

CHAPTER TWO

Literature Review

This chapter reviews previous studies carried out on coordination ‘and’ and comitativity ‘with’ from a typological perspective (*cf.* section 2.1) and those that have been conducted on Chinese *gen* ‘and, with’ (*cf.* section 2.2). Section 2.3 provides a summary of this chapter and points out issues that need to be further considered.

2.1 Typological perspective

In this section, two major papers, Haspelmath (2004) and Stassen (2000), which investigate the notion of coordination versus that of comitativity from a typological point of view, are briefly summarized.

2.1.1 Haspelmath (2004): Coordinating constructions

Haspelmath’s (2004) discussion on coordinating constructions covers numerous issues. Those which are most relevant to the present study are summarized briefly below. They include the discussion on: (i) the definition of coordination, (ii) the types of coordination, (iii) the coordinate structure constraint and (iv) the distinction between coordinate structure and comitative structure.

Haspelmath (2004:3-4) claims that a construction [A B] is coordinate if the two parts A and B have the same status; they will not be viewed as coordinate if one of the parts is clearly more salient and the other subordinate. In a coordinating construction,

the coordinated phrases are termed “coordinands” or “conjuncts” and a “coordinator” intervenes between the two coordinands.

In terms of semantics, there are three types of coordination (Haspelmath 2004:5):

(i) *conjunction* (‘and’ coordination) (ii) *disjunction* (‘or’ coordination) and (iii) *adversative coordination* (‘but’ coordination). While the conjunction in many Indo-European languages can conjoin a diverse range of phrasal categories, including noun phrases, verb phrases, adjective phrases, prepositional phrases and even clauses, about half of the languages of the world exhibit different conjunctive constructions for nominal and verbal conjunction (Haspelmath 2005). These coordinating constructions are category-sensitive, i.e. different categories require different coordinators. In some languages, coordinating constructions are not only category-sensitive; they also depend on the semantic content of the coordinands. In Takia, an Oceanic language spoken in Papua New Guinea, the coordinator of human conjuncts is different from that of non-human conjuncts (see Ross 2002). In Asmat, a language of West Papua, the distinction between proper names and common nouns causes the use of different coordinators (see Voorhoeve 1965).

Haspelmath (2004:28-30) also discusses the Coordinate Structure Constraint (CSC) proposed by Ross (1967). The Coordinate Structure Constraint stipulates that the movement of any conjunct or any element within a conjunct out of a coordinate

structure is not allowable. Haspelmath (2004:28) shows that the CSC accounts for the ungrammaticality of sentences (1) and (2):

(1) *What sofa will he put the chair between some table and ___?

(2) *What records did you buy _____ and books on civil engineering?

Haspelmath (2004:28)

Haspelmath (2004:14-20) goes on to deal with the differences between the comitative structure ('A with B') as opposed to the conjunctive structure ('A and B'). In a conjunctive construction [A and B], both participants are equally in control of the predicated event though the event may not necessarily occur at the same time or in the same place, whereas the comitative construction [A with B] entails that A and B are in the same place and at the same time, but they are not in equal control. This semantic distinction explains the ungrammaticality of sentences (3) and (4).

(3) *Pedro watched the world cup final with Yumiko, but Pedro was in Cordoba (or 'in 1986'), and Yumiko was in Kumamoto (or 'in 2004').

(4) *In the 2000 election campaign, Gore ran for U.S. president with Bush.

Haspelmath (2004:16)

In addition, topicality also helps to distinguish a comitative construction [A with B] from a conjunctive construction [A and B], as shown in (5) and (6)⁵.

(5) John went to school with Mary, and a book was given to *John/Mary.

⁵ Based on Haspelmath's opaque examples from Hausa, I constructed these two English examples in order not to confuse the readers.

(6) John and Mary went to school and a book was given to John/Mary.

Adapted from Haspelmath (2004:16)

In (5), the full NP 'John' cannot occur in the second clause unless it is replaced by the anaphoric pronoun 'him' as in *John went to school with Mary, and a book was given to him*. In (6), 'John' can occur in the second clause because it does not occupy full topicality in the first clause.

2.1.2 Stassen (2000): AND-languages and WITH-languages

Stassen (2000) conducts a typological study based on 260 languages, examining two different strategies employed to encode "noun phrase conjunction", namely, the coordinate strategy and the comitative strategy. Stassen clearly distinguishes between these two strategies.

(i) Coordinate strategy

The two coordinands of a conjunctive structure share an equal structural rank. Thus, the two coordinated NPs serve the same syntactic function, have the same thematic role and receive the same case. They form a larger syntactic unit. A conjunctive structure may require plural agreement on the predicate.

(ii) Comitative strategy

The two NPs in a comitative structure have unequal structural ranks. While one of the NPs can take any case role, the other NP is encoded as an oblique NP. These two NPs do not converge to form a larger syntactic constituent and do not force dual

or plural agreement on the predicate, and neither of the two NPs is subject to the Coordinate Structure Constraint. The following sentence is an example of comitative strategy.

