sally.

The subject in (21), the definite NP ‘the best student we have’, denotes a restricted, quantified set, which is paired with the referential nominal predicate ‘Sally’.

- (22) a. The one who stole the money is Bill.
b. Mr. Obama is the president of the United States.
(23) Mr. DuPont is my father.

The two examples in (22) are both specificational, which specifies a referential member for a non-referential and restricted set. ‘Bill’ is a referential member of the restricted set ‘the one who stole the money’, ‘Mr. Obama’ is the referential member of the restricted set ‘the president of the United States’. However, (23) is equational, in which both of the subject and the predicate are semantically referential and encode a one to one class-membership predication relation. We treat equational as a sub-class of specificational relationship. The major difference between an equational and a specificational copular sentence is that in equational sentences the subject and the predicate are both semantically referential, whereas a specificational sentence specifies a referential member for a non-referential restricted set.

Similarly, Chinese copular sentences can also be classified into the two semantic copulative categories: specificational and predicational. Examples in (24) are all specificational. (24a-b) are specificational sentences, in which the subject and the nominal predicate form a class-member relationship. (24c) is equational with a referential subject and predicate.

- (24) a. 我 做 的 是 這 個
 wǒ zuò de shì zhè-ge
 SG1 make NOM COP this CL
 ‘What I made is this one.’
- b. 奧巴馬 是 美 國 總 統
 Àobāmǎ shì Měiguó zǒngtǒng
 Obama COP US president
 ‘Obama is the president of the US.’
- c. 那 個 人 是 我 媽
 nà ge rén shì wǒ mā
 that CL person COP my mother
 ‘That person is my mother.’

Examples in (25) can all be said to be predicational, and to predicate a property or characteristic of the subject.

- (25) a. 她 是 黃 頭 髮
 tā shì huáng tóufà
 SG3 COP yellow hair
 ‘She has yellow hair.’
- b. 她 是 個 學 生
 tā shì ge xuéshēng
 SG3 COP CL student
 ‘She is a student.’

4. The constructional framework

Above we have discussed the syntactic functions of a copula and the semantics of copular sentences. Linguists of different theoretical traditions in general recognize the two categories of copular sentences: specificational and predicational, and the question arises whether the two categories involve one or two different copulas. Halliday (1967a, 1967b), Kahn (1973), etc. believe the dichotomy of the semantics of copular sentences comes from there being two *be*'s, which have different syntactic functions. In Montague grammar (Montague 1973, Dowty et al. 1981, Partee 1999), a distinction is made between the two *be*'s: the ‘be’ of predication and the *be* of specificity (equality, identity and specificity). They are distinguished from each other by the types of their arguments. The *be*- of the predicational takes two arguments, a type <e> for the subject entity, and

a type $\langle e, t \rangle$. However, the *be* of the specificational takes two arguments of type $\langle e \rangle$, two entities. Stowell (1989:255) considers the predicative *be* to be a raising verb,⁷ and the specificity *be* is “a two-place predicate conveying a relation of identity holding between two referential NPs”.

Within the framework of Construction Grammar, Croft (2001:266) suggests a copular construction:

“[p]rofiles the assertion classifying the subject as belonging to the category of the predicate nominal, or possessing the property of the predicate nominal. However, the copula verb itself is of minimal semantic content, adding only a predicative function to a maximally schematic categorization of the referent of the subject argument. It can be argued that the profile of the whole clause is determined partly by the copula and partly by the predicate noun/adjective—categorization of the subject referent as being of the type profiled by the predicate noun, or ascription of the property profiled by the predicate adjective.”

We suggest that there is only one copula involved and the dichotomy of the semantics of copular sentences is captured by two subschemas under a schema — the copular construction. In this paper, the Chinese copular construction is treated to be a form and meaning pairing, which has the form [(XP) COP XP] with [NP COP NP] as the prototype and denotes copulative linking meaning involving specificational or predicational. Even if non-nominals occur at the XP position of the copular construction, the construction’s conventional meaning overrides the meanings associated with verbal phrases or clauses that denote temporal transitory process, and therefore it still denotes a proposition with the meaning of specificational or predicational. In other words, the meaning of non-transitory states or situations that can be described or specified is coerced out from the copular construction even if verbal phrases or clauses that occur in the subject or predicate position are temporally and aspectually inflected.⁸ The prototypical

⁷ By verb raising it means verb movement to V, which has been posited for infinitival verbs in languages e.g. English, German and Dutch. The hypothesis is that the verb of an infinitival complement, if the complement is not extraposed is moved and adjoined to its governing verb, thereby creating a verb-cluster. Dutch Verb Raising creates the structure in (ib) (assuming the SOV d-structure in (ia)) (Evers 1975, Rutten 1991, etc.).

- (i) a. dat Jan [VP [VP hard werken1] willen2] heeft
that Jan hard work want-to has
b. dat Jan [VP [VP hard t1] t2] heeft willen2 werken1
that Jan has wanted to work hard

⁸ This idea is also consistent with the concept of factive nominalization (Paris 1979).

copular construction can be schematized as: $[NP_i \text{ COP } NP_j] \leftrightarrow [SEM_i \text{ copulative linking } SEM_j]$.

