

Chinese: Parts of Speech

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1. Introduction

Whether Chinese has the same range of parts of speech (or categories) as the Indo-European languages has been the subject of much debate in the literature. In particular, while it is generally recognized that Chinese makes a distinction between nouns and verbs, scholars hold different opinions regarding the rest of the categories (see Chao 1968, Li and Thompson 1981, Zhu 1982 and Xing and Ma 1992, inter alia). The differences in opinions are partly due to the different theoretical backgrounds adopted by linguists, and partly due to the use of different terminological conventions. As a result, different criteria are employed for classifying words and different terminological conventions are used to label the categories. In order to address the question of whether Chinese possesses the same range of categories as the Indo-European languages, I shall make reference to the familiar categories of the Indo-European languages whenever possible.

Before we proceed, it is important to mention that this chapter is intended to offer a comprehensive survey of the major categories in Chinese, aiming to establish the set of categories that is commonly found in Chinese and the Indo-European languages and those that are available in Chinese only. In particular, in the discussion of the major categories shared by Chinese and the Indo-European languages, I shall examine their characteristic features and discuss in what ways they are similar to and different from those in the Indo-European languages. Furthermore, I shall review the factors that contribute to the long-standing debate on the categorial status of adjectives, prepositions and localizers.

2. Categories commonly found in Chinese and the Indo-European languages

This section introduces the categories that are commonly found in Chinese and the Indo-European languages, including nouns, verbs, adjectives, adverbs, prepositions and conjunctions.

2.1 Nouns

The existence of nouns as an independent category in Chinese is uncontroversial

(Chao 1968, Zhu 1982, Huang, Li and Li 2009: Ch. 1). One of the characteristics of nouns is that they can be preceded by a [Numeral + Classifier] sequence (Chao 1968, Zhu 1982), as shown in the following examples.¹ In this regard, Chinese nouns behave like mass nouns in the Indo-European languages, as they always require the presence of classifiers in enumeration (see Chierchia 1998 and Cheng and Sybesma 1999 for discussion of the availability of count-mass distinction in Chinese).^{2,3}

- | | |
|--|--|
| (1) a. 一個 人
yī-ge rén
one-Cl person
'one person' | b. 三本 書
sān-běn shū
three-Cl book
'three books' |
| c. 兩杯 啤酒
liǎng-bēi píjiǔ
two-glass beer
'two glasses of beer' | d. 四磅 豬肉
sì-bàng zhūròu
four-pound pork
'four pounds of pork' |

Another characteristic of nouns is that they cannot be negated by *bù* 不 'not' (Chao 1968, Zhu 1982 and Huang, Li and Li 2009: Ch. 1) nor can they be modified by the intensifier *hěn* 很 'very' (Chao 1968, Zhu 1982), as evidenced by the ill-formedness (indicated by "*" below and throughout) of (2) and (3), respectively.⁴

- | | |
|--------------------------------------|------------------------------------|
| (2) a. *不 人
*bù rén
not person | b. *不 書
*bù shū
not book |
| c. *不 啤酒
*bù píjiǔ
not beer | d. *不 豬肉
*bù zhūròu
not pork |
-
- | | |
|-------------------------|---------------------|
| (3) a. *很 人
*hěn rén | b. *很 書
*hěn shū |
|-------------------------|---------------------|

¹ The term "classifier" here is used as a cover term equivalent to "numeral classifier". As I shall discuss in section 3.1, classifiers can be subdivided into sortal classifiers and measure words.

² The following abbreviations are used in glossing examples: Cl: classifier; Dur: durative aspect marker; Exp: experiential aspect marker; Perf: perfective aspect marker; Poss: possessive marker; Prog: progressive aspect marker; Prt: sentence-final particle; Q: question particle; Res: resultative aspect marker.

³ The romanization system used for the Chinese data is pīnyīn, and the tones given in the examples are in compliance with the standard tone sandhi rules in Mandarin.

⁴ As noted by Huang, Li and Li (2009: 10-11), there are examples such as *bù-rén-bù-guǐ* 不人不鬼 'not-human-not-ghost' in Chinese that seemingly allow a noun to be negated by *bù* 不. I follow Huang, Li and Li and regard these examples as idiomatic expressions rather than genuine counterexamples.

very person
c. *很 啤酒
*hén píjiǔ
very beer

very book
d. *很 豬肉
*hěn zhūròu
very pork

Apart from the fact that nouns in Chinese behave like mass nouns in the Indo-European languages, Chinese nouns differ from those in the Indo-European languages is that they are not inflected for number, gender and case. This is due to the fact that Chinese is an isolating language and is morphologically impoverished. Furthermore, unlike Indo-European languages, Chinese lacks definite and indefinite articles. Thus, the same form of a noun such as *xiǎohái* 小孩 ‘child’ may appear in the subject or object position. In terms of interpretational properties, it can be interpreted as singular or plural and generic, definite or indefinite, depending on context (Chierchia 1998, Cheng and Sybesma 1999, Li 1999):⁵

- (4) a. 小孩 喜歡 貓。
xiǎohái xǐhuān māo.
child like cat
i. ‘Children like cats.’ (generic)
ii. ‘The child/children like(s) cats.’ (definite)
- b. 他 會 去 找 小孩。
tā huì qù zhǎo xiǎohái.
he will go find child
i. ‘He will go find a/some child/children.’ (indefinite)
ii. ‘He will go find the child/children.’ (definite)

2.1.1 Classification of nouns

While we have seen in (1a-d) that Chinese nouns syntactically behave like mass nouns in the Indo-European languages in requiring the presence of classifiers in enumeration, the semantic distinction between count and mass nouns exists in Chinese. Based on the semantic properties of nouns and the types of classifiers being used, we can divide the class of nouns into four subclasses, namely, count nouns, mass nouns, collective nouns and abstract nouns (Zhu 1982; see also Chao 1968).

2.1.1.1 Count nouns

⁵ The opacity of bare nouns with respect to number is referred to as “transnumerality” in Greenberg (1974: 25), who proposes that it is correlated with the obligatory presence of classifiers in numeral-classifier languages (see Bisang 1998, 1999).

Count nouns refer to the type of nouns that denotes tangible and discrete entities that are countable. Typical examples of count nouns include *kèrén* 客人 ‘guest’, *shū* 書 ‘book’, *shé* 蛇 ‘snake’, *huā* 花 ‘flower’, among many others. Unlike count nouns in the Indo-European languages that can be directly combined with a numeral (e.g. *one guest*, *three books*, etc.), count nouns in Chinese require the use of sortal classifiers, such as *wèi* 位, *běn* 本, *tiáo* 條, etc., which encode some distinctive features like shape, as illustrated below (Zhu 1982; see also Chao 1968):

- | | |
|---|--|
| (5) a. 一位 客人
yí-wèi kèrén
one-Cl guest
‘one guest’ | b. 三本 書
sān-běn shū
three-Cl book
‘three books’ |
| c. 兩條 蛇
liǎng-tiáo shé
two-Cl snake
‘two snakes’ | d. 十朵 花
shí-duō huā
ten-Cl flower
‘ten flowers’ |

For instance, the sortal classifier *tiáo* 條 in (5c) classifies for long, cylindrical and flexible objects (Tai and Wang 1990), and thus it can serve as the classifier of *shé* 蛇 ‘snake’ and entities with similar characteristics:

- | | |
|---|---|
| (6) a. 一條 繩子
yī-tiáo shénzi
one-Cl rope
‘one rope’ | b. 三條 魚
sān-tiáo yú
three-Cl fish
‘three fish’ |
|---|---|

Furthermore, a subset of count nouns designating human beings can be suffixed by the collective marker *-men* 們 to refer to a group of people that are known to the speakers and hearers (Iljic 1994, 2001, Li 1999; see also Huang, Li and Li 2009: Ch. 8). This can be witnessed by the fact that a count noun suffixed with *-men* 們 is interpreted as definite, as in (7a), in contrast with the bare count noun, which can be interpreted as indefinite or definite, as in (7b).

- | | |
|--|------------|
| (7) a. 他 會 去 找 孩子們。
tā huì qù zhǎo háizi-men.
he will go find child-MEN
‘He will go find the children.’ | (definite) |
|--|------------|

- b. 他 會 去 找 孩子。
 tā huì qù zhǎo hái·zi.
 he will go find child
 i. ‘He will go find a/some child/children.’ (indefinite)
 ii. ‘He will go find the child/children.’ (definite)

However, unlike genuine plural markers in the Indo-European languages, count nouns suffixed with *-men* 們 cannot be preceded by a [Numeral + Classifier] sequence even when the numeral is greater than ‘one’ (Iljic 1994, 2001, Li 1998; see also Huang, Li and Li: Ch. 8), whereas a bare count noun can, as illustrated by the contrast between (8a) and (8b).⁶

- (8) a. *他 會 去 找 三個 孩子們。
 *tā huì qù zhǎo sān-ge hái·zi-men
 he will go find three-Cl child-MEN
 b. 他 會 去 找 三個 孩子。
 tā huì qù zhǎo sān-ge hái·zi.
 he will go find three-Cl child
 ‘He will go find three children.’

2.1.1.2 Mass nouns

In contrast with count nouns, mass nouns refer to the type of nouns that denotes entities that are not countable. Typical examples of mass nouns include *shuǐ* 水 ‘water’, *jiǔ* 酒 ‘wine’, *táng* 糖 ‘sugar’, *qìyóu* 汽油 ‘petrol’, *bù* 布 ‘cloth’, among many others. As noted by Chao (1968), there are four ways of classifying mass nouns. One way is to make use of standard measure words such as *chǐ* 尺 ‘foot’, *bàng* 磅 ‘pound’, *jiālún* 加侖 ‘gallon’, *gōngjīn* 公斤 ‘kilo’, as illustrated below:

- | | |
|-----------------------|-------------------------|
| (9) a. 一兩 銀子 | b. 三磅 糖 |
| yī-liǎng yínzi | sān-bàng táng |
| one-ounce silver | three-pound sugar |
| ‘one ounce of silver’ | ‘three pounds of sugar’ |
| c. 兩加侖 汽油 | d. 十公斤 米 |
| liǎng-jiālún qìyóu | shí-gōngjīn mǐ |
| two-gallon petrol | ten-kilo rice |

⁶ Li (1999) proposes that *-men* 們 can be analyzed as a collective marker as well as a plural marker. Interested readers are referred to Li (1999) for detailed discussion.

‘two gallons of petrol’

‘ten kilos of rice’

Another way is to make use of container measure words such as *bēi* 杯 ‘glass’, *píng* 瓶 ‘bottle’, etc. or temporary measure words such as *shēn* 身 ‘body’, *wūzi* 屋子 ‘room’, etc. that indicate the temporary location of the mass:

- | | |
|----------------------|-------------------------|
| (10) a. 一杯 水 | b. 三瓶 酒 |
| yī-bēi shuǐ | sān-píng jiǔ |
| one-glass water | three-bottle wine |
| ‘one glass of water’ | ‘three bottles of wine’ |
| c. 一身 雪 | d. 一屋子 煙 |
| yī-shēn xuě | yī-wūzi yān |
| one-body snow | one-house smoke |
| ‘a body of snow’ | ‘a houseful of smoke’ |

A third way is to employ indeterminate number/amount measure words such as *yidian* 一點 ‘a little’ and *yixie* 一些 ‘some’:

- | | |
|------------------|-------------|
| (11) a. 一點 水 | b. 一些 酒 |
| yīdiǎn shuǐ | yīxiē jiǔ |
| a.little water | some wine |
| ‘a little water’ | ‘some wine’ |

A fourth way is to employ measure words that describe the shape in which the mass can be gathered. Examples of this type of measure words include *duī* 堆 ‘heap’, *tán* 灘 ‘pool’, etc., as shown below:

- | | |
|----------------------|---------------------|
| (12) a. 兩堆 泥 | b. 一灘 水 |
| liǎng-duī ní | yī-tán shuǐ |
| two-heap earth | one-pool water |
| ‘two heaps of earth’ | ‘one pool of water’ |

2.1.1.3 Collective nouns

Collective nouns are inherently plural. Some illustrative examples are given below:

- | | |
|------------|---------|
| (13) a. 父母 | b. 飯菜 |
| fù-mǔ | fàn-cài |

- | | |
|---------------|-------------------------|
| father-mother | rice-vegetable |
| ‘parents’ | ‘food’ |
| c. 子女 | d. 親友 |
| zǐ-nǚ | qīn-yǒu |
| son-daughter | relative-friend |
| ‘children’ | ‘friends and relatives’ |
| | |
| (14) a. 紙張 | b. 花朵 |
| zhǐzhāng | huāduǒ |
| paper | flower |
| ‘paper’ | ‘flowers’ |
| c. 馬匹 | d. 書本 |
| mápǐ | shūběn |
| horse | book |
| ‘horses’ | ‘books’ |

The examples in (13) involve juxtaposition of two subordinate terms, whereas the examples in (14) are seemingly composed of a noun and a sortal classifier, as evidenced by the fact that the second element in the collective nouns in (14a-d) can be used as a sortal classifier, as shown below. The fact that the second member can be used as a sortal classifier in Modern Chinese is not surprising, as many sortal classifiers have their historical origins as nouns (Wang 1955, Liu 1965, among others):

- | | |
|--------------------|-----------------|
| (15) a. 一張 紙 | b. 三朵 花 |
| yī-zhāng zhǐ | sān-duǒ huā |
| one-Cl paper | three-Cl flower |
| ‘a piece of paper’ | ‘three flowers’ |
| c. 兩匹 馬 | d. 四本 書 |
| liáng-pí mǎ | sì-běn shū |
| two-Cl horse | four-Cl book |
| ‘two horses’ | ‘four books’ |

Due to the fact that collective nouns are inherently plural, they cannot be preceded by a [Numeral + Classifier] sequence, as evidenced by the ill-formedness of the following examples (Chao 1968, Zhu 1982):

- | | |
|----------------|-----------|
| (16) a. *兩個 父母 | b. *三碟 飯菜 |
|----------------|-----------|

*liǎng-ge	fù-mǔ	*sān-dié	fàn-cài
two-Cl	father-mother	three-Cl	rice-vegetable
Intended: ‘two parents’		Intended: ‘three plates of food’	
c. *一	張 紙張	d. *四	朵 花朵
*yī-zhāng	zhǐzhāng	*sì-duǒ	huāduǒ
one-Cl	paper	four-Cl	flower
Intended: ‘one piece of paper’		Intended: ‘four flowers’	

Instead, collective nouns can only take measure words concerned with grouping (e.g. *duì* 對 ‘pair’ and *pī* 批 ‘batch’), temporary measure words concerned with location (e.g. *zhuō* 桌 ‘table’) or indeterminate measure words such as *yīxiē* 一些 ‘some’, as demonstrated below:

(17) a. 兩對	父母	b. 三桌	飯菜
liǎng-duì	fù-mǔ	yī-zhuō	fàn-cài
two-pair	father-mother	one-table	rice-vegetable
‘two pairs of parents’		‘a table of food’	
c. 一	批 紙張	d. 一	些 花朵
yī-pī	zhǐzhāng	yīxiē	huāduǒ
one-batch	paper	some	flower
‘a batch of papers’		‘some flowers’	