(7) John left with Mary. Stassen (2000:6)

Stassen (2000:21) finds that the languages examined in his typological study can be divided into two types: AND-languages and WITH-languages. AND-languages display both the Coordinate strategy and the Comitative strategy, while WITH-languages do not mark the distinction and only use the Comitative strategy as a way to encode nominal conjunction. Stassen (2000:43ff) finally concludes his typological study by claiming that two correlational parameters are considered with respect to the AND/WITH-language distinction. If a language is TENSED and CASED, it tends to be an AND-language. If a language is NON-TENSED and NON-CASED, it is very likely to be a WITH-language.

2.2 Previous analyses on Chinese *gen*

Chinese makes use of the same marker *gen* to encode coordination and comitativity. This dual function of *gen* has given rise to a number of studies (Liu and Peyraube 1994, Tang 1979, Teng 1970, Gu 2000, and Paris 2005a-b). Section 2.2.1 is devoted to the grammaticalization of *gen*. Sections 2.2.2-2.2.4 review previous analyses of *gen* as a preposition and as a conjunction at the syntactic and semantic

levels.

2.2.1 Liu and Peyraube (1994): Grammaticalization of verbs into prepositions and prepositions into conjunctions

Liu and Peyraube (1994:184) show that Chinese conjunctions do not come directly from verbs but from prepositions which are derived from verbs; namely, Chinese conjunctions have undergone two stages of grammaticalization⁶. The first stage is a verb undergoing grammaticalization into a preposition and the second a preposition into a conjunction. In this sense, conjunctions are said to be more grammaticalized than prepositions (Hopper and Traugott 2003:16). In fact, the process of a Chinese verb undergoing transformation to a preposition is not fully understood without the consideration of the serial verb construction. Li and Thompson (1973, 1974, 1975) argue that the direction of word order change in Chinese from SVO to SOV is essentially due to the transformation of a serial verb construction into a new sentence where the first verb changes into a preposition, leading to SOV word order.

Liu and Peyraube (1994:184ff) illustrate the evolutionary history of Chinese coordinative conjunctions with *yu* ‘and’, *ji* ‘and’, *gong* ‘together’ and so on. Taking

⁶ The term “grammaticalization” was coined by the French linguist Antoine Meillet. Grammaticalization refers to the process whereby lexical words in some contexts show a tendency to be semantically bleached, which, in turn, causes a change of their grammatical roles. In other words, a lexical item undergoing grammaticalization will show a tendency to function as a grammatical item, such as a preposition or a conjunction. Also, as pointed out in Hopper and Traugott (2003:16), grammaticalization is one-way; that is, a lexical item can undergo changes from “less grammatical” to “more grammatical”, but a more grammatical item will not be expected to show a lexical encoding in its language.

the grammaticalization of *gong* as an example, the authors show that *gong* was originally a verb meaning “to share”. Later, it became an adverb meaning “together”, which in turn went through grammaticalization to function as a preposition meaning “with”. It is not until the Song Dynasty that *gong* derived a conjunction status. Thus, the use of *gong* as a conjunction is not directly derived from a verb but has gone through different stages of grammaticalization.

Gen, on the other hand, was originally a noun meaning ‘heel’ and, through metaphorical change, came to be used as a verb meaning ‘to follow’. *Gen* underwent two grammaticalization processes, the first from a verb to a preposition meaning ‘with’ and the second from a preposition to a conjunction ‘and’.

As will become clear below, the grammatical status of *gen* as a preposition and as a conjunction has aroused much research interest. Such interest is particularly reflected in the studies of Tang (1979), Teng (1970), Gu (2000), and Paris (2005a-b), to cite but a few.

2.2.2 Tang (1979): Defining the parts of speech of *gen*

The issue related to the distinction between *gen* as a preposition and as a conjunction has attracted much attention for the past few decades. It is commonly agreed that the boundary between *gen* as a preposition and as a conjunction is not clear-cut in some cases and needs to be sorted out in the context.

Tang (1979:8) points out that the conjunction status of *gen* seems easier to recognize when the two *gen*-coordinated elements take object position (8), appear as a prepositional object (9) or fall in focus position (10).

(8) Object position

wo	renshi	Zhangsan	gen	Lisi
我	認識	張三	跟	李四
1SG	know	Zhangsan	GEN	Lisi

‘I know Zhangsan and Lisi.’

(9) Prepositional object

xiaotou	yong	qizi	gen	banshou	ba	men	qiaokai
小偷	用	起子	跟	扳手	把	門	撬開
thief	use	screwdriver	GEN	spanner	BA	door	pry-open

‘The thief pried the door open with a screwdriver and a spanner.’

(10) Focus position (in a pseudo-cleft sentence)

yingyao	canjia	taolunhui	de shi	zhang	xiansheng	gen	li	xiansheng
應邀	參加	討論會	的 是	張	先生	跟	李	先生
invited	join	symposium	DE FOC	Zhang	Mr.	GEN	Li	Mr.

‘It is Mr. Zhang and Mr. Li who are invited to the symposium.’