We propose a constructional schematic taxonomy for the prototypical Chinese copular construction:

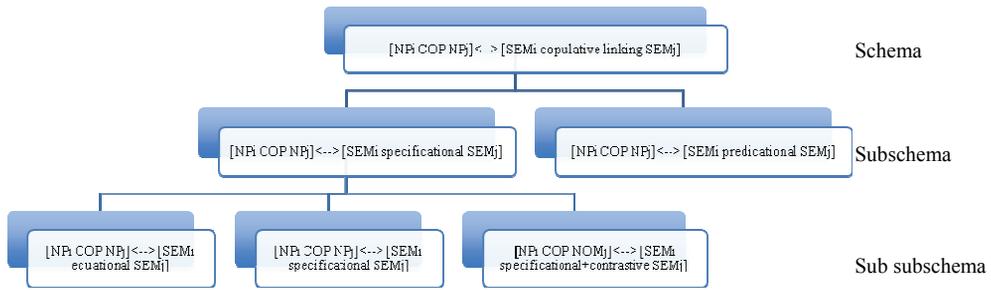


Figure 1: The constructional schematic taxonomy of the prototypical Chinese copular construction

In the constructional schematic taxonomy of the prototypical Chinese copular construction, $[NP_i \text{ COP } NP_j] \leftrightarrow [SEM_i \text{ copulative linking } SEM_j]$ is the abstract schema, under which $[NP \text{ COP } NP]$ with specificational and predicational meanings are two less abstract schemas. We categorize three sub subschemas under the schema of $[NP_i \text{ COP } NP_j] \leftrightarrow [SEM_i \text{ specificational } SEM_j]$: $[NP_i \text{ COP } NP_j] \leftrightarrow [SEM_i \text{ equational } SEM_j]$, $[NP_i \text{ COP } NP_j] \leftrightarrow [SEM_i \text{ specificational } SEM_j]$, and the cleft construction $[NP_i \text{ COP } NOM_j] \leftrightarrow [SEM_i \text{ specificational+contrastive } SEM_j]$. In terms of information structure, both equational and specificational copular sentences encode informational focus in which the subject is the topic encoding given information, and the post-copula predicate as a whole indicates new information that is the informational focus, whereas the cleft sentences indicate contrastive focus encoded by the immediate post-copula element and presupposition denoted by the discourse. In the next section, we will discuss the concept of cleft.

5. The concept of cleft

5.1 The cleft construction

The cleft construction is a subtype of the copular construction. A cleft sentence is a complex sentence in which a simple sentence is expressed using a main clause and a subordinate clause (Quirk et al. 1985, Levinson 1983, etc.). Traditionally, the English cleft includes two subtypes: it-cleft and pseudo-cleft (all/what/the-cleft). In English, a

prototypical it-cleft sentence has the form [It COP NP RC]⁹ as in (26).

(26) It is John who grimaced.

In an English pseudo-cleft sentence, the subordinated clause is a free relative clause headed by *what*, *all*, or a relative clause headed by *the one*, as in (27).

- (27) a. The one who grimaced is John.
b. What John did is grimace.
c. All John did is grimace.

The English cleft is often said to involve an element (the immediate post-copula element) encoding contrastive focus and the relative clause functioning as presupposition (Prince 1978, etc.). Lambrecht (1994:52) defines presupposition as the set of propositions lexicogrammatically evoked in a sentence that the speaker assumes the hearer already knows, or is ready to take for granted, at the time the sentence is uttered. Focus is the semantic component of a pragmatically structured proposition whereby the assertion differs from the presupposition (Lambrecht 1994:213). Scholars have proposed many versions of subclasses of focus and the most common one is to classify focus into two subtypes according to whether or not the focused item is in contrast with other alternatives in a limited set. Many terminologies have been used to refer to the non contrastive type and the contrastive type focuses, such as rheme vs. kontrast (Vallduvi & Vilkuuna 1998), information focus vs. identification focus (Kiss 1998), informational focus vs. operational focus (Roberts 1998) and informational focus vs. contrastive focus (Xu 2002, K. Li 2008). This paper adopts Xu's terms of informational focus and contrastive focus to highlight their functions.

Contrastive focus not only asserts what is different from its presupposition, it is also associated with exhaustiveness and exclusiveness as proposed by Kiss (1998). Accordingly, in (26), the post-copula NP 'John' is the focus complementing the presupposition 'someone grimaced'. Moreover, 'John' is exhaustively the one and only one exclusively that grimaced, therefore it is a contrastive focus.

Payne (1997:280) suggests that cross-linguistically "a cleft construction is a type of predicate nominal consisting of a noun phrase (NP_i) and a relative clause (RC) whose

⁹ The modern day English clefts allow a range of categories to occur as the complement of the copula 'be' (Patten 2010:222), i.e. the position of NP in [It COP NP RC]. Prepositional and adverbial phrases are common in the post-copula position, as in 'it was just here that we met', 'it is in December that she's coming', plus the gerund form of verb phrase in 'it is writing the paper that he did last night'.

relativized NP is co-referential with NP_i”, and “clefts in many languages exhibit the pattern [NP_i [COP headless RC_i]]”. Within Payne’s cross-linguistic formulation of cleft, the form that RC takes depends on what relativization strategies the language employs, i.e. it could be nominalization, a participial clause, or amore prototypical relative clause. According to Li & Thompson (1981:579), nominalization is the equivalent relativization strategy in Modern Chinese. They note that nominalization is a grammatical process to turn a VP/S/NP into a noun.¹⁰ Paris (1979:42) also claims “when a predicative element is followed by *de*, it possesses syntactic characteristics that are typical of nouns”. In Construction Grammar, the nominalization construction (NOM, in short) can be schematized as [VP/S/NP *de*] ↔ [entity, situation, or state].