2.1.1.4 Abstract nouns

Abstract nouns, as their name implies, do not refer to concrete entities. Rather, they are often used to denote abstract notions, such as complex or sophisticated situations, experiences, processes, qualities or phenomena in diverse areas. Some illustrative examples of abstract nouns are given below:

(18) a. 真理	b. 病
zhēnlǐ	bìng
truth	sickness
‘truth’	‘sickness’
c. 矛盾	d. 效果
máodùn	xiàoguǒ
contradiction	effect
‘contradiction’	‘effect’

Abstract nouns may be preceded by the general classifier *ge* 個, measure words indicating type, such as *zhǒng* 種 ‘type, kind, category’ or indeterminate measure words such as *yīxiē* 一些 ‘some’ and *yīdiǎn* 一點 ‘a little’ (Chao 1968, Zhu 1982), as demonstrated below:

- | | |
|--|--|
| <p>(19) a. 一個 真理
yī-ge zhēnlǐ
one-Cl truth
‘a truth’</p> <p>c. 一些 矛盾
yīxiē máodùn
some contradiction
‘some contradictions’</p> | <p>b. 一種 病
yī-zhǒng bìng
one-kind sickness
‘a kind of sickness’</p> <p>d. 一點 效果
yīdiǎn xiàoguǒ
a.little effect
‘a little effect’</p> |
|--|--|

2.2 Verbs

Unlike nouns, verbs can be negated by *bù* 不 ‘not’ in Chinese (Chao 1968 and Huang, Li and Li 2009: Ch. 1):

- | | |
|--|---|
| <p>(20) a. 我 不 休息。
wǒ bù xiūxi.
I not rest
‘I do not rest.’</p> <p>c. 他 不 批評 別人。
tā bù pīpíng biérén.
he not criticize other.person
‘He does not criticize others’</p> | <p>b. 他 不 喜歡 數學。
tā bù xǐhuān shùxué.
he not like mathematics
‘He does not like mathematics.’</p> <p>d. 我 不 送 他 禮物。
wǒ bú sòng tā lǐwù.
I not give him present
‘I do not give him (a) present(s)’</p> |
|--|---|

2.2.1 Classification of verbs: action verbs vs. stative verbs

Among the verbs in Chinese, they can be divided into two classes: action verbs and stative verbs. The former depict actions, whereas the latter express the states of being. A well-known characteristic of action verbs is that they are compatible with aspect markers, such as the progressive aspect marker *zài* 在, as in (21a-d) (see Li and Thompson 1981: Ch. 6 and Smith 1991 for discussion of the aspect markers in Chinese), while stative verbs can be modified by the intensifier *hěn* 很 although its presence is not mandatory, as shown in (22a-d) (Chao 1968, Zhu 1982, inter alia).⁷

⁷ Parentheses are used as a notational convention. Specifically, an expression enclosed by a pair of

- (21) a. 他 在 休息。
tā zài xiūxi.
he Prog rest-Perf
'He is resting.'
- b. 我 在 批評 他。
wǒ zài pīpíng tā.
I Prog criticize he
'I am criticizing him.'
- c. 我 在 研究 這個 問題。
wǒ zài yánjiū zhè-ge wèntí.
I Prog study this-CI problem
'I am studying this problem.'
- d. 他 在 教 我 法語。
tā zài jiāo wǒ Fáyǔ.
he Prog teach me French
'He is teaching me French.'
- (22) a. 他 (很) 喜歡 數學。
tā (hén) xǐhuān shùxué.
he very like mathematics
'He likes mathematics (a lot).'
- b. 我 (很) 尊敬 他。
wǒ (hěn) zūnjìng tā.
I very respect him
'I respect him (a lot).'
- c. 他 (很) 羨慕 我。
tā (hěn) xiànmù wǒ.
he very envy me
'He envies me (a lot).'
- d. 我 (很) 想念 他。
wǒ (hén) xiǎngniàn tā.
I very miss him
'I miss him (a lot).'

2.2.2 Classification of verbs: subcategorization properties

Another way of classifying verbs is based on the number of arguments for which they subcategorize. Similar to the verbs in the Indo-European languages, verbs in Chinese can be classified into intransitive, transitive and ditransitive verbs.

2.2.2.1 Intransitive verbs

Intransitive verbs are those that subcategorize for a single argument. Typical examples of intransitive verbs are *lái* 來 'come', *sǐ* 死 'die', *shuì* 睡 'sleep', *fāshēng* 發生 'happen', *pǎo* 跑 'run', *xiūxi* 休息 'rest', *líkāi* 離開 'leave', etc. Some illustrative examples are given below:⁸

- (23) a. 他 來了。
tā lái-le.
he come-Perf
- b. 他 死了。
tā sǐ-le.
he die-Perf

parentheses is regarded as optional. For instance, in (22a-d), the pair of parentheses is used to indicate that the presence of *hén* 很 is optional.

⁸ Note that intransitive verbs can be further divided into unergative and unaccusative verbs. Interested readers are referred to Li (1985), Lü (1987) and Huang (1989, 2007) for detailed discussion.

- | | |
|--|---|
| <p>‘He came.’</p> <p>c. 他 睡了。</p> <p>tā shuì-le.</p> <p>he sleep-Perf</p> <p>‘He slept.’</p> <p>e. 他 跑了。</p> <p>tā pǎo-le.</p> <p>he run-Perf</p> <p>‘He ran.’</p> | <p>‘He died.’</p> <p>d. 剛剛 發生了 車禍。</p> <p>gānggāng fāshēng-le chē-huò.</p> <p>just.now happen-Perf car-accident</p> <p>‘A car accident happened just now.’</p> <p>e. 他 休息了。</p> <p>tā xiūxi-le.</p> <p>he rest-Perf</p> <p>‘He rested.’</p> |
|--|---|

Interestingly, many intransitive verbs in Chinese can be used transitively (see Chappell 1999, Xu 1999, 2001, Han 2000, Wen and Chen 2001, Shen, He and Gu 2002, Sun and Wu 2003, Tang 2004, Hole 2005, Zhu 2005, Pan and Han 2006, Huang 2007, inter alia), as shown below:

- (24) a. 你 來 碗 牛肉 麵 吧？
 nǐ lái wǎn niúròu miàn ba?
 you come bowl beef noodle Prt
 ‘Have a bowl of beef noodle, will you?’
- b. 他 死了 父親。
 tā sǐ-le fùqīn.
 he die-Perf father
 ‘His father died.’
- c. 他們 昨天 發生了 車禍。
 tāmen zuótiān fāshēng-le chē-huò.
 they yesterday happen-Perf car-accident
 ‘A car accident happened to them yesterday.’
- d. 他 跑了 兩個 犯人。
 tā pǎo-le liǎng-ge fànrén.
 he run-Perf two-Cl criminal
 ‘He had two criminals ran away.’

2.2.2.2 Transitive verbs

As for transitive verbs, they subcategorize for two arguments: an external argument that corresponds to the subject and an internal argument that corresponds to the object. Both action and stative verbs can be used as transitive verbs. Typical examples of action verbs that are transitive include *zuò* 做 ‘do’, *mǎi* 買 ‘buy’, *qù* 去 ‘go’,

pīpíng 批評 ‘criticize’, etc. and those of stative verbs that are transitive include *xǐhuān* 喜歡 ‘like’, *zūnjìng* 尊敬 ‘respect’, *xiǎngniàn* 想念 ‘miss’, *xiànmù* 羨慕 ‘envy’, etc. As mentioned earlier, action verbs can be followed by aspect markers, such as the perfective aspect marker *-le* 了, as shown in (25a-d), whereas stative verbs can be modified by the intensifier *hě* 很, as in (26a-d).

- (25) a. 他 做了 很多 壞 事。 b. 他 買了 一本 書。
 tā zuò-le hěnduō huài shì. tā mǎi-le yī-běn shū.
 he do-Perf many bad thing he buy-Perf one-Cl book
 ‘He did many bad things.’ ‘He bought a book.’
 c. 他 去過 北京。 d. 他 批評了 別人。
 tā qù-guo Běijīng. tā pīpíng-le biérén.
 he go-Exp Beijing he criticize-Perf other.people
 ‘He has been to Beijing.’ ‘He criticized others.’
- (26) a. 他 很 喜歡 數學。 b. 我 很 尊敬 他。
 tā hěn xǐhuān shùxué. wǒ hěn zūnjìng tā.
 he very like mathematics I very respect him
 ‘He likes mathematics a lot.’ ‘I respect him a lot.’
 c. 他 很 羨慕 我。 d. 我 很 想念 他。
 tā hěn xiànmù wǒ. wǒ hěn xiǎngniàn tā.
 he very envy me I very miss him
 ‘He envies me a lot.’ ‘I miss him a lot.’

2.2.2.3 Ditransitive verbs

Ditransitive verbs subcategorize for three arguments: an external argument that corresponds to the subject and two internal arguments, one corresponding to an indirect object and the other corresponding to a direct object. Typical examples of ditransitive verbs include *sòng* 送 ‘give’, *jiāo* 教 ‘teach’, *dì* 遞 ‘hand’, *jì* 寄 ‘send’, *huán* 還 ‘return’, *mài* 賣 ‘sell’, *jièshào* 介紹 ‘introduce’, etc. Unlike English whose ditransitive verbs may appear in double object constructions (e.g. *I gave him a book*) and dative constructions (e.g. *I gave a book to him*), ditransitive verbs in Chinese may appear in three types of constructions: double object constructions in the form of [verb + Noun Phrase + Noun Phrase], dative constructions in the form of [verb + Noun Phrase + *gěi* 給 + Noun Phrase]⁹ and

⁹ Note that the categorial status of *gěi* 給 in dative constructions is controversial in the literature: it has been analyzed as a coverb (Li and Thompson 1981), a preposition (Tang 1990, Zhang 1990, Yang

verb-*gěi* 給 double object constructions in the form of [verb-*gěi* 給 + Noun Phrase + Noun Phrase], with the verb and *gěi* 給 forming a verbal complex (see Zhu 1979, Li 1990, and Liu 2006 for more detailed discussion). As noted by Liu (2006), not all ditransitive verbs can appear in the three constructions in Chinese. As shown below, while *sòng* 送 ‘give’ can appear in all three constructions (27a-c), *jiāo* 教 ‘teach’ can appear in double object constructions and verb-*gěi* double object constructions but not dative constructions (28a-c) and *dì* 遞 ‘hand’ can appear in dative constructions and verb-*gěi* 給 double object constructions but not double object constructions (29a-c) (the examples in (28)-(29) are adapted from Liu 2006).

- (27) a. 他 送了 我 一本 書。
 tā sòng-le wǒ yī-běn shū.
 he give-Perf me one-Cl book
 ‘He gave me a book.’
 b. 他 送了 一本 書 給 我。
 tā sòng-le yī-běn shū gěi wǒ.
 he give-Perf one-Cl book to me
 ‘He gave a book to me.’
 c. 他 送給 我 一本 書。
 tā sòng-gěi wǒ yī-běn shū.
 he give-to me one-Cl book
 ‘He gave me a book.’
- (28) a. 他 教了 我 一個 方法。
 tā jiāo-le wǒ yī-ge fāngfǎ.
 he teach-Perf me one-Cl method
 ‘He taught me a method.’
 b. *他 教了 一個 方法 給 我。
 *tā jiāo-le yī-ge fāngfǎ gěi wǒ.
 he teach-Perf one-Cl method to me
 Intended: ‘He taught a method to me.’
 c. 他 教給 我 一個 方法。
 tā jiāo-gěi wǒ yī-ge fāngfǎ.
 he teach-to me one-Cl method
 ‘He taught me a method.’

- (29) a. *他 遞了 我 一杯 啤酒。

*tā dì-le wǒ yī-bēi píjiǔ.

he hand-Perf me one-glass beer

Intended: ‘He handed me a glass of beer.’

b. 他 遞了 一杯 啤酒 給 我。

tā dì-le yī-bēi píjiǔ gěi wǒ.

he hand-Perf one-glass beer to me

‘He handed a glass of beer to me.’

c. 他 遞給 我 一杯 啤酒。

tā dì-gěi wǒ yī-bēi píjiǔ.

he hand-to me one-glass beer

‘He handed me a glass of beer.’

2.3 Adjectives

Adjectives and stative verbs share many common properties in Chinese. For this reason, there are scholars who hold the view that adjectives should be subsumed under stative verbs and that adjectives should not be regarded as an independent category (McCawley 1992; see also Chao 1968). Contrary to this view, many scholars argue that adjectives should be regarded as an independent category distinct from stative verbs (Zhu 1982, Paul 2006, 2010). Adopting the latter view, I begin by reviewing the common properties shared by adjectives and verbs (section 2.3.1), followed by a discussion of the arguments for treating adjectives as an independent category (section 2.3.2).

2.3.1 Common properties of adjectives and verbs

Unlike adjectives in the Indo-European languages, those in Chinese can function as predicates without the presence of the copular verb *shì* 是 ‘be’. Furthermore, they are typically accompanied by the intensifier *hěn* 很 in the predicate position, as demonstrated below.¹⁰ In this regard, adjectives behave like stative verbs in Chinese (Zhu 1982).

(30) a. 他 很 高。

tā hěn gāo.

he very tall

b. 他 很 聰明。

tā hěn cōngmíng.

he very smart

¹⁰ As pointed out in Aoun and Li (2003: 251 fn.14), although *hěn* 很 is generally translated as ‘very’, it is a ‘bleached’ element in the sense that it does not carry much meaning when it precedes an adjective (see Huang 1997, 2006, Liu 2010, He and Jiang 2011, Grano 2012 for detailed discussion of the function of the intensifier *hěn* 很).

‘He is smart.’

- | | | | | | | | | |
|----|---------------------------|------|------|-----------|----|--------------|------|-----------|
| c. | 這本 | 書 | 很 | 貴。 | d. | 他 | 很 | 傷心。 |
| | zhè-běn | shū | hěn | guì. | | tā | hěn | shāngxīn. |
| | this-Cl | book | very | expensive | | he | very | sad |
| | 'This book is expensive.' | | | | | 'He is sad.' | | |

In addition, similar to verbs, adjectives in the predicate position can be negated by *bù* 不 ‘not’:

- (31) a. 他 不 高。
tā bù gāo.
he not tall
'He is not tall.'
- b. 他 不 聰明。
tā bù cōngmíng.
he not smart
'He is not smart.'
- c. 這本 書 不 貴。
zhè-běn shū bú guì.
this-Cl book not expensive
'This book is not expensive.'
- d. 他 不 傷心。
tā bù shāngxīn.
he not sad
'He is not sad.'

2.3.2 Distinguishing adjectives from verbs

In spite of these similarities, there is a need for distinguishing adjectives from verbs and treating adjectives as an independent category (Zhu 1982, Huang, Li and Li 2009: Ch. 1, Paul 2010). Specifically, Zhu (1982) notes that adjectives crucially differ from verbs in that they cannot subcategorize for an internal argument or an object, as evidenced by the ill-formedness of the following examples. In this regard, adjectives behave on a par with intransitive verbs in being one-place predicates.

- (32) a. *他 高 那個 男孩。
 *tā gāo nà-ge nánhái.
 he tall that-Cl boy
- b. *他 聰明 那個 學生。
 *tā cōngmíng nà-ge xuésheng.
 he smart that-Cl student
- c. *這本 書 貴 那本 書。
 *zhè-běn shū guì nà-běn shū.
 this-Cl book expensive that-Cl book
- d. *他 傷心 這件 事。
 *tā shāngxīn zhè-jàn shì.

he sad this-Cl matter

Despite the fact that adjectives are akin to intransitive verbs in not being able to take an object, adjectives should not be subsumed under intransitive verbs, since adjectives show different reduplication patterns from verbs in Chinese (Zhu 1956, 1980, 1982, Li and Thompson 1981: Ch. 3, Lü 1984, Huang, Li and Li 2009: Ch. 1, Paul 2010). Specifically, while disyllabic adjectives of the AB form can undergo reduplication to give rise to the AABB pattern, as in (33a-b), disyllabic verbs of the AB form typically give rise to the ABAB pattern after reduplication, as demonstrated in (34a-d).

- (33) a. *gānjìng* 乾淨 ‘clean’ → *gāngānjìngjìng* 乾乾淨淨 ‘thoroughly clean’
b. *lǎoshi* 老實 ‘honest’ → *lǎolǎoshishi* 老老實實 ‘honest and frank’
c. *jiǎndān* 簡單 ‘simple’ → *jiǎnjiǎndāndān* 簡簡單單 ‘rather simple’
d. *hútu* 糊塗 ‘muddleheaded’ → *húhútutu* 糊糊塗塗 ‘rather muddleheaded’
- (34) a. *qǐngjiào* 請教 ‘inquire’ → *qǐngjiàoqǐngjiào* 請教請教 ‘inquire a little’
b. *pīpíng* 批評 ‘criticize’ → *pīpíngpīpíng* 批評批評 ‘criticize a little’
c. *yánjiū* 研究 ‘research’ → *yánjiūyánjiū* 研究研究 ‘research a little’
d. *tǎolùn* 討論 ‘discuss’ → *tǎolùntǎolùn* 討論討論 ‘discuss a little’

Apart from the fact that adjectives and verbs show different reduplication patterns, they also differ in terms of interpretational properties (Paul 2010). Specifically, reduplication of adjectives often yields a higher degree of liveliness or intensity (Zhu 1956, Chao 1968: 209, Tang 1988), while reduplication of verbs often gives rise to the so-called “tentative aspect” according to Chao (1968: 204). The different reduplication patterns and interpretational properties thus constitute another piece of evidence for distinguishing adjectives from verbs.

Additional evidence for analyzing adjectives as an independent category comes from the fact that adjectives are composed of predicative and non-predicative adjectives (Li 1996, Aoun and Li 2003, Paul 2005, 2010) just like those in the Indo-European languages.¹¹ If adjectives were subsumed under intransitive verbs, one would expect that all adjectives can be used predicatively on a par with intransitive verbs, contrary to fact. Some illustrative examples of non-predicative adjectives are given below (see Aoun and Li 2003, Paul 2005, 2010 for more

¹¹ Note that although Chinese makes a distinction between predicative and non-predicative adjectives, the inventory of the so-called “non-predicative adjectives” in Chinese is not identical to that in English. Interested readers are referred to Li (1996) for fuller discussion of the properties of non-predicative adjectives in Chinese.

examples of non-predicative adjectives):

- (35) a. *這條 道路 很 主要。
*zhè-tiáo dàolù hén zhǔyào.
this-Cl road very main
Intended: 'This road is main.'
b. *他們的 目標 很 共同。
*tāmen-de mùbiāo hěn gòngtóng.
they-Poss goal very common
Intended: 'Their goals are common.'

Finally, it is worth mentioning that both predicative and non-predicative adjectives can function as attributive adjectives when they precede *de* 的 and a noun, as illustrated below (Aoun and Li 2003, Paul 2005, 2010; see also Cheung 2012):

- (36) a. 聰明 的 學生
cōngmíng de xuésheng
smart DE student
'intelligent students'
b. 貴 的 書
guì de shū
expensive DE book
'expensive books'
- (37) a. 主要 的 道路
zhǔyào de dàolù
main DE road
'main roads'
b. 共同 的 目標
gòngtóng de mùbiāo
common DE goal
'common goals'

2.4 Adverbs

Adverbs typically occur between the subject and a verb or an adjective, as shown in the following examples. The presence of the verb or adjective is mandatory, as adverbs, unlike verbs and adjectives, cannot serve as predicates:¹²

- (38) a. 他 剛 *(來)。
tā gāng *(lái).
he just arrive
'He just arrived.'
b. 他 常常 *(跳舞)。
tā chángcháng *(tiàowǔ).
he often dance
'He dances often.'

¹² Parentheses are used as a notational convention. Specifically, an asterisk "*" that immediately precedes the left parenthesis indicates that the presence of the expression inside the parentheses is mandatory and the omission of the expression will result in ill-formedness. In (38a-d), this means that the presence of the verb or adjective inside the parentheses is obligatory.

- | | |
|--|--|
| c. 他 非常 *(高)。
tā fēicháng *(gāo).
he extremely tall
'He is extremely tall.' | d. 他 真 *(聰明)。
tā zhēn *(cōngmíng).
he truly smart
'He is really smart.' |
|--|--|

2.4.1 Classification of adverbs: sentence-level adverbs vs. VP-level adverbs

Adverbs in Chinese can be roughly divided into two types: sentence-level adverbs and VP-level adverbs (Li and Thompson 1981: Ch. 8, Paul to appear). The former may appear before or after the subject, whereas the latter can only appear after the subject.¹³

2.4.1.1 Sentence-level adverbs

Among the sentence-level adverbs, they can be further divided into time adverbs and attitude adverbs, both of which can immediately precede or follow the subject (Li and Thompson 1981: Ch. 8), with only a few exceptions (Paul, to appear).

2.4.1.1.1 Time adverbs

Typical examples of time adverbs include *jīntiān* 今天 'today', *qùnián* 去年 'last year', *zànshí* 暫時 'temporarily', *jiānglái* 將來 '(in the) future', *xiànzài* 現在 'now', *xiàwǔ* 下午 '(in the) afternoon', among many others. Time adverbs can occur either in the sentence-initial position or immediately after the subject, as demonstrated below:

- | | |
|---|--|
| (39) a. 今天 他 很 高興。
jīntiān tā hěn gāoxìng.
today he very happy
'He is very happy today.' | b. 他 今天 很 高興。
tā jīntiān hěn gāoxìng.
he today very happy
'He is very happy today.' |
| (40) a. 去年 他 沒有 回來。
qùnián tā méiyǒu huílai.
last.year he not.have return
'He did not return last year.' | b. 他 去年 沒有 回來。
tā qùnián méiyǒu huílai.
he last.year not.have return
'He did not return last year.' |

¹³ There are many alternative ways to classify adverbs in Chinese. Interested readers are referred to Li (1924), Wang (1934), Zhang (1959), Hu (1962), Lü (1979), Liu, Pan, and Gu (1983), Zhang (1987) and Qian (1990) for alternative means of classifying adverbs and their different categorizations.

- (41) a. 暫時 他 住 在 這裏。 b. 他 暫時 住 在 這裏。
 zànshí tā zhù zài zhèlǐ. tā zànshí zhù zài zhèlǐ.
 temporarily he live at here he temporarily live at here
 ‘He lives here temporarily.’ ‘He lives here temporarily.’

The time adverbs in the above examples clearly function as sentential adverbs, as they signal the time at which or during which the event described by the sentence occurs.

2.4.1.1.2 Attitude adverbs

Attitude adverbs denote the speakers’ attitude toward or evaluation of the event described by the sentence. Typical examples of attitude adverbs include *xiǎnrán* 顯然 ‘obviously’, *yěxǔ* 也許 ‘perhaps’, *dàgài* 大概 ‘probably’, *xìngkuī* 幸虧 ‘fortunately’, *dāngrán* 當然 ‘of course’, *tūrán* 突然 ‘suddenly’, *qíshí* 其實 ‘in fact’, among many others. The following examples show that they can occur in the sentential-initial position or immediately after the subject on a par with time adverbs:

- (42) a. 顯然 他 不 喜歡 你。 b. 他 顯然 不 喜歡 你。
 xiǎnrán tā bù xǐhuān nǐ. tā xiǎnrán bù xǐhuān nǐ.
 obviously he not like you he obviously not like you
 ‘Obviously, he does not like you.’ ‘Obviously, he does not like you.’

- (43) a. 也許 他 會 來。 b. 他 也許 會 來。
 yěxǔ tā huì lái. tā yěxǔ huì lái.
 perhaps he will come he perhaps will come
 ‘Perhaps he will come.’ ‘Perhaps he will come.’

- (44) a. 大概 他 是 感冒 了。 b. 他 大概 是 感冒 了。
 dàgài tā shì gǎnmào le. tā dàgài shì gǎnmào le.
 probably he be cold Prt he probably be cold Prt
 ‘Probably he has caught a cold.’ ‘Probably he has caught a cold.’

However, as noted by Paul (to appear), a few attitude adverbs, especially those containing *shuō* 說 ‘speak’, such as *lǎoshí shuō* 老實說 ‘frankly speaking’, *tǎnbái shuō* 坦白說 ‘honestly speaking’, *huàn jù huà shuō* 換句話說 ‘in other words’, among others, are confined to the sentence-initial position, as evidenced by the contrast between (45a) and (45b).

- (45) a. 老實說， 我 不 喜歡 他。
 lǎoshí-shuō, wǒ bù xǐhuān tā.
 frankly-speaking I not like him
 ‘Frankly speaking, I do not like him.’
 b. *我 老實說 不 喜歡 他。
 wǒ lǎoshí-shuō bù xǐhuān tā.
 I frankly-speaking not like him
 Intended: ‘Frankly speaking, I do not like him.’

2.4.1.2 VP-level adverbs

As for VP-level adverbs, they can be subdivided into manner and non-manner adverbs, both of which occur between the subject and the verb (Li and Thompson 1981: Ch. 8).

2.4.1.2.1 Manner adverbs

Manner adverbs serve to modify the verb phrase by describing the manner in which the action depicted by the verb phrase is carried out. The majority of the manner adverbs is derived from adjectives through the addition of the suffix *-de* 地, such as *xìngfèn-de* 興奮地 ‘excitedly’, *yánlì-de* 嚴厲地 ‘sternly’, *kuàilè-de* 快樂地 ‘happily’, *zǐxì-de* 仔細地 ‘meticulously’, *jiǎndān-de* 簡單地 ‘simply’, *zhèndìng-de* 鎮定地 ‘calmly’, etc. As mentioned earlier, they are confined to the position between the subject and the verb, as illustrated in (46a-c).

- (46) a. 他 興奮地 跑 進來。
 tā xìngfèn-de pǎo jìnlái.
 he excitedly run enter
 ‘He excitedly ran in.’
 b. 他 嚴厲地 責備了 我。
 tā yánlì-de zébèi-le wǒ.
 he sternly reproach-Perf me
 ‘He sternly reproached me.’
 c. 他們 快樂地 跳舞。
 tāmen kuàilè-de tiàowǔ.
 they happily dance
 ‘They danced happily.’

For many monosyllabic and disyllabic adjectives, reduplication applies before

they are suffixed by *-de* 地, such as *mànmàn-de* 慢慢地 ‘slowly’, *jìngjìng-de* 靜靜地 ‘quietly’, *kuàikuài-de* 快地 ‘quickly’, *qīngqīng-de* 輕輕地 ‘softly’, *rènrènzhēnzhēn-de* 認認真真地 ‘seriously’, *shūshūfūfū-de* 舒舒服服地 ‘comfortably’, *gāogāoxìngxìng-de* 高高興興地 ‘happily’, *qīngqīngchǔchǔ-de* 清清楚楚地 ‘clearly’, etc., as shown in (47a-c). In this respect, the Chinese suffix *-de* 地 behaves like the *-ly* suffix in English, which can turn an adjective into an adverb (e.g. *slow* → *slowly*, *quiet* → *quietly*, etc.).

- (47) a. 他 慢慢地 回答 我的 問題。
 tā mànmàn-de huídá wǒ-de wèntí.
 he slowly answer I-Poss question
 ‘He slowly answered my question(s).’
 b. 他 靜靜地 躺在 草地 上。
 tā jìngjìng-de tǎng-zài cǎodì shàng.
 he quietly lie-at grass on
 ‘He quietly lay on the grass.’
 c. 他 會 認認真真地 考慮 這個 問題。
 tā huì rènrènzhēnzhēn-de kǎolù zhè-ge wèntí.
 he will seriously consider this-Cl problem
 ‘He will consider this problem seriously.’

Furthermore, there is a subset of disyllabic manner adverbs, which can be optionally followed by *-de* 地 (Zhu 1982):

- (48) a. 他們 趕緊(地) 往 屋裏 跑。
 tāmen gǎnjǐn(-de) wǎng wū-lǐ pǎo.
 they rapidly toward house-inside run
 ‘They rapidly ran inside the house.’
 b. 樹葉 在 微 風中 悠悠(地) 落 下。
 shùyè zài wēi fēng-zhōng yōuyōu(-de) luò xià.
 leave at light wind-in slowly drop down
 ‘The leaves slowly fluttered down in the light wind.’
 c. 他們 認真(地) 討論了 這個 問題。
 tāmen rènzhēn(-de) tāolùn-le zhè-ge wèntí.
 they seriously consider-Perf this-Cl problem
 ‘They seriously considered this problem.’

2.4.1.2.2 Non-manner adverbs

As for non-manner adverbs, they are mainly composed of VP-level temporal adverbs, such as *yǐjīng* 已經 ‘already’, *zǎo* 早 ‘long ago’, *cháng* 常 ‘often’, *gāng* 剛 ‘just’, *mǎshàng* 馬上 ‘immediately’, among many others (see Li and Thompson 1981: Ch. 8, Zhu 1982, Yip and Rimmington 1997: Ch. 14, 2004: Ch. 9.1.2).¹⁴ Unlike sentence-level time adverbs, VP-level temporal adverbs are restricted to the position between the subject and the verb, as illustrated below:

- | | |
|--|--|
| <p>(49) a. 他 已經 離開了。
 tā yǐjīng líkāi-le.
 he already leave-Perf
 ‘He has already left.’</p> | <p>b. 他 早 知道了。
 tā zǎo zhīdào-le.
 he long.ago know-Perf
 ‘He knew that long ago.’</p> |
| <p>c. 他 常 來 這裏。
 tā cháng lái zhèlǐ.
 he often come here
 ‘He often comes here.’</p> | <p>d. 他 剛 回來。
 tā gāng huílai.
 he just return
 ‘He just returned.’</p> |

2.5 Prepositions

Prepositions are one of the most poorly defined categories in Chinese partly due to the fact that many of the prepositions have their historical origins as verbs (Li and Thompson 1974a, Zhu 1982, Norman 1988, Heine, Claudi and Hünemeyer 1991 and Hopper and Traugott 1993) and partly due to the fact that Chinese is a morphologically impoverished language and there is no inflectional morphology to mark prepositions or verbs. Furthermore, some prepositions have characteristics of verbs (Chao 1968, Li and Thompson 1974a, b, 1981, Zhu 1982). For these reasons, some scholars consider prepositions as a “mixed” category containing verbs and prepositions (McCawley 1992), while others maintain that prepositions form an independent category distinct from verbs (Li and Thompson 1974a, b; see also Huang, Li and Li 2009). This section is not intended to resolve the debate as to whether prepositions are best regarded as a mixed or independent category. Instead, it will focus on the basic properties of prepositions and their categorization (section 2.5.1), followed by a discussion of the verbal properties of a subset of prepositions (section

¹⁴ Another type of adverbs that is commonly discussed in the literature includes *yòu* 又 ‘again’, *zài* 再 ‘again’, *jiù* 就 ‘only, immediately, emphatic, thereupon (then)’, *zhǐ* 只 ‘only’, *cái* 才 ‘just now, only then’, *hái* 還 ‘still’, *yě* 也 ‘also’ and *dōu* 都 ‘all’ (Li and Thompson 1981: Ch. 8, Zhu 1982, among others), many of which are associated with multiple meanings. Interested readers are referred to Hole (2004) for detailed discussion of *jiù* 就, *cái* 才, *hái* 還 and *yě* 也 in relation to information structure and Lee 1986, Cheng 1995, Li 1995, Lin 1996, 1998, Zhang 1997: Section 7.5, 2008, Xiang 2008, inter alia for detailed discussion of *dōu* 都.