Therefore, the equivalent of a headless RC in Chinese is a nominalization, and the form of the cleft construction is [NP COP NOM]. Paris (1979) suggests that the copula *shì* is the main verb in the underlying structure of the *shì...de* cleft and the remainder of sentence is nominalized by the nominalizer *de*. Accordingly, the cleft construction can be schematized as [NP_i COP NOM_j] ↔ [SEM_i specificational+contrastive SEM_j].

Patten (2010:103) suggests that English cleft sentences belong to a family of specificational copular sentences, in that they also involve the restrictive but non-referential set in common with definite noun phrases, which is given, or recovered, in the form of a relative clause. In other words, English cleft sentences are copular sentences in which the post-copula NP is identified as the referential member for the restricted and non-referential NP (in the form of relative clause). What is more, the restricted set encompasses not just objects, but also actions, and properties, and therefore the referential member encoded in the post-copula element can range over clauses, VPs as well as NPs (Patten 2010:261).

We have suggested the Chinese cleft construction also belongs to the family of specificational copular sentences, because it also involves a restricted, non-referential set denoted by the post-copula nominalization specified by a referential member encoded by the subject NP. For example, in (28a) the nominalization *zuótiān qù Shànghǎi de* represents the restricted, but non-referential set *qù Shànghǎi de* and the subject *tā* specifies the referential member of the restricted class.

In terms of information structure, just like in English, the Chinese cleft construction also encodes contrastive focus (K. Li 2008). The element immediately following the copula is the contrastive focus¹¹ asserting an idea with respect to a certain presupposition.

¹⁰ The copula *shì* as well as copular clauses cannot be nominalized, e.g. **[shì xuéshēng] de* ‘[COP student] NOM’.

¹¹ The immediate post-copular element as the contrastive focus of cleft sentence is phonetically stressed. If in the same sentence the copula itself rather than the immediate post-copular element is phonetically stressed, then it emphasizes the truthfulness of the statement. For example, if

For example, in (28a), the contrastive focus is the adverbial time phrase *zuótiān* ‘yesterday’, and the presupposition in the context is ‘she went to Shanghai at some time’. Similarly, in (28b), the contrastive focus is encoded in the element right following *shì*, e.g. the prepositional phrase *zài jiā* ‘at home’, and the presupposition is ‘at some place this was made’. If a verb phrase directly follows the copula in a cleft sentence, as in (28c), the contrastive focus can be the verb *qù* ‘go’, the complement of the verb *Shànghǎi*, or the verbal phrase as a whole *qù Shànghǎi* ‘go to Shanghai’, depending on the context. In (28d), the contrastive focus is the modal verb *huì* or plus the verbal phrase *qù Shànghǎi* ‘go to Shanghai’ depending on the context. Paul & Whitman (2008) distinguish examples like (28d) from the *shì...de* cleft and refer to them as the propositional assertion pattern which does not involve focus because the whole material between *shì* and *de* may be old information in the discourse. This claim is in conflict with the empirical data, e.g. in (28d) the post-copula modal verb *huì* ‘will’ can be the contrastive focus. If the sentence is to assert the complex information between *shì* and *de*, the modal verb *huì* plus the verbal phrase *qù Shànghǎi* is focal. Either way, (28d) denotes the semantics of the *shì...de* cleft.

- (28) a. 她 是 昨天 去 上海 的
 tā shì zuótiān qù Shànghǎi de
 SG3 COP yesterday go Shanghai NOM
 ‘It was yesterday that she went to Shanghai.’
- b. 這個 是 在家 做 的
 zhè-ge shì zài jiā zuò de
 this CL COP at home make NOM
 ‘It was at home that this was made.’
- c. 她 是 去 上海 的
 tā shì qù Shànghǎi de
 SG3 COP go Shanghai NOM
 ‘It was Shanghai that she went.’
- d. 她 是 會 去 上海 的
 tā shì huì qù Shànghǎi de
 SG3 COP will go Shanghai NOM
 ‘She WILL go to Shanghai.’

the copula is stressed in (28a), it means ‘it is true that she came to Shanghai yesterday’. A detailed discussion of this topic is out of the scope of the current discussion.

Based on the above discussion, for a Chinese cleft sentence, the semantic meaning is complex: on top of the copulative specificational meaning, there is the meaning of contrastive exclusiveness. In English translation, the contrastive focus and the presupposition are structurally singled out, whereas in Chinese, the focal meaning and the presupposition are subtler as well as more dependent on the discourse and the context. Therefore the English translation does not fully convey the complex semantics of the Chinese cleft.

We suggest examples (28a-d) are cleft sentences in Modern Chinese, as all the examples have the form [NP COP NOM] (NOM=(ADV/TP/PP) VP/S/NP *de*) with specificational+contrastive meaning. However, some scholars e.g. Teng (1979), Zhu (1997), Huang (1998), distinguish (28b) from (28a, c, d), because they believe that the Chinese cleft is not reversible (Huang 1998:211), whereas (28b) indicates equation and therefore the subject and the predicate can be reversed ((29) is the reversed version of (28b)). They believe both (28b) and (29) share the identical equational meaning, and they are Chinese pseudo-cleft sentences.