2.5.2), seeking to provide a better understanding of the characteristic features of prepositions and the underlying factors that give rise the debate on the categorial status of prepositions in Chinese.

2.5.1 Basic properties of prepositions and categorization

In Chinese, prepositions (also referred to as “coverbs” in Li and Thompson 1974a, b, 1981) are typically followed by a noun phrase and most of the prepositions and the following noun phrase appear between a subject and a verb phrase, as visualized in the generalized schema below (Li and Thompson 1974a, b, 1981):

(50) Subject + Preposition + Noun Phrase + Verb (+ Noun Phrase)

According to Huang, Li and Li (2009: Ch. 1), there are mainly four classes of words that are considered as prepositions in the literature:

- (51) a. *zhìyú* 至於 ‘as regards’, *guānyú* 關於 ‘concerning’, etc.
b. *cóng* 從 ‘from’, *duì* 對 ‘toward,’ etc.
c. *gěi* 給 ‘to/for’, *zài* 在 ‘at’, etc.
d. *bǎ* 把, *bèi* 被, *jiào* 叫, *ràng* 讓, etc.¹⁵

All four classes of prepositions can be followed by a noun phrase, as shown in (52)-(55). However, as noted by Huang, Li and Li (2009), the class of prepositions in (51a) requires the preposition and the following noun phrase to precede the subject (see also Li and Thompson 1981), as demonstrated in (52a-b), unlike those in (51b-d), which can appear after the subject, as illustrated in (53)-(55).

- (52) a. 至於 其他 問題， 我們 以後 再 說。
zhìyú qítā wèntí, wǒmen yǐhòu zài shuō.
as.regards other question we later again speak
‘As regards other questions, we will talk about them later.’
b. 關於 這件 事， 我 沒有 意見。
guānyú zhè-jìàn shì, wǒ méiyǒu yìjiàn.
concerning this-Cl matter I not.have opinion

¹⁵ The absence of gloss here is due to the fact these words have grammaticalized into function words and lack descriptive content. Following Li and Thompson (1981), *bǎ* 把 could be regarded as an object marker (see Liu 1997, Sybesma 1999, Li 2006 for fuller discussion of *bǎ* 把), whereas *bèi* 被, *jiào* 叫, *ràng* 讓 could be regarded as agent markers that serve to introduce the agent in passive sentences (Zhu 1982; see Feng 1995, Ting 1995, 1998, Huang 1999 for detailed discussion of *bèi* 被).

‘Concerning this matter, I do not have an opinion.’

- (53) a. 他 從 北京 帶 回來 很多 禮物。
tā cóng Běijīng dài huílai hěnduō lǐwù.
he from Beijing bring back many present
‘He brought back many presents from Beijing.’
b. 他 對 這件 事 沒有 意見。
tā duì zhè-jàn shì méiyǒu yìjiàn.
he toward this-Cl matter not.have opinion
‘He does not have an opinion on this matter.’
- (54) a. 他 給 學生 寫過 不少 推薦 信。
tā gěi xuésheng xiě-guo bùshǎo tuījiàn xìn.
he for student write-Exp not.few recommendation letter
‘He wrote quite a few recommendation letters for students.’
b. 他 在 桌子 上 放了 一本 書。
tā zài zhuōzi shang fàng-le yī-běn shū.
he at table top put-Perf one-Cl book
‘He put a book on the table.’
- (55) a. 他 把 花瓶 打破 了。
tā bǎ huāpíng dǎ-pò le.
he BA vase hit-break Prt
‘He broke the vase.’
b. 那個 警察 被 流氓 打傷 了。
nèi-ge jǐngchá bèi liúmáng dǎ-shāng le.
that-Cl policeman BEI hooligan hit-wound Prt
‘That policeman was wounded by some hooligans.’

Interestingly, as noted by Huang, Li and Li (2009), the classes of prepositions in (51b-c) and the following noun phrase can also appear in the pre-subject position like those in (51a), as in (56)-(57), while the class of prepositions in (51d) cannot, as evidenced by the ill-formedness of (58).

- (56) a. 從 北京， 他 帶 回來 很多 禮物。
cóng Běijīng, tā dài huílai hěnduō lǐwù.
from Beijing he bring back many present
‘From Beijing, he brought back many presents.’

- b. 對 這件 事， 他 沒有 意見。
 duì zhè-jìan shì, tā méiyǒu yìjiàn.
 toward this-Cl matter he not.have opinion
 ‘On this matter, he does not have an opinion.’
- (57) a. 給 學生， 他 寫過 不少 推薦 信。
 gěi xuésheng, tā xiě-guo bùshǎo tuījiàn xìn.
 for student he write-Exp not.few recommendation letter
 ‘For students, he wrote quite a few recommendation letters.’
- b. 在 桌子 上， 他 放了 一本 書。
 zài zhuōzi shang, tā fàng-le yī-běn shū.
 at table top he put-Perf one-Cl book
 ‘On the table, he put a book.’
- (58) a. *把 花瓶， 他 打破 了。
 *bǎ huāpíng, tā dǎ-pò le.
 BA vase he hit-break Prt
- b. *被 流氓， 那個 警察 打傷 了。
 *bèi liúmáng, nèi-ge jǐngchá dǎ-shāng le.
 BEI hooligan that-Cl policeman hit-wound Prt

While the two classes of prepositions in (51b-c) behave alike in that the prepositions and the following noun phrase can either appear in the pre-subject or post-subject position, the two classes differ in that a subset of the prepositions in (51c) can form complex verbal predicates such as *sòng-gěi* 送给 ‘give-to’ and *fàng-zài* 放在 ‘put-at’, as in (59), whereas those in (51b) cannot (Huang, Li and Li 2009).

- (59) a. 他 送給了 我 一件 毛衣。
 tā sòng-gěi-le wǒ yí-jìan máoyī.
 he give-to-Perf me one-Cl sweater
 ‘He gave me a sweater.’
- b. 他 把 書 放在 桌子 上。
 tā bǎ shū fàng-zài zhuōzi shang.
 he BA book put-at table top
 ‘He put a book on the table.’

In sum, we have seen that all four classes of prepositions must be followed by a noun phrase. In this respect, they behave like prepositions in the Indo-European

languages. In addition, the preposition and the following noun phrase generally form a syntactic unit that serves to modify the verb phrase.¹⁶

2.5.2 Verbal nature of prepositions

Despite the fact that prepositions in Chinese can generally take a noun phrase as its object on a par with those in the Indo-European languages, many prepositions share some properties of verbs due to their historical transition from verbs to prepositions. In the following, we shall consider two properties that show the verbal nature of prepositions.

2.5.2.1 Compatibility with aspect markers

One of the properties shared by verbs and many prepositions in Chinese is that they are compatible with aspect markers. For instance, it has been noted that a subset of prepositions can be followed by the durative aspect marker *-zhe* 着 (see Li and Thompson 1981: Ch. 6.2 for detailed discussion of the durative aspect marker *-zhe* 着) similar to verbs (Chao 1968 and Li and Thompson 1974a, b, 1981). The representative prepositions that can be followed by *-zhe* 着 are given in Table 1 below (the following table is adapted from Li and Thompson 1981: 361).

Table 1. The list of prepositions that can be followed by *-zhe* 着

<i>àn</i> 按	‘according to’	<i>píng</i> 憑	‘depend on, according to’
<i>āi</i> 挨	‘adjacent to’	<i>shùn</i> 順	‘along’
<i>cháo</i> 朝	‘facing’	<i>xiàng</i> 向	‘facing’
<i>chòng</i> 沖	‘facing’	<i>wǎng</i> 往	‘toward’
<i>duì</i> 對	‘toward’	<i>wèi</i> 為	‘for’
<i>kāo</i> 靠	‘on the strength of’	<i>yán</i> 沿	‘along’

Some illustrative examples showing that the above prepositions can be followed by *-zhe* 着 are given below. As noted by Li and Thompson (1981: Ch. 9), the presence of *-zhe* 着 does not contribute to the meaning of the sentence, as witnessed from the fact that the following examples have the same meanings with or without *-zhe* 着:

(60) a. 你們 得 按(着) 次序 發言。

¹⁶ Recent syntactic studies have shown that *bǎ* 把 and *bèi* 被 and the following noun phrase do not form a constituent. Interested readers are referred to Sybesma (1999), Li (2006) and Huang, Li and Li (2009: Ch. 5) for syntactic analyses of the *bǎ* 把 construction, and Feng (1995), Ting (1995, 1998), Huang (1999) and Huang, Li and Li (2009: Ch. 4) for syntactic analyses of the *bèi* 被 construction.

nǐmen déi àn(-zhe) cìxù fāyán.
you must according.to-Dur order speak
'You must speak in order.'

- b. 他 朝(着) 我 走 過來。
tā cháo(-zhe) wó zǒu guòlái.
he toward-Dur me walk come
'He walked over to me.'

- c. 他 對(着) 我 點了 點 頭。
tā duì(-zhe) wǒ diǎn-le diǎn tóu.
he toward-Dur me nod-Perf nod head
'He nodded to me.'

The fact that *-zhe* 着 is devoid of durative meaning when it occurs with the above prepositions suggest that they have undergone grammaticalization into prepositions and are on the verge of losing their verbal properties. Additional support for this view comes from the fact that the list of prepositions that can take *-zhe* 着 is fairly restricted (Li and Thompson 1981: Ch. 9) and must be memorized, as evidenced by the fact *-zhe* 着 cannot be added freely to any prepositions:

- (61) a. *他 從着 北京 帶 回來 很多 禮物。
*tā cóng-zhe Běijīng dài huílai hěnduō lǐwù.
he from-Dur Beijing bring back many present
b. *他 給着 學生 寫 推薦 信。
*tā gěi-zhe xuésheng xiě tuījiàn xìn.
he for-Dur student write recommendation letter
c. *他 在着 圖書館 看 書。
*tā zài-zhe túshūguǎn kàn shū.
he at-Dur library read book

In addition to *-zhe* 着, a few prepositions can be followed by *-le* 了 akin to verbs (Chao 1968 and Li and Thompson 1981):

- (62) 他 為了 你的 事 一 整 晚 都 沒 睡。
tā wèi-le nǐ-de shì yī zhéng wǎn dōu méi shuì.
he for-Perf you-Poss matter one whole night all not.have sleep
'For your matter, he didn't sleep for the whole night.'

Despite their apparent similarities, whether *-le* 了 still marks the perfective aspect

when it occurs with a preposition is far from clear when compared with true verbs (cf. (25)). The fact that a limited set of prepositions is compatible with *-le* 了 should thus be regarded as evidence for their historical transition from verbs to prepositions.

2.5.2.2 *Prepositions functioning as verbs*

The verbal nature of prepositions can also be reflected from their dual categorial status: many prepositions in Chinese can be used as prepositions as well as verbs (Chao 1968 and Li and Thompson 1974a, b, 1981), as shown in Table 2 below (the following table is adapted from Li and Thompson 1981: 368-369).

Table 2. Prepositions functioning as prepositions and as verbs

Prepositions	As prepositions	As verbs
<i>āi</i> 挨	‘next to’	‘be next to’
<i>àn</i> 按	‘according to’	‘press’
<i>bǐ</i> 比	‘compare’	‘compare’
<i>chǎo</i> 朝	‘facing’	‘face’
<i>chéng</i> 乘	‘take advantage of’	‘ride on’
<i>chòng</i> 冲	‘facing’	‘face’
<i>chúle</i> 除了	‘except, besides’	‘remove’
<i>dàitì</i> 代替	‘in place of’	‘take the place of’
<i>dāng</i> 當	‘in front of’	‘serve as’
<i>dào</i> 到	‘to’	‘arrive’
<i>duì</i> 對	‘to’	‘face’
<i>gěi</i> 給	‘to, for’	‘give’
<i>gēn</i> 跟	‘with’	‘follow’
<i>jiě</i> 解	‘from’	‘untie, relieve’
<i>kào</i> 靠	‘on the strength of’	‘lean against, depend on’
<i>nì</i> 逆	‘against’	‘be opposed to’
<i>píng</i> 憑	‘depend on, according to’	‘depend on’
<i>shùn</i> 順	‘along’	‘follow’
<i>tì</i> 替	‘in place of’	‘substitute for’
<i>wǎng</i> 往	‘facing’	‘face’
<i>xiàng</i> 向	‘facing’	‘face’

The following examples illustrate that the above prepositions can be used as prepositions (63a, 64a, 65a) as well as verbs (63b, 64b, 65b).

- (63) a. 我們 會 按 你的 意思 辦 這件 事。
 wǒmen huì àn nǐ-de yìsī bàn zhè-jìan shì.
 we will according.to you-Poss idea do this-Cl matter
 ‘We will do this matter according to your ideas.’
 b. 是不是 有 人 在 按 門鈴？
 shì-bu-shì yǒu rén zài àn mén-líng?
 be-not-be have person Prog press door-bell
 ‘Is someone ringing the doorbell?’
- (64) a. 他 朝 我 笑了 笑。
 tā cháo wǒ xiào-le xiào.
 he facing me smile-Perf smile
 ‘He smiled at me.’
 b. 他的 房子 朝 海。
 tā-de fángzi cháo hái.
 he-Poss house face sea
 ‘His house faces the sea.’
- (65) a. 他 常 到 北京 去。
 tā cháng dào Běijīng qù.
 he often to Beijing go
 ‘He often goes to Beijing.’
 b. 春天 到了。
 chūntiān dào-le.
 spring arrive-Perf
 ‘Spring has come.’

While many prepositions have verbal counterparts, there are quite a few prepositions that do not, such as *zhìyú* 至於 ‘as regards’, *guānyú* 關於 ‘concerning’, *cóng* 從 ‘from’, *bǎ* 把, *bèi* 被, among others.

Given the fact that many prepositions show verbal properties and have dual categorial status, a natural question that arises is whether prepositions in Chinese are best analyzed as a “mixed” category consisting of verbs and prepositions. This is a plausible view that has been explored in the literature (McCawley 1992). An alternative is to maintain that prepositions form an independent category distinct from verbs and attribute the verbal properties of a subset of prepositions to their historical development from verbs (Li and Thompson 1974a, b). On this view, prepositions should be distinguished from their verbal counterparts, which are best analyzed as

homophonous verbs. An advantage of this view is that it can provide a natural explanation for the verbal properties of a subset of prepositions while maintaining a clear distinction between prepositions and verbs.