Here, reversibility is taken by these scholars as a criterion to distinguish pseudo-cleft from cleft. However, it is unclear in what way reversibility should be the defining characteristic between the two. As a matter of fact, it can be an unrealistic constraint on the description of the cleft construction.

- (29) 在家 做 的 是 這個
 zài jiā zuò de shì zhè-ge
 at home make NOM COP this CL
 ‘What was made at home is this one.’

We suggest all cleft, or pseudo-cleft, sentences are not equational but specificational, and cannot be reversed without affecting its discourse function. (28b) has the form [NP COP NOM], the post-copula PP *zàijiā* ‘at home’ is the contrastive focus, and the information focus is the entire nominalization *zàijiā zuò de*. However, (29) has the form [NOM COP NP], and the post-copula NP *zhè-ge* ‘this one’ is the informational focus. Although the Chinese pseudo-cleft also includes exhaustiveness and exclusiveness (Prince 1978, Higgins 1979, Quirk et al. 1985, etc.), e.g. *zhè-ge* ‘this one’ indicates exhaustiveness and exclusiveness in (29), and specificational member-class relationship (Patten 2010), it has the form [NOM COP NP], which differs from the cleft [NP COP NOM]. (A more detailed discussion of Chinese pseudo-cleft will take us afar from our topic and is not pursued here as it has fallen out the scope of this paper.)

We suggest that (28b) is a cleft rather than a pseudo-cleft because it has the form [NP COP NOM] that entails a specificational meaning and a contrastive focus. All

examples in (28) are examples of the cleft construction $[NP_i \text{ COP NOM}_j] \leftrightarrow [\text{SEM}_i \text{ specificational+contrastive SEM}_j]$, in spite of the differences in terms of semantic referentiality and the optionality of the nominalizer *de*. In (28a, c, d), the subject of the sentence *tā* is co-referential with the implicit subject in the nominalization, and the final nominalizer *de* is optional. By contrast, in (28b) the subject of the sentence *zhè-ge* is co-referential with the implicit object in the nominalization, and the nominalizer *de* is obligatory. Therefore, within the constructional framework, we propose that the schematic cleft construction has two subschemas: cleft-sbj as in (28a, c, d) and cleft-obj as in (28b). Whereas the cleft-sbj involves subject-**subject** co-referentiality, and optionality of the nominalizer *de*, the cleft-obj involves subject-**object** co-referentiality which means the verb in the nominalization is transitive with an obligatory nominalizer.

A thorough and sophisticated account for the constructional distinction between the two constructions demands more distributional data and further research. One possible account for the constructional distinction between the cleft-sbj and cleft-obj construction may be that for the cleft-sbj, the subject is frequently human (see the discussion of the prototypical cleft-sbj form in §5.3), thus it tends to be more active, which may loosen the formal constraint of the nominalization at the predicate position of the cleft sentence and may cause the final nominalizer to be optional; whereas for the cleft-obj, the subject is less active and therefore emphasizes the formal constraint of the nominalization.

5.2 An adverb analysis of *shì* in the so-called *shì* cleft sentence

Huang (1998) claims cleft sentences do not have the meaning of an ordinary copular sentence: “they neither indicate equation or inclusion, nor do they predicate property as ordinary copular sentences may do” (Huang 1998:213). Therefore, he argues that *shì* in cleft sentences cannot be treated as a copula verb. He provides a syntactic analysis to argue that the cleft *shì* has the status of an adverb. We will discuss this argument in detail in this section. According to Huang, (30) are cleft sentences with the final particle *de* omitted.

- (30) a. 小李 是 昨天 打了 小王
 Xiǎolǐ shì zuótiān dǎ-le Xiǎowáng
 Xiaoli COP yesterday hit-PERF Xiaowang
 ‘It was yesterday that Xiaoli hit Xiaowang.’
- b. 小李 昨天 是 打了 小王
 Xiǎolǐ zuótiān shì dǎ-le Xiǎowáng
 Xiaoli yesterday COP hit-PERF Xiaowang
 ‘It was hitting Xiaowang that Xiaoli did yesterday.’

- c. 是 小李 昨天 打了 小王
 shì Xiǎolǐ zuótiān dǎ-le Xiǎowáng
 COP Xiaoli yesterday hit-PERF Xiaowang
 ‘It was Xiaowang that hit Xiaoli yesterday.’

Huang (1998:213) claims that *shì* in cleft sentences has “the status of an adverb on a par with negation and modals”. He argues, in English cleft sentences such as (31), what immediately follows the copula, such as ‘John’, is taken to be the focus of the sentence, with the rest of the sentence ‘that hit Bill’ backgrounded. There is a structural dependency between the focus and a position within the presupposed clause. The structure of (31) is shown in (32).

- (31) It is John that hit Bill.
 (32) It is John_i [that t_i hit Bill].

Therefore, Huang says, there is a legitimate value-variable relationship between the focus and the gap in the presupposition. However, he claims the situation with the Chinese cleft is quite different. In Modern Chinese, “a cleft sentence differs from a non-cleft only in the presence vs. absence of the focus indicator *shì*. There is no overt dislocation of the focus” (Huang 1998:214). Example (33) is a non-cleft declarative version of (30):

- (33) 小李 昨天 打了 小王
 Xiǎolǐ zuótiān dǎ-le Xiǎowáng
 Xiaoli yesterday hit-PERF Xiaowang
 ‘Xiaoli hit Xiaowang yesterday.’