2.6 Conjunctions

Similar to conjunctions in the Indo-European languages, conjunctions in Chinese are function words in that they form a closed class and have grammatical rather than content meaning. In Chinese, conjunctions can be divided into two major types: those that function to conjoin phrases (section 2.6.1) and those that serve to conjoin clauses (section 2.6.2).

2.6.1 Phrasal conjunctions

For conjunctions that serve to conjoin phrases, they can be further divided into three types, depending on the types of phrases they conjoin. They include (i) conjunctions that serve to conjoin nouns or noun phrases, (ii) conjunctions that serve to conjoin adjectives or adjectival expressions and (iii) conjunctions that serve to conjoin verbs or verb phrases.

2.6.1.1 Conjunctions conjoining nouns

In Chinese, there are four conjunctions that serve to conjoin nouns or noun phrases. They include *hé* 和 ‘and’ (Cheung et al. 1994: 46), *gēn* 跟 ‘and, with’, *tóng* 同 ‘and, with’ and *yǔ* 與 ‘and, with’ (Yip and Rimmington 2004: Ch. 22.1), as illustrated below:

- (66) a. 我的 學生 和 他的 學生 都 是 上海 人。
wǒ-de xuésheng hé tā-de xuésheng dōu shì Shànghǎi rén.
I-Poss student and he-Poss student all be Shanghai person
‘My students and his students are Shanghaiese.’
- b. 北京 跟 香港 都 是 很 值得 去 看 的 地方。
Běijīng gēn Xiānggǎng dōu shì hěn zhídé qù kàn de dìfāng.
Beijing and Hong.Kong all be very worth go see DE place
‘Beijing and Hong Kong are both places worth seeing.’
- c. 他 同 妹妹的 關係 很 不 錯。
tā tóng mèimei-de guānxi hěn bú cuò.
he and sister-Poss relationship very not bad

‘The relationship between him and his sister is quite good.’

- d. 他 對 法國的 文化 與 歷史 都 很 感 興趣。
tā duì Fǎguó-de wénhuà yǔ lìshǐ dōu hén gǎn xìngqù.
he to France-Poss culture and history all very feel interest
‘He is interested in the culture and history of France.’

Despite the fact that all four conjunctions have the meaning of ‘and’, they differ in terms of register, i.e. some are more formal than the others (Lü 1980).

2.6.1.2 Conjunctions conjoining adjectives

As for conjunctions that function to conjoin adjectives or adjectival expressions, they include simplex conjunctions that involve a single word like *ér* 而 ‘also’ (Yip and Rimmington 2004: Ch. 22.1) and complex ones that involve more than one word, such as *yòu* 又...*yòu* 又 ‘both...and...’ (Cheung et al. 1994: 427), etc. Both types of conjunctions can conjoin adjectives or adjectival expressions in the predicative (67a, 68a) as well as attributive positions (67b, 68b).

- (67) a. 他 堅定 而 勇敢。
tā jiāndìng ér yǒnggǎn.
he steadfast and brave
‘He is steadfast and brave.’
b. 他 是 個 認真 而 嚴謹 的 哲學家。
tā shì-ge rènzhēn ér yánjǐn de zhéxuéjiā.
he be-Cl serious and rigorous DE philosopher
‘He is a serious and rigorous philosopher.’
- (68) a. 這個 西瓜 又 大 又 甜。
zhè-ge xīguā yòu dà yòu tián.
this-Cl watermelon also large also sweet
‘This watermelon is large and sweet.’
b. 他 是 個 又 聰明 又 勤奮 的 學生。
tā shì ge yòu cōngmíng yòu qínfèn de xuésheng.
he be Cl also smart also diligent DE student
‘He is a smart and diligent student.’

2.6.1.2 Conjunctions conjoining verbs

We have seen that *yòu* 又...*yòu* 又 ‘both...and...’ can be used to conjoin adjectives. In addition to adjectives, it can serve to conjoin verbs or verb phrases to emphasize on the coexistence of the two situations depicted by the verb phrases (Cheung et al. 1994: 427), as demonstrated below:

- (69) a. 他們 對 他 又 打 又 罵。
 tāmen duì tā yòu dǎ yòu mà.
 they to him also hit also scold
 ‘They hit and scolded him.’
 b. 他們 又 唱 又 跳， 非常 高興。
 tāmen yòu chàng yòu tiào, fēicháng gāoxìng.
 they also sing also dance extremely happy
 ‘They sang and danced, and were extremely happy.’

Another conjunction used to conjoin verbs is *bìng* 並 ‘also’. Unlike *yòu* 又...*yòu* 又 ‘both...and’, which is often used to conjoin intransitive verbs, *bìng* 並 is used to conjoin transitive verbs that share the same object (Yip and Rimmington 2004: Ch. 22.1):

- (70) a. 他們 討論 並 通過了 這個 計劃。
 tāmen tāolùn bìng tōngguò-le zhè-ge jìhuà.
 they discuss also pass-Perf this-Cl project
 ‘They discussed and passed this project.’
 b. 大家 都 同意 並 擁護 我的 提議。
 dàjiā dōu tóngyì bìng yōnghù-wǒ-de tíyì.
 everyone all agree also support I-Poss proposal
 ‘Everyone agreed and supported my proposal.’

In (70a), *zhè-ge jìhuà* 這個計劃 ‘this project’ is the shared object of *tāolùn* 討論 ‘discuss’ and *tōngguò* 通過 ‘pass’, both of which are transitive verbs. In (70b), the shared object is *wǒ de tíyì* 我的提議 ‘my proposal’.

2.6.2 Clausal conjunctions

Most of the conjunctions in Chinese are clausal conjunctions. They serve to conjoin two clauses and display three characteristic features. First, many of the clausal conjunctions occur in pairs and in some cases, one of the elements in the pair can be optionally omitted (Li and Thompson 1981: Ch. 23, Yip and Rimmington 2004: Ch.

22.2), as shown in (71).

- (71) a. *búdàn* 不但...*érqiě* 而且 ‘not only...but also...’
b. *jíshǐ* 即使...*yě* 也... ‘even though...still...’
c. *níngkě* 寧可...*yěbù* 也不 ‘would rather...and not...’
d. (*rúguǒ*) (如果)...*jiù* 就 ‘if...then...’
e. *suīrán* 雖然...*dànshì* 但是... ‘although...but...’
f. *wúlùn* 無論...*dōu* 都... ‘no matter what...still...’
g. (*yàoshi*) (要是)...*jiù* 就... ‘if...then...’
h. (*yīnwéi*) (因為)...*suǒyǐ* 所以... ‘because...therefore...’
i. *zhǐyǒu* 只有...*cái* 才... ‘only if...then...’

There are also some clausal conjunctions that are used individually (Li and Thompson 1981: Ch. 23, Yip and Rimmington 2004: Ch. 22.2), as in (72).

- (72) a. *búguò* 不過... ‘but...’
b. ...*de shíhòu* 的時候 ‘when...’
c. *kěshì* 可是... ‘but...’
d. ...*yǐqián* 以前 ‘before...’

Some illustrative examples of the two types of clausal conjunction are given below:

- (73) a. 他 不但 罵 人， 而且 還 打 人 呢。
tā búdàn mà rén, érqiě hái dǎ rén ne.
he not.only scold person but.also in.addition hit person Prt
‘He not only swore at people, but also hit them.’
b. 我 寧可 吃 素， 也 不 吃 蝸牛。
wǒ níngkě chī sù, yě bù chī wōniú.
I rather eat vegetable and not eat snail
‘I would rather be a vegetarian than eat snails.’
c. (如果) 他 喝醉了， 我們 就 送 他 回 家。
(rúguǒ) tā hē-zuì-le, wǒmen jiù sòng tā huí jiā.
if he drink-drunk-Perf we then take he return home
‘If he is drunk, we will take him home.’
d. 大家 雖然 很 累， 但是 心情 都 很 愉快。
dàjiā suīrán hěn lèi, dànshì xīnqíng dōu hěn yúkuài.
everyone although very tired but mood all very cheerful
‘Although everyone was tired, their mood was cheerful.’

- e. 無論 你 走得 多 快，他 都 能 趕得 上。
wúlùn ní zǒu-de duō kuài, tā dōu néng gǎn-de shàng.
no.matter you go-Res how fast he still can catch-Res up
‘No matter how fast you go, he can still catch up.’
- f. (要是) 明天 不 下雨，我 就 一定 去。
(yàoshi) míngtiān bú xià yǔ, wǒ jiù yí dìng qù.
if tomorrow not rain I then definitely go
‘If it doesn’t rain tomorrow, I’ll definitely go.’
- g. (因為) 他 腿部 受了 傷，所以 沒 參加 比賽。
(yīnwéi) tā tuǐ bù shòu-le shāng, suó yǐ méi cānjiā bǐsài.
because he leg bear-Perf wound therefore not.have join match
‘Because he had a leg injury, he did not take part in the match.’
- h. 只有 樂觀，你的 病 才 能 恢復得 快。
zhí yǒu lèguān, nǐ-de bìng cái néng huīfù-de kuài.
only.if optimistic you-Poss sickness then can recover-Res quick
‘Only by being optimistic could you be able to have a speedy recovery.’
- (74) a. 他 不 是 很 聰明，不過 考上 大學 了。
tā bú shì hěn cōngmíng, búguò kǎo-shàng dàxué le.
he not be very smart but exam-ascend university Prt
‘He is not smart but he passed the university entrance exam.’
- b. 我 回來 的 時候，媽媽 已經 睡着了。
wǒ huí lái de shíhòu, māma yǐ jīng shuì-zháo-le.
I return DE time mother already sleep-fall-Perf
‘When I returned home, my mother was already asleep.’
- c. 我 本來 想 早 點 來，可是 沒 趕上 飛機。
wǒ běn lái xiǎng zǎo diǎn lái, kě shì méi gǎn-shàng fēijī.
I originally think early a.little come but not.have chase-ascend plane
‘I had originally intended to come earlier, but I didn’t catch the plane.’
- d. 我 離開 以前，弟弟 還 沒 回來。
wǒ lí kāi yǐ qián, dì dì hái méi huí lái.
I leave before younger.brother still not.have return
‘Before I left home, my younger brother still had not returned.’

Second, some of the clausal conjunctions have monosyllabic and disyllabic variants depending on the rhythmic requirement (Yip and Rimmington 2004: Ch. 22.2):

- (75) a. *dànshì* 但是 ‘but’ → *dàn* 但 ‘but’
 b. *suīrán* 雖然 ‘although’ → *suī* 雖 ‘although’
 c. *rúguǒ* 如果 ‘if’ → *rú* 如 ‘if’
 d. *yīnwéi* 因為 ‘because’ → *yīn* 因 ‘because’

The following examples illustrate the use of the monosyllabic variants:

- (76) a. 你的 建議 很好，但 時機 還不 成熟。
nǐ-de jiànyì hén hǎo, dàn shíjī hái bù chéngshú.
 you-Poss suggestion very good but time still not ripe
 ‘Your suggestion is good, but the time is still not ripe.’
 b. 文章 雖 短，卻 很 有 力。
wénzhāng suī duǎn, què hěn yǒu lì.
 article although short yet very have force
 ‘Although the article is short, it is very forceful.’
 c. 你 如 有 困難，我 可以 幫助 你。
nǐ rú yǒu kùnnán, wǒ kěyǐ bāngzhù nǐ.
 you if have problem I can help you
 ‘If you have a problem, I can help you.’
 d. 因 年代 久遠，這 件 事 已經 無法 考察。
yīn niándài jiúyuǎn, zhè-jìan shì yǐjīng wúfǎ kǎochá.
 because age remote.past this-Cl matter already no.way check
 ‘Because it was in the remote past, there is no ways to check this matter.’

Third, for clausal conjunctions that occur in pairs, the first member of the pair may appear before or after the subject (Yip and Rimmington 2004: Ch. 22.2; see also Shi 1986: section 3.7, McCawley 1988, Gasde and Paul 1996, Tsao 1996, Zhou 2002: Ch. 5, Zhang 2009), as demonstrated below:

- (77) a. 要是 你 不 舒服，就 別 來 了。
yàoshì nǐ bù shūfu, jiù bié lái le.
 if you not well then not come Prt
 ‘If you are not well, then don’t come.’
 b. 你 要是 不 舒服，就 別 來 了。
nǐ yàoshì bù shūfu, jiù bié lái le.
 you if not well then not come Prt
 ‘If you are not well, then don’t come.’

- (78) a. 雖然 他 身體 不 好， 但是 很少 請假。
 suīrán tā shēntǐ bù hǎo, dànshì hénshǎo qǐngjià.
 although he body not good but rarely request-leave
 ‘Although he wasn’t well, he rarely requested leave.’
- b. 他 雖然 身體 不 好， 但是 很少 請假。
 tā suīrán shēntǐ bù hǎo, dànshì hénshǎo qǐngjià.
 he although body not good but rarely request-leave
 ‘Although he wasn’t well, he rarely requested leave.’

Finally, it is worth mentioning that clauses can be conjoined without the presence of any explicit clausal conjunctions in Chinese (Li and Thompson 1981: Ch. 23, Yip and Rimmington 2004: Ch. 22.2), as shown below:

- (79) a. (如果) 你 去，我 (就) 跟 你 去。
 (rúguǒ) nǐ qù, wǒ (jiù) gēn nǐ qù.
 if you go I then with you go
 ‘If you go, I’ll go with you.’
- b. 他 剛 想 出去 (的時候)， 忽然 下起 大雪 來 了。
 tā gāng xiǎng chūqù (de shíhòu), hūrán xiàqǐ dà-xué lái le.
 he just want go.out DE time suddenly fall heavy-snow come Prt
 ‘When he was just thinking of going out, it suddenly began to snow heavily.’

3. Categories unique to Chinese

In this section, I turn to discuss three categories that are available in Chinese but absent in the Indo-European languages, namely, classifiers, localizers and sentence-final particles.