According to Huang, a simple way to look at the Chinese cleft formation is to say that it inserts the marker *shì* directly in front of the constituent in focus, as is exemplified in (30). Chinese cleft sentences, “unlike their English counterparts, involve neither structural dependency, nor the value-variable relation between the focus and the presupposition” (Huang 1998:205). He further claims that treating the cleft *shì* as a copula verb on a par with ordinary copula *shì*, or the pseudo-cleft *shì* as in (28b), is both semantically implausible and syntactically problematic. Semantically, cleft sentences like (30) do not indicate equation, identification, inclusion or predicative property. Syntactically, one important restriction on the cleft formation is that no post-verbal phrase may be clefted, e.g. *Xiǎowáng* in (30), therefore (34) is ungrammatical.

- (34) *小李 昨天 打了 是 小王
 Xiǎolǐ zuótiān dǎ-le shì Xiǎowáng
 Xiaoli yesterday hit-PERF COP Xiaowang
 ‘It was Xiaowang whom Xiaowang hit yesterday.’

If the cleft *shì* is an adverb, since the position of an adverb, e.g. negation, modals, time adverbials, in Chinese is pre-verbal, “it is of course the case that *shì* can never occur post-verbally between a verb and its complement” (Huang 1998:215).

Huang also maintains that the cleft *shì* may enter into scope relations¹² with negation and modals. In (35), following Huang, *shì* is glossed as FO (focus operator).

- (35) a. 小李 是 明天 不 去
 Xiǎolǐ shì míngtiān bú qù
 Xiaoli FO tomorrow NEG go
 ‘It is tomorrow that Xiaoli will not go.’
 b. 小李 不 是 明天 去
 Xiǎolǐ bú shì míngtiān qù
 Xiaoli NEG FO tomorrow go
 ‘It is not tomorrow that Xiaoli will go.’
 c. 是 小李 可能 明天 去
 shì Xiǎolǐ kěnéng míngtiān qù
 FO Xiaoli possibly tomorrow go
 ‘It is Xiaoli who will possibly go tomorrow.’
 d. 可能 小李 是 明天 去
 kěnéng Xiǎolǐ shì míngtiān qù
 possibly Xiaoli FO tomorrow go
 ‘Possibly it is tomorrow that Xiaoli will go.’

According to Huang, (35) shows the focus operator *shì*, the negation operator *bù* and the modal operator *kěnéng* enter into scope relations with each other in free order. The fact that *shì* may enter into scope relations like negation, modals, and other adverbs, suggests that *shì* is simply another such quantificational adverb with the property of bearing scope (Huang 1998:216).

¹² The General Scope Principle (Kroch 1974:145) suggests: “if within a simplex sentence there are operators with the surface word order X Y Z..., then the operators are indexed in order of appearance, giving X1Y1Z1..., and a scope marker is established as follows: [X1’ Y1’ Z1’...] where X is a quantifier of type X”.

Finally, Huang suggests that although the cleft *shì* has the status of an adverb, it is closely related to the copula verb *shì* used in copular sentences including the pseudo-cleft *shì*. He points out that verb phrases such as *yòngli* ‘use force’ in (36a) can function adverbially in (36b):

- (36) a. 她 用了 力 了
 tā yòng-le lì le
 SG3 use-PERF force CRS
 ‘She has used force.’
- b. 她 用力 打 小王
 tā yòng lì dǎ Xiǎowáng
 SG3 use force hit Xiaowang
 ‘She hit Xiaowang with force (forcefully).’

Similarly, *shì* is a copula verb in copular sentences, but in cleft sentences, it functions as a focus operator and has the status of an adverb.

In the following we will demonstrate that Huang’s arguments on cleft *shì* being an adverb fail to stand up on further scrutiny. Instead, *shì* is systematically a copula verb in these sentences. As we have shown in §5.1, sentences like (30) are examples of the cleft-sbj [NP_i COP NOM_j] \leftrightarrow [SEM_i cleft-sbj SEM_j], in which the subject NP is co-referential with the subject in the nominalization, therefore it involves the semantic co-reference. Furthermore, it entails a specificational meaning and a contrastive focus with the referential subject specifying the non-referential but restricted set encoded by the post-copula nominalization, and hence it encodes a legitimate value-variable relation. In fact, as we will show in the next section, the examples in (30) are instances of the cleft-sbj with the optional sentence final nominalizer *de*.

First, Huang points out that no post-verbal phrase may be clefted, as in (34). However, many linguists including Zhang & Fang (1996) point out that in Chinese, not only can adverbs not separate the verb and its complement in Chinese, no verb with an unrelated argument structure can occur in a verbal phrase between the verb and its complement either, e.g. **dǎ chī Xiǎowáng* ‘hit eat Xiaowang’. Following this general constraint, as a verb, *shì* naturally cannot occur between another verb and its object in (34).

Second, Huang claims cleft *shì* may enter into scope relations with negation, modals, and quantificational adverbs in free order (see (35)), thus *shì* is simply another such adverb that has the property of bearing scope. However, examples in (37) show that, if we substitute *shì* in (35) with a regular verb such as *zhīdào* ‘to know’, the grammaticality of the sentences holds.

- (37) a. 小李 知道 明天 不 去
 Xiǎolǐ zhīdào míngtiān bú qù
 Xiaoli know tomorrow NEG go
 ‘Xiaoli knows that (he) will not go tomorrow.’
- b. 小李 不 知道 明天 去
 Xiǎolǐ bù zhīdào míngtiān qù
 Xiaoli NEG know tomorrow go
 ‘Xiaoli does not know that (he) will go tomorrow.’
- c. 知道 小李 可能 明天 去
 zhīdào Xiǎolǐ kěnéng míngtiān qù
 know Xiaoli possibly tomorrow go
 ‘(Someone) knows Xiaoli will possibly go tomorrow.’
- d. 可能 小李 知道 明天 去
 kěnéng Xiǎolǐ zhīdào míngtiān qù
 possibly Xiaoli know tomorrow go
 ‘Possibly Xiaoli know that (he) will go tomorrow.’

Verbs are generally not considered as operators (unless they serve as auxiliaries) and do not enter scope relations with operators. The fact that *shì* shows up in one sentence with negation or modal does not necessarily mean that it bears a scope relation with them. It could still be a verb, like *zhīdào* ‘to know’ in (37).

Finally, the scope phenomenon of the cleft *shì* that is considered by Huang to be like an adverbial verbal phrase such as *yòngli* ‘use force’ in *yòngli dǎ Xiǎowáng* ‘hit him with force (forcefully)’ as in (36) is also called into question by (38). Note that the sentence in (38) shows that the same verb *yòng* in the same position may actually be the verb in a serial-verb construction. It then follows that the verbal phrase *yòng li* in (36) is not used adverbially but the verb in a serial-verb construction. Consequently, this is another piece of evidence to support the claim that *shì* is a verb in copular sentences, and raises serious doubt about the adverbial claim in the cleft construction.

- (38) 她 用了 很大 的 力 打 小王
 tā yòng-le hěn dà de lì dǎ Xiǎowáng
 SG3 use-PERF very heavy REL force hit Xiaowang
 ‘She has used heavy force to hit Xiaowang.’

In light of the above data, it has become clear that none of the arguments for treating *shì* as an adverbial focus operator shows that it is uniquely adverbial. It follows then that *shì* can be analyzed systematically as a copula verb. Moreover, the adverb analysis

of *shì* in the cleft implies the simplex structure [NP ADV VP (PTCL)] that would strongly imply a transitory temporal process rather than a non-transitory state or situation. However, as we have pointed out in §5.1, the cleft construction indicates specificational non-transitory states or situations. Accordingly the adverb analysis is not consistent with the semantic nature of the cleft. We will elaborate this point in §5.3.

5.3 A new analysis of Chinese cleft sentences

The examples in (39) lay bare the function of *shì* as a non-inflectional invariant verb in connecting two NPs in a non-transitory situation. In the sentences of (39a-b) a transitory process *qù* ‘go’ marked by an adverb *dōu* ‘all’, can be negated by negator, *bù* or *méiyǒu*. However, preceding the copula *shì*, only one negator *bù* is possible.

- (39) a. 我們 沒有 都 去
wǒmen méiyǒu dōu qù
PL1 NEG all go
‘Not all of us have gone.’
- b. 我們 不 都 去
wǒmen bù dōu qù
PL1 NEG all go
‘Not all of us will go/went.’
- c. *我們 沒有 是 去
wǒmen méiyǒu shì qù
PL1 NEG COP go
- d. 我們 不 是 去 (的)
wǒmen bú shì qù (de)
PL1 NEG COP go (NOM)
‘We are not those who will go/went.’

This is so because the Chinese *méiyǒu* is a negator of a process in terms of its temporal structure. However, the Chinese *bù* negates a non-transitory state. For example, in (40), none of the adjectives, *hǎo* ‘good’, *cōngmíng* ‘smart’, or *gāo* ‘tall’, indicating a non-transitory state can be negated by *méiyǒu*.

- (40) a. 他 不 好， 不 聰明， 不 高
tā bù hǎo bù cōngmíng bù gāo
SG3 NEG good NEG smart NEG tall
‘He is not good, not smart, or not tall.’

- b. 他 *沒有 聰明， *沒有 高
 tā *méiyǒu cōngmíng *méiyǒu gāo
 SG3 NEG smart NEG tall

Such a pattern in negation confirms our hypothesis that the cleft construction inherits the syntactic and semantic properties from the schematic copular construction, and it denotes a specificational non-transitory situation or state rather than a transitory process.

The examples in (41) and (42) illustrate the cleft-sbj with the explicit nominalizer *de* and the cleft-sbj with the implicit¹³ nominalizer *de* respectively.

- (41) 她 是 昨天 到達 北京 的
 tā shì zuótiān dàodá Běijīng de
 SG3 COP yesterday arrive Beijing NOM
 ‘It was yesterday that she arrived in Beijing.’ (CCL)
- (42) 我 是 到 北京 學習 來了
 wǒ shì dào Běijīng xuéxí lái-le
 SG1 COP to Beijing study come-CRS
 ‘It was to Beijing that I have come to study.’ (CCL)
- (43) 戰爭 的 艱難， 我 是 親身 經歷 了 的
 zhànzhēng de jiānnán wǒ shì qīnshēn jīnglì le de
 war ASSOC hardship SG1 COP myself experience PERF NOM
 ‘As for the hardship of the war, I MYSELF have experienced it.’ (CCL)

In example (41), the post-copula contrastive focus *zuótiān* ‘yesterday’ asserts the exhaustiveness and exclusiveness with respect to the presupposition ‘she arrived in Beijing someday’ in the context. In (42), the contrastive focus, the prepositional phrase *dào Běijīng* ‘to Beijing’, is asserted of the presupposition ‘I came somewhere to study’. The form of (42) is just like (41) except that *de* is implicit. (43) is an example of the topic-comment construction, in which the comment part is a cleft-sbj sentence with the verb of the nominalization inflected by the perfective *le*, and the explicit nominalizer *de*. We hypothesize that (41)-(43) are cleft-sbj sentences with the final nominalizer *de* optional.