3.1 Classifiers

Classifiers (also referred to as “numeral classifiers”) are a salient feature of classifier languages like Chinese. They are regarded as a semi-lexical category due to the fact that many classifiers are historically derived from nouns. In our discussion of count and mass nouns in sections 2.1.1.1-2.1.1.2, I have implicitly assumed that sortal classifiers should be differentiated from measure words. However, whether sortal classifiers ought to be distinguished from measure words remains a point of contention in the literature. In fact, two traditional views can be identified in the

literature: one tradition does not differentiate between sortal classifiers and measure words. For instance, Chao (1968: 584-620) regards classifiers as individual measures and subsumes them under the rubric of “measure words”. A similar view is held by Li and Thompson (1981: 106), who state that “any measure word can be a classifier”. One piece of evidence in support of this view comes from the fact that both sortal classifiers (e.g. *wèi* 位, *běn* 本, *tiáo* 條 and *duǒ* 朵) and measure words (e.g. *chǐ* 尺 ‘foot’, *bàng* 磅 ‘pound’, *jiālún* 加侖 ‘gallon’ and *gōngjīn* 公斤 ‘kilo’), can appear between a numeral and a noun:

- | | |
|--|---|
| <p>(80) a. 一位 客人
yí-wèi kèrén
one-Cl guest
‘a guest’</p> <p>c. 兩條 蛇
liáng-tiáo shé
two-Cl snake
‘two snakes’</p> | <p>b. 三本 書
sān-běn shū
three-Cl book
‘three books’</p> <p>d. 十朵 花
shí-duǒ huā
ten-Cl flower
‘ten flowers’</p> |
| <p>(81) a. 一尺 布
yī-chǐ bù
one-foot cloth
‘one foot of cloth’</p> <p>c. 兩加侖 汽油
liǎng-jiālún qìyóu
two-gallon petrol
‘two gallons of petrol’</p> | <p>b. 三磅 糖
sān-bàng táng
three-pound sugar
‘three pounds of sugar’</p> <p>d. 十公斤 米
shí-gōngjīn mǐ
ten-kilo rice
‘ten kilos of rice’</p> |

The other tradition holds the view that measure words are distinguishable from sortal classifiers. An observation that is indicative of such a distinction comes from the fact that sortal classifiers tend to resist the insertion of *de* 的, while measure words always allow the insertion of *de* 的 (Tai and Chao 1994, Kuo 1998, Cheng and Sybesma 1999), as shown below:¹⁷

¹⁷ Note that although sortal classifiers have a tendency to resist the insertion of *de* 的, as illustrated by the ill-formedness of (82a-d), this should not be taken to mean that sortal classifiers never allow the insertion of *de* 的. As revealed by Li (2013) and Shi (2013), there are many counter-examples showing that *de* 的 can be inserted between a sortal classifier and the following noun. In particular, as noted in Shi (2013), insertion of *de* 的 becomes possible when the numeral+sortal classifier+*de* 的 is understood as a modifier of some kind, as shown in (i).

(i) 一套 二十本 的 紅樓夢

- (82) a. *一位 的 客人
*yí-wèi de kèrén
one-Cl DE guest
c. *兩條 的 蛇
*liǎng-tiáo de shé
two-Cl DE snake
- b. *三本 的 書
*sān-běn de shū
three-Cl DE book
d. *十朵 的 花
*shí-duǒ de huā
ten-Cl DE flower
- (83) a. 一尺 的 布
yī-chǐ de bù
one-foot DE cloth
'one foot of cloth'
c. 兩加侖 的 汽油
liǎng-jiālún de qìyóu
two-gallon DE petrol
'two gallons of petrol'
- b. 三磅 的 糖
sān-bàng de táng
three-pound DE sugar
'three pounds of sugar'
d. 十公斤 的 米
shí-gōngjīn de mǐ
ten-kilo DE rice
'ten kilos of rice'

Additional support for the distinction between sortal classifiers and measure words comes from their different semantic functions. According to Tai (1990: 312), “[a] classifier categorizes a class of nouns by picking out some salient perceptual properties, whether physically or functionally based, which are permanently associated with the entities named by the class of nouns; a measure word does not categorize but denotes the quantity of the entity named by a noun.” The semantic difference becomes more transparent if we compare the sortal classifier *tiáo* 條 in *yī-tiáo shé* 一條蛇 ‘a snake’ with the measure word *chǐ* 尺 ‘foot’, as in *yī-chǐ bù* 一尺布 ‘a foot of cloth’: the former picks out the salient properties of *shé* 蛇 ‘snake’, i.e. it has a long and cylindrical body, whereas *chǐ* 尺 ‘foot’ does not pick out any salient properties of ‘cloth’ nor does it categorize a particular type of cloth. Rather, it denotes the quantity.

Their different semantic functions can also be witnessed from their selectional restrictions. In particular, while sortal classifiers can only be used to classify a limited and specific set of nouns, e.g. count nouns (see section 2.1.1.1), measure words can be used with a wide variety of nouns (Tai 1990). For instance, container measure words such as *xiāng* 箱 ‘box’ and *dài* 袋 ‘bag’ can be used with count nouns as well as mass nouns:

yí-tào èrshí-běn de Hónglómèng
one-Cl twenty-Cl DE Dream.of.the.Red.Chamber
'a series of Dream of the Red Chamber that consists of twenty volumes.'

- (84) a. 一箱 書
yī-xiāng shū
one-box book
'one box of books'
- b. 三袋 蘋果
sān-dài píngguǒ
three-bag apple
'three bags of apples'
- (85) a. 一箱 酒
yī-xiāng jiǔ
one-box wine
'one box of wine'
- b. 三袋 米
sān-dài mǐ
three-bag rice
'three bags of rice'

In light of the aforementioned arguments, I follow the second view and maintain that sortal classifiers should be distinguished from measure words. I shall discuss sortal classifiers and measure words in the following sections.

3.1.1 Sortal classifiers

Sortal classifiers often reflect the intrinsic features of the nouns they classify. Somewhat similar to gender in the Indo-European languages, the choice of classifiers is to some extent predictable from the meaning of the noun, especially when the classifiers are encoded with specific semantic information, such as shape, animacy, etc. Let us consider some common sortal classifiers that classify nouns in terms of shape. As shown below, sortal classifiers denoting shape can be divided into three subclasses, namely, those denoting long and narrow entities (86), those denoting round and oval entities (87) and those denoting entities with a flat surface (88).

(86) Sortal classifiers denoting long and narrow entities:

- a. zhī 支: yī-zhī xuějiā 一支雪茄 'a cigar', yī-zhī làzhú 一支蠟燭 'a candle', yī-zhī qiāng 一支槍 'a gun', yī-zhī jiàn 一支箭 'an arrow', etc.
- b. gēn 根: yī-gēn zhēn 一根針 'a needle', yī-gēn xiàn 一根線 'a thread', yī-gēn tóufà 一根頭髮 'a hair', yī-gēn huǒchái 一根火柴 'a match', yī-gēn xiāngcháng 一根香腸 'a sausage', yī-gēn zhúzi 一根竹子 'a bamboo', etc.
- c. tiáo 條: yī-tiáo chóng 一條蟲 'a worm', yī-tiáo shé 一條蛇 'a snake', yī-tiáo yú 一條魚 'a fish', yī-tiáo shéngzi 一條繩子 'a rope', yī-tiáo hé 一條河 'a river', yī-tiáo tuǐ 一條腿 'a leg', yī-tiáo huángguā 一條黃瓜 'a cucumber', yī-tiáo chuán 一條船 'a boat', yī-tiáo gǒu 一條狗 'a dog', etc.

(87) Sortal classifiers denoting round and oval entities:

- a. *kē* 顆: *yī-kē zhēnzhū* 一顆珍珠 ‘a pearl’, *yī-kē zhǒngzi* 一顆種子 ‘a seed’, *yī-kē zhàdàn* 一顆炸彈 ‘a bomb’, *yī-kē zǐdàn* 一顆子彈 ‘a bullet’, *yī-kē shǒuliúdàn* 一顆手榴彈 ‘a hand grenade’, *yī-kē xīn* 一顆心 ‘a heart’, *yī-kē yáchǐ* 一顆牙齒 ‘a tooth’, *yī-kē xīng* 一顆星 ‘a star’, *yī-kē tang* 一顆糖 ‘a candy’, etc.
- b. *lì* 粒: *yí-lì mǐ* 一粒米 ‘a grain of rice’, *yí-lì dòuzi* 一粒豆子 ‘a bean’, *yí-lì huāshēng* 一粒花生 ‘a peanut’, *yí-lì pútáo* 一粒葡萄 ‘a grape’, *yí-lì shāzi* 一粒沙子 ‘a grain of sand’, etc.
- c. *tuán* 團: *yī-tuán máoxiàn* 一團毛線 ‘a ball of wool’, *yī-tuán miàn* 一團麵 ‘a dough’, *yī-tuán miánhuā* 一團棉花 ‘a cotton wool’, *yī-tuán huǒ* 一團火 ‘a fire’, *yī-tuán yún* 一團雲 ‘a dense patch of cloud’

(88) Sortal classifiers denoting entities with a flat surface:

- a. *zhāng* 張: *yī-zhāng zhǐ* 一張紙 ‘a piece of paper’, *yī-zhāng biǎo* 一張表 ‘a chart’, *yī-zhāng piào* 一張票 ‘a ticket’, *yī-zhāng yóupiào* 一張郵票 ‘a stamp’, *yī-zhāng chuáng* 一張床 ‘a bed’, *yī-zhāng zhuōzi* 一張桌子 ‘a table’, etc.
- b. *piàn* 片: *yí-piàn yèzi* 一片葉子 ‘a leaf’, *yí-piàn miánbāo* 一片麵包 ‘a slice of bread’, *yí-piàn ānmiányào* 一片安眠藥 ‘a sleeping tablet’, *yí-piàn tǔdì* 一片土地 ‘a stretch of land’, *yí-piàn wāngyáng* 一片汪洋 ‘a vast sheet of water’, etc.
- c. *miàn* 面: *yí-miàn jìngzi* 一面鏡子 ‘a mirror’, *yí-miàn luó* 一面鑼 ‘a gong’, *yí-miàn qí* 一面旗 ‘a flag’, etc.

Animacy also plays a role in the choice of classifier. For instance, animate beings, including mammals, birds and insects are commonly classified by the sortal classifier *zhī* 隻, as in (89)-(91), whereas plants are generally classified by *kē* 棵, as shown in (92).

- (89) a. 一隻 羊
yī-zhī yáng
 one-Cl sheep
 ‘a sheep’
- c. 三隻 老虎
sān-zhī láohǔ
 three-Cl tiger
 ‘three tigers’

- b. 兩隻 狼
liǎng-zhī láng
 two-Cl wolf
 ‘two wolves’
- d. 六隻 老鼠
liù-zhī láoshǔ
 six-Cl mouse
 ‘six mice’

- (90) a. 一隻 鳥
yī-zhī niǎo
one-Cl bird
'a bird'
- c. 三隻 麻雀
sān-zhī máquè
three-Cl sparrow
'three sparrows'
- b. 四隻 燕子
sì-zhī yànzi
four-Cl swallow
'four swallows'
- d. 十隻 雞
shí-zhī jī
ten-Cl chicken
'ten chickens'
- (91) a. 一隻 甲蟲
yī-zhī jiǎchóng
one-Cl beetle
'a beetle'
- c. 三隻 蝴蝶
sān-zhī húdié
three-Cl butterfly
'three butterflies'
- b. 兩隻 蜻蜓
liǎng-zhī qīngtíng
two-Cl dragonfly
'two dragonflies'
- d. 五隻 毛蟲
wǔ-zhī máochóng
five-Cl caterpillar
'five caterpillars'
- (92) a. 一棵 樹
yī-kē shù
one-Cl tree
'a tree'
- c. 三棵 麥子
sān-kē màizi
three-Cl wheat
'three stalks of wheat'
- b. 兩棵 蔥
liǎng-kē cōng
two-Cl spring onion
'two spring onions'
- d. 四棵 草
sì-kē cǎo
four-Cl grass
'four tufts of grass'

The most versatile sortal classifier is *ge* 個, which can be used to classify a wide range of nouns, including nouns denoting humans (93), inanimate objects (94) and abstract concepts (95).

- (93) a. 一個 人
yī-ge rén
one-Cl person
'a person'
- c. 三個 老師
sān-ge lǎoshī
- b. 兩個 朋友
liǎng-ge péngyǒu
two-Cl friend
'two friends'
- d. 六個 醫生
liù-ge yīshēng

three-Cl teacher
'three teachers'

six-Cl doctor
'six doctors'

- (94) a. 一個 手錶
yī-ge shóubiǎo
one-Cl watch
'a watch'
c. 兩個 島
liǎng-ge dǎo
two-Cl island
'two islands'

- b. 三個 西瓜
sān-ge xīguā
three-Cl watermelon
'three watermelons'
d. 十個 城市
shí-ge chéngshì
ten-Cl city
'ten cities'

- (95) a. 一個 主意
yī-ge zhǔyì
one-Cl idea
'an idea'
c. 兩個 願望
liǎng-ge yuànwàng
two-Cl wish
'two wishess'

- b. 三個 目的
sān-ge mùdī
three-Cl purpose
'three purposes'
d. 一個 機會
yī-ge jīhuì
one-Cl opportunity
'an opportunity'

In the literature, *ge* 個 has been viewed as a “general classifier” (also referred to as a “neutral classifier”), since it can be used with a wide range of nouns of different semantic properties (Huang and Ahrens 2003). More often, however, particular sets of nouns with common characteristics or belonging to the same type are classified by more specific sortal classifiers rather than *ge* 個 (see Ahrens 1994).

Furthermore, many nouns may be classified by two or more alternative sortal classifiers, as shown below:

- (96) a. 一個 客人
yī-ge kèrén
one-Cl guest
'a guest'

- b. 一位 客人
yí-wèi kèrén
one-Cl guest
'a guest'

- (97) a. 一個 窗
yī-ge chuāng
one-Cl window
'a window'

- b. 一扇 窗
yí-shàn chuāng
one-Cl window
'a window'

- | | |
|---|--|
| <p>(98) a. 一條 金魚
yī-tiáo jīnyú
one-Cl goldfish
'a goldfish'</p> | <p>b. 一尾 金魚
yī-wěi jīnyú
one-Cl goldfish
'a goldfish'</p> |
| <p>(99) a. 一支 步槍
yī-zhī bùqiāng
one-Cl rifle
'a rifle'</p> | <p>b. 一杆 步槍
yī-gān bùqiāng
one-Cl rifle
'a rifle'</p> |
| <p>(100) a. 一支 毛筆
yī-zhī máobǐ
one-Cl writing.brush
'a writing brush'</p> | <p>b. 一管 毛筆
yī-guǎn máobǐ
one-Cl writing.brush
'a writing brush'</p> |

In many cases, the choice of the classifiers is determined by the register, discourse types, the age and dialectal background of the speakers.

3.1.2 Measure words

Measure words are employed to denote the quantity or amount of the entity named by a noun. In Chinese, they can be subdivided into four types, namely, standard measures, collective measures, container measures and generic measures (Chao 1968, Li and Thompson 1981: Ch. 4.2.1, Zhu 1982, Yip and Rimmington 2004: Ch. 2.8, among others).