We found 2,760 tokens of the cleft-sbj sentences in CCL Modern Chinese Corpus, of which 2,122 (76.9%) share the form [PRO shì (ADV/TP/PP) VP *de*], e.g. (41), (43), and 638 (23.1%) are those in which the final nominalizer *de* is not present, e.g. (42).

¹³ Since the nominalizer *de* in the cleft-sbj is optional, it can be present or absent in a cleft-sbj sentence. We treat *de* in presence as explicit, and the absent *de* as implicit.

This shows that the rate of the nominalizer *de* being implicit is far less than those explicitly with it. According to this frequency, [PRO *shì* (ADV/TP/PP) VP *de*] is, therefore, the prototypical structure of the cleft-sbj. The prototypical cleft-sbj involves the subject as the doer of the event encoded by the nominalization, e.g. (41), (43). The presence of the nominalizer *de* in the cleft-sbj may be to do with the semantic and pragmatic factors. As we have briefly mentioned in §5.1, the cleft-sbj tends to be active and loosens the formal constraint of the nominalization, which accordingly may cause the final nominalizer to be deletable. Also, based on our data, if sentence final particles e.g. the current related state particle *le*, intonation particles *ne*, *ba*, *ya*, *a*, question particles *ma*, etc, occur in a cleft-sbj sentence, the nominalizer is frequently implicit. For example:

- (44) 你 是 常常 去 那兒 嗎?
 nǐ shì chángcháng qù nà'èr mā
 SG2 COP often go there Q
 ‘Do you OFTEN go there?’ (CCL)

What’s more, as we will show in (45c) and (46b), if the nominalization in a cleft-sbj sentence consists of a head NP modified by a relative clause with a relativizer *de*, the final nominalizer *de* is frequently implicit to avoid the redundancy.

A copular sentence in (45a) can be used grammatically only in a highly specific context, i.e. speaking to a waiter in a restaurant clarifying what a person has ordered. It is inconceivable that *mǐfàn* ‘rice’ serves a predicational function, as it is not a property of human being. Therefore, it interprets only the specificational meaning, because a copula, cross-linguistically, is observed to represent either predicational or specificational function. It is, therefore, reasonable to consider (45a) to be a short form for a cleft-sbj sentence in (45b), in which only *mǐfàn* ‘rice’, the contrastive focus, is kept after dropping the entire presupposition, ‘something that I have ordered’. It is also reasonable to consider (45a) a short form for a cleft-sbj sentence in (45c) which has the exact same meaning and information structure as (45b) but structurally involves a nominalization consisting of a head noun modified by a relative clause, and an implicit nominalizers.¹⁴

- (45) a. 我 是 米飯
 wǒ shì mǐfàn
 SG1 COP rice
 ‘?? I am rice.’

¹⁴ Li & Thompson (1981:588) claim that (45c) is an alternate form of (45b) and the two are essentially equivalent. We disagree with them on this point. As Paul & Whitman (2008) discover many *shì...de* cleft sentences as well as their propositional assertion pattern only take the form V O *de*, but not V *de* O, it is problematic to claim they are equivalent.

- b. 我 是 點 米飯 的
 wǒ shì diǎn mǐfàn de
 SG1 COP order rice NOM
 ‘It is rice that I have ordered.’
- c. 我 是 點 的 米飯 (的)
 wǒ shì diǎn de mǐfàn (de)
 SG1 COP order REL rice (NOM)
 ‘It is rice that I have ordered.’

The structurally ambiguous sentence in (46a) further illustrates this point. If we take the head noun of the post-copula RC representing the restricted set, i.e. ‘she is the daughter who was born last year’, then the referential member *tā* ‘she’ in subject position is a member of the set of the daughter who was born. But then where does the second reading come from, as the seemingly common referential member of *tā* in (46a) can have a mother reading?

- (46) a. 她 是 去年 生 的 女兒
 tā shì qùnián shēng de nǚ’er
 SG3 COP last year bear REL daughter
 i. ‘She is the daughter who was born last year.’
 ii. ‘It was last year that she gave birth to a daughter.’
- b. 她 是 去年 生 的 女兒 的
 tā shì qùnián shēng de nǚ’er de
 SG3 COP last year bear REL daughter NOM
 ‘It was last year that she gave birth to a daughter.’