3.1.2.1 Standard measures

Standard measure words express nationally or internationally accepted standards of measurement, indicating standards for weight, quantity, volume or size. Typical examples include *jīn* 斤 'catty', *dǎ* 打 'dozen', *liǎng* 兩 'ounce', *bàng* 磅 'pound', *gōngjīn* 公斤 'kilo', *gōngshēng* 公升 'liter', *chǐ* 尺 'foot', *jiālún* 加侖 'gallon', etc. Some illustrative examples are given below:

- | | |
|---|--|
| <p>(101) a. 一斤 白菜
yī-jīn báicài
one-catty Chinese.cabbage</p> | <p>b. 兩打 雞蛋
liáng-dǎ jīdàn
two-dozen egg</p> |
|---|--|

- | | | | |
|----|------------------------------|----|------------------------|
| | ‘a catty of Chinese cabbage’ | | ‘two dozens of eggs’ |
| c. | 三兩 銀子 | d. | 五磅 茶葉 |
| | sān-liǎng yínzi | | wǔ-bàng chá-yè |
| | three-ounce silver | | five-pound tea-leaf |
| | ‘three ounces of silver’ | | ‘five pounds of tea’ |
| e. | 四公斤 蘋果 | f. | 六公升 水 |
| | sì-gōngjīn píngguǒ | | liù-gōngshēng shuǐ |
| | four-kilo apple | | six-liter water |
| | ‘four kilos of apples’ | | ‘six liters of water’ |

3.1.2.2 Collective measures

Collective measure words resemble collective nouns in English. In most cases, specific collective measures are used for nouns denoting humans and inanimate beings, whereas nouns denoting animate beings such as mammals and insects typically occur with *qún* 群 ‘a group’, as illustrated below:

- | | | | |
|----------|------------------------------|----|----------------------|
| (102) a. | 一班 年輕 人 | b. | 一隊 戰士 |
| | yī-bān niánqīng rén | | yí-duì zhànshì |
| | one-bunch young person | | one-file soldier |
| | ‘a bunch of young people’ | | ‘a file of soldiers’ |
| c. | 一幫 孩子 | d. | 一股 土匪 |
| | yī-bāng háizi | | yī-gǔ túfěi |
| | one-group child | | one-gang bandit |
| | ‘a group of children’ | | ‘a gang of bandits’ |
| (103) a. | 一束 花 | b. | 一串 鑰匙 |
| | yí-shù huā | | yí-chuàn yàoshí |
| | one-bunch flower | | one-bunch key |
| | ‘a bunch of flowers’ | | ‘a bunch of keys’ |
| c. | 一挂 鞭炮 | d. | 一筆 錢 |
| | yí-guà biānpào | | yī-bǐ qián |
| | one-string firecracker | | one-sum money |
| | ‘a string of firecrackers’ | | ‘a sum of money’ |
| (104) a. | 一群 羊 | b. | 一群 牛 |
| | yī-qún yáng | | yī-qún niú |
| | one-flock sheep | | one-herd cow |

- | | | | |
|----|--------------------|----|-------------------|
| | ‘a flock of sheep’ | | ‘a herd of cows’ |
| c. | 一群 蜜蜂 | d. | 一群 螞蟻 |
| | yī-qún mífēng | | yī-qún máyǐ |
| | one-swarm bee | | one-swarm ant |
| | ‘a swarm of bees’ | | ‘a swarm of ants’ |

However, in some cases, nouns denoting humans, animate beings or inanimate beings may occur with the same collective measure words. Two typical examples are *qún* 群 and *pī* 批: the former denotes ‘a crowd’ or ‘a group’, which is compatible with nouns denoting humans or animate beings such as mammals, fish and insects, as shown in (105a-f), whereas the latter denotes ‘a group’, ‘a batch’ or ‘a pile’ and is compatible with nouns denoting humans or inanimate beings, as in (106a-d).

- | | | | |
|----------|---------------------|----|-----------------------|
| (105) a. | 一群 人 | b. | 一群 小孩 |
| | yī-qún rén | | yī-qún xiǎohái |
| | one-crowd person | | one-crowd child |
| | ‘a crowd of people’ | | ‘a crowd of children’ |
| c. | 一群 狼 | d. | 一群 魚 |
| | yī-qún láng | | yī-qún yú |
| | one-pack wolf | | one-shoal fish |
| | ‘a pack of wolves’ | | ‘a shoal of fish’ |
| e. | 一群 蜜蜂 | f. | 一群 螞蟻 |
| | yī-qún mífēng | | yī-qún máyǐ |
| | one-swarm bee | | one-swarm ant |
| | ‘a swarm of bees’ | | ‘a swarm of ants’ |
-
- | | | | |
|----------|---------------------|----|-----------------------|
| (106) a. | 一批 人 | b. | 一批 學生 |
| | yī-pī rén | | yī-pī xuésheng |
| | one-group person | | one-group student |
| | ‘a group of people’ | | ‘a group of students’ |
| c. | 一批 貨 | d. | 一批 文件 |
| | yī-pī huò | | yī-pī wénjiàn |
| | one-batch goods | | one-pile document |
| | ‘a batch of goods’ | | ‘a pile of documents’ |

In addition, there are specific collective measures such as *duì* 對 and *shuāng* 雙, both meaning ‘a pair’, that are used with nouns, which denote humans, animate or inanimate entities that come in pairs:

- (107) a. 一對 夫婦
yí-duì fū-fù
one-pair husband-wife
'a couple'
- b. 一對 天鵝
yí-duì tiāné
one-pair swan
'a pair of swans'
- c. 一對 枕頭
yí-duì zhěntóu
one-pair pillow
'a pair of pillows'
- d. 一對 耳環
yí-duì ěr-huán
one-pair ear-ring
'a pair of ear-rings'
- (108) a. 一雙 手
yī-shuāng shǒu
one-pair hand
'a pair of hands'
- b. 一雙 眼睛
yī-shuāng yǎnjīng
one-pair eye
'a pair of eyes'
- c. 兩雙 鞋
liǎng-shuāng xié
two-pair shoe
'two pairs of shoes'
- d. 三雙 襪子
sān-shuāng wàzi
one-pair sock
'three pairs of socks'

Note that even though there are nouns that are treated in pairs in English (e.g. *a pair of trousers*, *a pair of scissors*, *a pair of spectacles*, etc.), they are incompatible with *duì* 對 or *shuāng* 雙 in Chinese, as evidenced by the ill-formedness of (109a, 110a, 111a). Instead, they are classified by sortal classifiers, as shown in (109b, 110b, 111b).

- (109) a. *一對/一雙 褲子
*yí-duì/yī-shuāng kùzi
one-pair/one-pair trousers
Intended: 'a pair of trousers'
- b. 一條 褲子
yī-tiáo kùzi
one-Cl trousers
'a pair of trousers'
- (110) a. *一對/一雙 剪刀
*yí-duì/yī-shuāng jiǎndāo
one-pair/one-pair scissors
Intended: 'a pair of scissors'
- b. 一把 剪刀
yī-bǎ jiǎndāo
one-Cl scissors
'a pair of scissors'
- (111) a. *一對/一雙 眼鏡
*yí-duì/yī-shuāng yǎnjìng
one-pair/one-pair spectacles
Intended: 'a pair of spectacles'
- b. 一副 眼鏡
yí-fù yǎnjìng
one-Cl spectacles
'a pair of spectacles'

Collective measures may also express indeterminate numbers or amounts through the use of *yīxiē* 一些 ‘some’ and *yīdiǎn* 一點 ‘a little’: the former is applicable to count and mass nouns (112a-b), whereas the latter is applicable to mass nouns (113a-b) (see section 2.1.1.2).

- | | |
|--|--|
| (112) a. 一些 朋友
yīxiē péngyǒu
some friend
‘some friends’ | b. 一些 酒
yīxiē jiǔ
some wine
‘some wine’ |
|--|--|

- | | |
|---|--|
| (113) a. 一點 酒
yīdiǎn jiǔ
a.little wine
‘a little wine’ | b. 一點 牛奶
yīdiǎn niúnnǎi
a.little milk
‘a little milk’ |
|---|--|

3.1.2.3 Container measures

Container measure words are typically used with nouns denoting food and drinks. Typical examples include *bēi* 杯 ‘cup’, *píng* 瓶 ‘bottle’, *hé* 盒 ‘box’, *guō* 鍋 ‘pot’, *wǎn* 碗 ‘bowl’, *xiāng* 箱 ‘box’, *guàn* 罐 ‘can’, *hú* 壺 ‘(tea) pot’, *dài* 袋 ‘bag’, *bāo* 包 ‘packet’, among many others (Chao 1968, Li and Thompson 1981: 109, Zhu 1982). Some illustrative examples are given below:

- | | |
|---|---|
| (114) a. 一杯 茶
yī-bēi chá
one-cup tea
‘a cup of tea’ | b. 兩瓶 酒
liǎng-píng jiǔ
two-bottle wine
‘two bottles of wine’ |
| c. 三盒 巧克力
sān-hé qiǎokèlì
three-box chocolate
‘three boxes of chocolate’ | d. 一鍋 燉肉
yī-guō dùnròu
one-pot stew
‘a pot of stew’ |
| e. 四碗 飯
sì-wǎn fàn
four-bowl rice
‘four bowls of rice’ | f. 六箱 書
liù-xiāng shū
six-box book
‘six boxes of books’ |

Note that these container measure words can be used as nouns in their own right,

in which case they are classified by sortal classifiers and some of them must be followed by the suffix *-zi* 子 (see Li and Thompson 1981: 42-43 for detailed discussion of *-zi* 子; see also Cheng 2009), as shown below:

- (115) a. 一個 杯子
yī-ge bēizi
one-Cl cup
'a cup'
- b. 兩個 瓶子
liǎng-ge píngzi
two-Cl bottle
'two bottles'
- c. 三個 盒子
sān-ge hézi
three-Cl box
'three boxes'
- d. 一個 鍋
yī-ge guō
one-Cl pot
'a pot'
- e. 四個 碗
sì-ge wǎn
four-Cl bowl
'four bowls'
- f. 六個 箱子
liù-ge xiāngzi
six-Cl box
'six boxes'

Another type of container measures may employ body parts or enclosed areas as temporary “containers”. They are typically preceded by the numeral *yī* — ‘one’ and can be optionally followed by *de* 的, as demonstrated below (Chao 1968, Li and Thompson 1981: 111-112):

- (116) a. 一臉 (的) 灰
yī-liǎn (de) huī
one-face DE dust
'a faceful of dust'
- b. 一屋子 (的) 煙
yī-wūzi (de) yān
one-house DE smoke
'a houseful of smoke'
- c. 一頭 (的) 白 髮
yī-tóu (de) bái fà
one-head DE white hair
'a headful of grey hair'
- d. 一地 (的) 麵粉
yī-dì (de) miànfěn
one-floor DE flour
'a floorful of flour'
- e. 一肚子 (的) 氣
yí-dùzi (de) qì
one-stomach DE anger
'a stomachful of grievance'
- f. 一桌 (的) 客人
yī-zhuō (de) kèrén
one-table DE guest
'a tableful of guests'

Since any nouns denoting body parts or enclosed areas can serve as temporary container measures, this type of container measures forms an open class. This derivation is akin to the suffixation of *-ful* in English, which is applicable to nouns to

derive measure words (e.g. *house* → *houseful*, *head* → *headful*, etc.)

3.1.2.4 Generic measures

Generic measure words, denoting types and kinds, can be used with count nouns, mass nouns and abstract nouns. Typical examples are *zhǒng* 種 ‘kind’, *lèi* 類 ‘category’ and *yàng* 樣 ‘type’, as demonstrated below:

- | | |
|---|--|
| (117) a. 一種 水果
yī-zhǒng shuǐguǒ
one-kind fruit
‘a kind of fruit’ | b. 兩種 蔬菜
liáng-zhǒng shūcài
two-kind vegetable
‘two kinds of vegetables’ |
| c. 四種 酒
sì-zhǒng jiǔ
four-kind wine
‘four kinds of wine’ | d. 一種 病
yī-zhǒng bìng
one-kind illness
‘a kind of illness’ |
| (118) a. 這類 動物
zhè-lèi dòngwù
this-species animal
‘this species of animal’ | b. 這類 紅酒
zhè-lèi hóng-jiǔ
this-kind red-wine
‘this kind of red wine’ |
| c. 這類 問題
zhè-lèi wèntí
this-genre problem
‘this genre of problems’ | d. 這類 角色
zhè-lèi juésè
this-kind role
‘this kind of role’ |
| (119) a. 幾樣 東西
jǐ-yàng dōngxi
several-kind thing
‘several kinds of things’ | b. 各樣 商品
gè-yàng shāngpǐn
different-kind commodity
‘several kinds of commodities’ |
| c. 幾樣 飯菜
jǐ-yàng fàn-cài
several-kind rice-vegetable
‘several kinds of food’ | d. 四樣 食物
sì-yàng shíwù
four-kind food
‘four kinds of food’ |

3.2 Localizers

Localizers (also referred to as “*fāngwèicí* 方位詞” in Zhu 1982: 40) express the

spatial location of the entities denoted by nouns. Most of the localizers are monosyllabic and they include *shàng* 上 ‘up’, *xià* 下 ‘down’, *qián* 前 ‘front’, *hòu* 後 ‘back’, *lǐ* 裏 ‘inside’, *wài* 外 ‘outside’, *páng* 旁 ‘side’, *nèi* 內 ‘inside’, etc. (Chao 1968, Zhu 1982: Ch. 4.4, Li and Thompson 1981: Ch. 11, Chappell and Peyraube 2008). Most of the disyllabic localizers are derived from the monosyllabic ones through the addition of suffixes such as *-bian* 邊, *-mian* 面 and *-tou* 頭 (Chao 1968, Zhu 1982: Ch. 4.4, Li and Thompson 1981: Ch. 11, Chappell and Peyraube 2008). The representative localizers are listed in Table 3 below (the following table is adapted from Zhu 1982: 40-41 and Li and Thompson 1981: 391).

Table 3. Localizers in Chinese

Localizers				Gloss
<i>shàng</i> 上	<i>shàngbian</i> 上邊	<i>shàngmian</i> 上面	<i>shàngtou</i> 上頭	‘on top of, above’
<i>xià</i> 下	<i>xiàbian</i> 下邊	<i>xiàmian</i> 下面	<i>xiàtou</i> 下頭	‘under, below’
<i>lǐ</i> 裏	<i>lǐbian</i> 裏邊	<i>lǐmian</i> 裏面	<i>lǐtou</i> 裏頭	‘in, inside’
<i>wài</i> 外	<i>wàibian</i> 外邊	<i>wàimian</i> 外面	<i>wàitou</i> 外頭	‘outside’
<i>qián</i> 前	<i>qiánbian</i> 前邊	<i>qiánmian</i> 前面	<i>qiántou</i> 前頭	‘in front of’
<i>hòu</i> 后	<i>hòubian</i> 後邊	<i>hòumian</i> 後面	<i>hòutou</i> 後頭	‘in back of, behind’
<i>páng</i> 旁	<i>pángbian</i> 旁邊			‘beside’
<i>zhōngjiān</i> 中間				‘in the center of’
	<i>zuǒbian</i> 左邊	<i>zuǒmian</i> 左面		‘left of’
	<i>yòubian</i> 右邊	<i>yòumian</i> 右面		‘right of’
<i>dōngbù</i> 東部	<i>dōngbian</i> 東邊	<i>dōngmian</i> 東面		‘east of’
<i>nánbù</i> 南部	<i>nánbian</i> 南邊	<i>nánmian</i> 南面		‘south of’
<i>xībù</i> 西部	<i>xībian</i> 西邊	<i>xīmian</i> 西面		‘west of’
<i>běibù</i> 北部	<i>běibian</i> 北邊	<i>běimian</i> 背面		‘north of’
<i>nèi</i> 內				‘inside’

In terms of distribution, localizers are preceded by a noun phrase, as shown in the following generalized schema (Chao 1968; see also Li and Thompson 1981: Ch. 11):

(120) Noun Phrase + Localizer

Some illustrative examples are given below:

(121) a. 他 在 房子 裏 修理 電視機。
 tā zài fángzi lǐ xiūlǐ diànshìjī.

he at room inside repair television

‘He fixed the television inside the room.’

b. 車子 停 在 學校 外邊。

chēzi tíng zài xuéxiào wàibian.

car stop at school outside

‘The car is parked outside the school.’

One of the important debates on localizers is their categorial status. As noted by Chappell and Peyraube (2008), in regard to the categorial status of localizers, almost every possibility has been entertained in the literature. For instance, they have been analyzed as adjectives (Ma 1898: Ch. 3), adverbs (Lü 1947, Li and Liu 1955), nominal suffixes (Cartier 1972), postpositions forming a discontinuous constituent with the prepositions they frequently co-occur with (Hagège 1975: 220 ff., Peyraube 1980: 53 ff.; see also Tai 1973, Ernst 1988), spatial clitics (Liu 1998, Sun 2008) and even pronouns (Rygaloff 1973: 143). However, one of the dominant views is that localizers are best analyzed as a subclass of nouns (Zhu 1982, A. Li 1990, Huang, Li and Li 2009: Ch. 1). One piece of evidence comes from the fact that the noun phrase and the following localizer, similar to noun phrases, can function as the subject (122a) or object (122b) (Huang, Li and Li 2009: Ch. 1; see also Y. Li 1983, 2003, A. Li 1990).

(122) a. 城 外 很 美麗。

chéng wài hén měilì.

city outside very beautiful

‘The outside of the city is beautiful.’

b. 他 去過 城 外。

tā qù-guo chéng wài.

he go-Exp city outside

‘He has been to the outside of the city.’

Another piece of evidence is that the noun phrase plus the localizer, similar to noun phrases, can be preceded by the preposition *zài* 在 ‘at’ (Huang, Li and Li 2009: Ch. 1), as demonstrated below:

(123) a. 他 在 房 裏 修理 電視機。

tā zài fáng li xiūlǐ diànshìjī.

he at room inside repair television

‘He fixed the television inside the room.’

- b. 他 在 這個 房子 修理 電視機。
 tā zài zhè-ge fángzi xiūlǐ diànshìjī.
 he at this-Cl room repair television
 ‘He fixed the television in this room.’

Despite these similarities, there are reasons for distinguishing localizers from nouns. For one thing, unlike nouns that can be preceded by a [Numeral + Classifier] sequence (see section 2.1), localizers cannot. For another, if localizers were nouns, it would wrongly predict that they can always function as the subject or object on their own without the preceding noun phrase (cf. (122)).¹⁸

- (124) a. *外 很 美麗。
 *wài hén měilì.
 outside very beautiful
 Intended: ‘The outside is beautiful.’
 b. *他 去過 外。
 *tā qù-guo wài.
 he go-Exp outside
 Intended: ‘He has been to the outside.’

Based on these reasons, I adopt the view that localizers should be regarded as an autonomous category in line with Li (1992), Chu (1997, 2006), among others. The fact that localizers, in particular the disyllabic ones, share similar properties with nouns may be attributed to the fact that they are historically derived from nouns (Chappell and Peyraube 2008).

3.3 Sentence-final particles

Sentence-final particles are one of the most distinctive features of Chinese. As their name implies, they are used in the sentence final position, serving various semantic and pragmatic functions. There are roughly six sentence-final particles in Chinese, including *le* 了, *ne* 呢, *ma* 嗎, *ba* 吧, *ou* 嘔 and *a/ya* 啊/呀 (Li and Thompson 1981: Ch. 7; see also Chao 1968, Zhu 1982), which I shall discuss in detail in the following sections.

¹⁸ Note that the sentences in (124a-b) will become well-formed when the disyllabic localizer *wàimian* 外面 ‘outside’ is used instead. However, this fact does not suffice to undermine our arguments for differentiating localizers from nouns, since localizers, whether monosyllabic or disyllabic, are always incompatible with [Numeral + Classifier] sequences.

3.3.1 le 了

As noted by Li and Thompson (1981: Ch. 7), the sentence-final *le* 了 is different from other sentence-final particles in that it can be followed by other sentence-final particles, such as *a* 啊, *ou* 嘸 and the yes-no question particle *ma* 嗎, as illustrated below:

(125) Q: 他 是 學生 嗎?

tā shì xuésheng ma?

he be student Q

‘Is he a student?’

A: 他 當然 是 了 啊。

tā dāngrán shì le a.

he of.course be Prt Prt

‘Of course he is!’

(126) 我 告訴 他 那件 事 了 嘸。

wǒ gàosù tā nà-jiàn shì le ou.

I tell him that-Cl matter Prt Prt

‘I told him about that matter.’

(127) 他 去 買 東西 了 嗎?

tā qù mǎi dōngxi le ma?

he go· buy thing Prt Q

‘Did he go shopping?’

In terms of its semantic and pragmatic functions, it has been noted that the sentence-final *le* 了 can mark a change of state or indicate what is expressed is contrary to expectation (Chao 1968, Li and Thompson 1981, Ross 1995, Sybesma 1999, Soh 2009). The change of state reading becomes more transparent when we compare sentences with and without the sentence-final *le* 了:¹⁹

(128) a. 他 當了 父親。

tā dāng-le fùqīn.

¹⁹ As shown in (128b), the sentence-final *le* 了 may co-occur with the perfective aspect marker *-le* 了. Interested readers are referred to Chao (1968), Rohsenow (1978), Li and Thompson (1981), Li, Thompson and Thompson (1982), Ross (1995), Sybesma (1999), Lin (2003), Soh (2009), among others for detailed discussion of the similarities and differences between the two and the different analyses of the sentence final *le* 了.

he become-Perf father

‘He became a father.’

- b. 他 當了 父親 了。

tā dāng-le fùqīn le.

he become-Perf father Prt

‘He is now a father. (He wasn’t one before and now he has a child).’

- (129) a. 他 不 怕 鬼。

tā bú pà guǐ.

he not fear ghost

‘He is not afraid of ghosts.’

- b. 他 不 怕 鬼 了。

tā bú pà guǐ le.

he not fear ghost Prt

‘He is no longer afraid of ghosts (and he was before).’

The examples in (128a, 129a) are simple declarative sentences, while the addition of the sentence-final *le* 了 in (128b, 129b) conveys a change of state. More precisely, the addition of the sentence-final *le* 了 in (128b) signals that the person referred to as *tā* 他 ‘he’ was not a father before and has become a father. In (129b), the sentence-final *le* 了 signals a change of state from being afraid of ghosts to no longer being afraid of ghosts.

As for the contrary to expectation reading, consider the following pair of sentences with and without the sentence-final *le* 了 (they are taken from Soh 2009: 632).

- (130) a. 這片 西瓜 很 甜。 不 必 加 糖。

zhè-piàn xīguā hěn tián. Bú bì jiā táng.

this-Cl watermelon very sweet not need add sugar

‘This watermelon is sweet. It is not necessary to add sugar.’

- b. 這片 西瓜 很 甜 了。 不 必 加 糖 了。

zhè-piàn xīguā hěn tián le. Bú bì jiā táng le.

this-Cl watermelon very sweet Prt not need add sugar Prt

‘This watermelon is sweet (contrary to what one may assume/expect). It is not necessary to add sugar (contrary to what one may assume/expect).’

(130a) is a simple declarative sentence asserting that the watermelon is sweet. In contrast, the speaker uttering (130b) not only makes the same assertion, but also

implies that someone in the discourse context may think otherwise and the sentence is intended to correct this wrong assumption (see Li and Thompson 1981: 263-270).

3.3.2 *ne* 呢

The sentence-final *ne* 呢 can be used in declarative and interrogative sentences. In declarative sentences, it is mainly used to indicate that the sentence is the speaker's response to some previous claim, expectation or belief on the part of the hearer. Pragmatically, it has the effect of drawing the hearer's attention to the information conveyed by the sentence (Li and Thompson 1981: Ch. 7; see also Chao 1968, Hu 1981, Chu 1984, 1985a, b, 1998, Lin 1984, King 1986, Shao 1989, Gao 2005, Wu 2005, Li 2006). To highlight the function of *ne* 呢, let us consider the following pair of sentences:

- (131) a. 他們 有 五條 牛。
tāmen yǒu wǔ-tiáo niú.
they have five-Cl cow
'They have five cows.'
- b. 他們 有 五條 牛 呢。
tāmen yǒu wǔ-tiáo niú ne.
they have five-Cl cow Prt
'(Listen,) they have five cows.'

(131a) is a simple declarative sentence asserting that the people referred to as 'they' have five cows. In contrast, the speaker uttering (131b) not only makes the same assertion, but also draws the hearer's attention to this piece of information, which could be a perfect response if the hearer has claimed that the people referred to as 'they' do not have anything in the previous discourse. In such a context, (131b) could be construed as a response challenging the hearer's expectation.

Apart from declarative sentences, the sentence final *ne* 呢 can be used in four types of interrogative sentences, including A-not-A questions (132), disjunctive questions (133), *wh*-questions (134) and truncated questions consisting of only one noun (135B) (Li and Thompson 1981: Ch. 7; see also Hu 1981, Chu 1984, 1985a, b, 1998, King 1986, Shao 1989, Jin 1996, Gao 2006, Li 2006):

- (132) 他們 來不來 呢？
tāmen lái-bu-lái ne?
they come-not-come Q

‘Will they come?’

- (133) 你 想 喝 茶 還 是 咖 啡 呢 ?
nǐ xiǎng hē chá háishi kāfēi - ne?
you want drink tea or coffee Q
‘Do you want tea or coffee?’

- (134) 他 們 什 麼 時 候 來 呢 ?
tāmen shénme shíhòu lái ne?
they what time come Q
‘When will they come?’

- (135) A: 他 明 天 要 去 學 校 。
tā míngtiān yào qù xuéxiào.
he tomorrow need go school
‘He needs to go to school tomorrow.’

- B: 你 呢 ?
nǐ ne?
you Q
‘How about you?’

3.3.3 ma 嗎

Unlike *ne* 呢 that can be used in A-not-A questions, disjunctive questions, *wh*-questions and truncated questions, *ma* 嗎 is confined to yes-no questions (Li and Thompson 1981: Ch. 7, Zhu 1982), as illustrated below:

- (136) 你 想 她 嗎 ?
nǐ xiǎng tā ma?
you miss her Q
‘Do you miss her?’

3.3.4 ba 吧

According to Li and Thompson (1981: Ch. 7), the sentence final *ba* 吧 serves to signal the speaker’s desire to solicit the approval or agreement from the hearer with regard to the information conveyed by the sentence (Chao 1968, Zhu 1982: Ch. 16; see Han 1995, Chu 1998, Li 2006 for more detailed discussion and the different

analyses of the sentence-final *ba* 吧). It can be used in different types of speech acts, such as commands (137) and advice (138) (the following examples are taken from Li and Thompson 1981: 307-308).

(137) 我們 走 吧!
wǒmen zǒu ba!
we go Prt
'Let's go!'

(138) 你 想一想 吧!
nǐ xiǎng-yi-xiǎng ba!
you think-one-think Prt
'Why don't you think about it a little?'

The sentence-final *ba* 吧 can also be used in declarative sentences to solicit agreement or confirmation from the hearer with respect to the information conveyed by the sentence:

(139) 她 很 漂亮 吧!
tā hěn piàoliang ba!
she very pretty Prt
'She is pretty, don't you agree?'

For instance, the speaker uttering (139) is intended to solicit agreement from the hearer that the person referred to as 'she' is pretty. This function of *ba* 吧 is comparable to the function of tag questions in English (e.g. *She is pretty, isn't she?*), which is intended to seek confirmation of a statement from the hearer.

Finally, the sentence-final *ba* 吧 can also be used in interrogative sentences to seek confirmation from the hearer (Zhu 1982: Ch. 16):

(140) 今天 是 星期天 吧?
jīntiān shì Xīngqītiān ba?
today be Sunday Prt
'Today is Sunday, isn't it?'

The most natural context in which (140) is used is when the speaker is fairly certain that today is Sunday and would like to seek further confirmation from the hearer.

3.3.5 ou 嘸

As noted by Li and Thompson (1981: Ch. 7), the sentence-final *ou* 嘸 is used to indicate that the sentence preceding *ou* 嘸 is intended to be construed as a friendly warning showing the concern and care on the part of the speaker (see also Chao 1968). In light of its semantic function, *ou* 嘸 can be used to soften a command and convert it into a concerned warning:

- (141) 小心 嘸!
xiǎoxīn ou!
careful Prt
'Be careful, okay?'

The sentence-final *ou* 嘸 can also appear in conditionals when they are construed as concerned warnings (Li and Thompson 1981: Ch. 7):

- (142) 如果 你 吃 太多 就 會 肚子 疼 嘸。
rúguǒ nǐ chī tàiduō jiù huì dùzi téng ou.
if you eat too.much then will stomach hurt Prt
'Let me tell you, if you eat too much, you'll have a stomachache'

Due to the semantic nature of *ou* 嘸, it is commonly found in the speech of an adult addressing a child (Li and Thompson 1981: Ch. 7). For instance, it is perfectly natural for a mother to utter (142) to warn her child while expressing her concern that her child might have eaten too much.

3.3.6 a/ya 啊/呀

According to Li and Thompson (1981: Ch. 7), the sentence final *a/ya* 啊/呀 may function to reduce the forcefulness of the information conveyed by a sentence (Chao 1968, Zhu 1982, Dow 1983; see Shie 1991, Chu 2002, Wu 2004 for detailed discussion of the discourse functions of the sentence-final *a* 啊). When used in interrogative sentences such as A-not-A questions (143), *wh*-questions (144) and truncated questions with a *wh*-word alone (145), the addition of *a/ya* 啊/呀 has the pragmatic effect of softening the query.

- (143) 你 去不去 啊/呀?
nǐ qù-bu-qǔ a/ya?

you go-not-go Prt/Prt
'Will you go?'

- (144) 你 要 去 哪兒 啊/呀?
nǐ yào qù nǎr a/ya?
you want go where Prt/Prt
'Where do you want to go?'

- (145) 誰 啊/呀?
shéi a/ya?
who Prt/Prt
'Who is it?'

Apart from interrogative sentences, *a/ya* 啊/呀 can be used in imperative sentences, serving to reduce the forcefulness of a command (Li and Thompson 1981: Ch. 7). This becomes more transparent if we compare the following pair of sentences with and without *a/ya* 啊/呀:

- (146) a. 你 過來!
nǐ guòlái!
you come
'You come here!'
b. 你 過來 啊/呀!
nǐ guòlái a/ya!
you come Prt/Prt
'You come here.'

(146a) is a simple imperative sentence expressing a command. With the addition of *a/ya* 啊/呀 in (146b), it is interpreted as a suggestion or an encouragement rather than a command.

4. Conclusion

In this chapter, I have provided a comprehensive survey of the categories in Chinese. In particular, we have seen that Chinese has six major categories, including nouns, verbs, adjectives, adverbs, prepositions and conjunctions, which are also available in the Indo-European languages. In addition, I have shown that Chinese possesses three categories that are absent in the Indo-European languages, namely, classifiers,

localizers and sentence-final particles. These findings suggest that while some basic categories such as nouns, verbs, adjectives, adverbs, prepositions and conjunctions may potentially be considered as universal, other categories such as classifiers, localizers and sentence-final particles are language-specific and may be viewed as distinctive features of Sinitic languages.

Among the three categories whose categorial statuses are debatable in the literature, I have argued that adjectives and localizers are best analyzed as distinct categories, refuting the alternative views, which take adjectives as a subclass of verbs and localizers as a subclass of nouns. As for prepositions, I have demonstrated that they may either be analyzed as a mixed category consisting of verbs and prepositions or an independent category consisting of prepositions only. Under the latter view, the verbal properties of prepositions can be traced back to their historical origin as verbs.

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