The sentence in (46b) with the nominalizer *de* present unambiguously gives the mother reading. Similar to (45c), example (46b) with the form [PRO shi RC NP de] is obviously a cleft-sbj sentence, in which the subject *tā* ‘she’ represents the referential member of the non-referential, but restricted set of ‘the one who gave birth to a daughter last year’ encoded by the nominalization. The immediate post-copula contrastive focus *qùnián* ‘last year’ is asserted of the presupposition ‘she gave birth to a daughter some time’. The sentence in (46a) is structurally ambiguous only because the nominalizer *de* in (46b) is optional. The ambiguity here has further substantiated our hypothesis that the Chinese cleft-sbj has a [NP COP NOM] form and the ambiguity is caused by the optionality of the nominalizer *de*.¹⁵ Therefore, *shì* must be a copula verb and similarly the bare-*shì*

¹⁵ 他是去的台北 SG3 COP go REL Taipei ‘It was Taipei that he went’, is an example similar to

examples Huang provides in (30) are simply cleft-sbj sentences with an implicit nominalizer *de*.

6. Conclusion

This paper has discussed the concepts of “copula” and “cleft”. We have shown that *shi* in Modern Chinese is systematically an invariant non-inflectional copula verb, not a particle, a focus marker, a focus operator or an adverb in the cleft construction. The copular construction can be schematized as $[(XP)_i \text{ COP } XP_j] \leftrightarrow [SEM_i \text{ copulative linking } SEM_j]$, in which although the XP can be non-nominal, its prototypical form is $[NP \text{ COP } NP]$. We have proposed a constructional schematic taxonomy of the prototypical Chinese copular construction (see Figure 1).

We claim the cleft construction $[NP_i \text{ COP } NOM_j] \leftrightarrow [SEM_i \text{ specificational } +\text{contrastive } SEM_j]$ is a subschema of the copular construction, which inherits the attributes of the schematic copular construction. Figure 2 summarizes the form and meaning properties of the prototypical copular construction and the cleft construction, and provides a comparison between them.

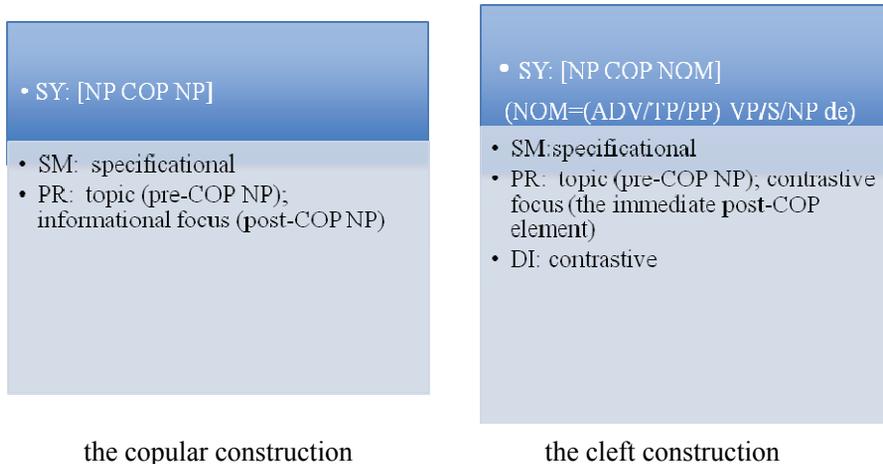


Figure 2: A comparison of the schematic copular construction and the cleft construction (form in the upper box and meaning in lower box, SY: syntax; SM: semantics; PR: pragmatics; DI: discourse)

(45c) and (46b). It is a cleft-sbj sentence, in which the nominalization consists of a head noun ‘Taipei’ modified by a relative clause, and the final nominalizer *de* is implicit.

The cleft construction signals the specificational and contrastive meaning at the same time with the element immediately following *shì* as the contrastive focus. Under this schematic cleft construction, there are two types: cleft-sbj and cleft-obj. The cleft-obj involves subject-**object** co-referentiality and the obligatory presence of a nominalizer, whereas the cleft-sbj involves subject-**subject** co-referentiality, and the optionality of the nominalizer *de*. The CCL Modern Chinese Corpus reveals that in actual discourse only less than a quarter of cleft-sbj sentences have the implicit nominalizer *de*, and [PRO *shì* (ADV/TP/PP) VP *de*] is the prototype. Suppose that *shì* in some cleft-sbj sentences is actually on its way changing into an adverb as some have suggested, it is still far from getting there yet as 75% of them still occur with an explicit *de*, not to say that none of the arguments given so far uniquely identifies it as an adverbial. Finally, the primary semantic function of the cleft-sbj is to indicate a non-transitory class-membership rather than a transitory process that the adverbial analysis may imply. In short, we have demonstrated an extra mileage provided by the copula hypothesis as it can provide a natural explanation of the somewhat idiosyncratic sentences in (45) and (46).

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漢語分裂構式中的系詞研究

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本文從類型學角度重新思考和分析漢語系詞和分裂結構的概念，將漢語系詞重新定義為通常與名詞短語構成謂語結構的無形態屈折變化的動詞。依照構式語法理論，漢語的系詞構式（或稱判斷構式）是個形式語義的統一體，表達的語義為指定性或描述性。文章提出典型系詞構式的等級層次分類，並指出漢語分裂構式 [NP COP NOM] 是系詞構式下指定性構式中的一個次構式，其表達的是指定性的語義且標示對比焦點。文章根據其形式和語義將分裂構式分成兩個次構式：分裂－主語和分裂－賓語，並進一步說明漢語分裂構式標示的是一個非臨時性的狀態而非一個臨時性的過程。

關鍵詞：系詞，分裂結構，構式語法