Tang (1979:8)

However, when the two nouns connected by *gen* appear in subject position, it is not always easy to tell whether *gen* serves as a conjunction or as a preposition. This point is illustrated by example (11):

(11) Laozhang	gen	Laoli	yiqi	lai	le
老張	跟	老李	一起	來	了
Laozhang	GEN	Laoli	together	come	CRS

a. Laozhang and Laoli came together.
b. Laozhang came with Laoli.

In an attempt to shed light on the function of *gen* in such ambiguous contexts, Tang (1979:8ff) proposes the following criteria.

- (i) When *gen* is used as a conjunction, it cannot be immediately preceded by any

modifying elements. If it is, then *gen* must be treated as a preposition.

Modifying elements include temporal adverbials such as *zuotian* ‘yesterday’ as in (12), manner adverbials such as *gaogaoxingxingde* ‘happily’ as in (13), modals such as *yuanyi* ‘willing’ as in (14), negative markers such as *bu* or *meiyou* ‘not’ as in (15), and the focus particle *shi* as in (16). Accordingly, *gen* in the following examples functions as a preposition, not as a conjunction.

(12) Temporal adverbials: *zuotian* ‘yesterday’

Zhangsan	<u>zuotian</u>	gen	Lisi	yiqi	lai	le
張三	昨天	跟	李四	一起	來	了
Zhangsan	yesterday	GEN	Lisi	together	come	CRS

‘Zhangsan came with Lisi yesterday.’

(13) Manner adverbials: *gaogaoxingxingde* ‘happily’

Zhangsan	<u>gaogaoxingxingde</u>	gen	Lisi	yiqi	lai	le
張三	高高興興地	跟	李四	一起	來	了
Zhangsan	happily	GEN	Lisi	together	come	CRS

‘Zhangsan happily came with Lisi.’

(14) Modals: *yuanyi* ‘willing’

Zhangsan	<u>yuanyi</u>	gen	Lisi	yiqi	lai
張三	願意	跟	李四	一起	來
Zhangsan	MOD	GEN	Lisi	together	come

‘Zhangsan is willing to come together with Lisi.’

(15) Negative markers: *meiyou*

Zhangsan	<u>meiyou</u>	gen	Lisi	yiqi	lai
張三	沒有	跟	李四	一起	來
Zhangsan	NEG	GEN	Lisi	together	come

‘Zhangsan did not come with Lisi.’

(16) The focus particle: *shi*

Zhangsan	<u>shi</u>	gen	Lisi	yiqi	lai	de
張三	是	跟	李四	一起	來	的
Zhangsan	FOC	GEN	Lisi	together	come	DE

‘Zhangsan came WITH LISI.’

Tang (1979:8-10)

(ii) When the adverbial *dou* ‘all’ appears before the predicate, *gen* is more likely to be treated as a conjunction as in (17). The insertion of any element between the two noun phrases will lead to the ungrammaticality of the sentence as illustrated in (18).

- | | | | | | | | |
|------|--|-------------------|------------|-------------------|-------------------|------------|-----------|
| (17) | Zhangsan | <i>gen</i> | Lisi | <u><i>dou</i></u> | <i>lai</i> | <i>le</i> | |
| | 張三 | 跟 | 李四 | 都 | 來 | 了 | |
| | Zhangsan | GEN | Lisi | all | come | CRS | |
| | ‘Both Old Zhang and Old Li have come.’ | | | | | | |
| (18) | *Zhangsan | <u><i>shi</i></u> | <i>gen</i> | Lisi | <u><i>dou</i></u> | <i>lai</i> | <i>de</i> |
| | 張三 | 是 | 跟 | 李四 | 都 | 來 | 的 |
| | Zhangsan | FOC | GEN | Lisi | all | come | DE |
- Tang (1979:8-9)

To sum up, Tang’s analysis shows that when *gen* conjoins two noun phrases, i.e. [NP₁ *gen* NP₂], they form a tight syntactic unit which allows no insertion of any element in between. However, when an element is inserted to modify the second noun phrase, *gen* no longer conjoins two noun phrases but serves as a preposition and this prepositional phrase is part of the predicate.

2.2.3 Teng (1970): Comitative construction versus phrasal coordinating construction

Teng (1970) compares and discusses the two usages of *gen*, i.e. as a conjunction and as a preposition.

2.2.3.1 *Gen* as a conjunction

Teng (1970:318) shows that when *gen* coordinates two nouns as in (19), the

sentence can be given two interpretations: it may refer to one single event whereby *gen* acts as a phrasal conjunction, or two separate events whereby *gen* acts as a sentential conjunction.

- (19) Xiaoming gen Xiaohua zuotian mai le yiben shu
 小明 跟 小華 昨天 買 了 一本 書
 Xiaoming GEN Xiaohua yesterday buy PFV one-CL book
 a. ‘Xiaoming and Xiaohua bought a book together yesterday.’ (phrasal)
 b. ‘Both Xiaoming and Xiaohua bought a book yesterday.’ (sentential)
Teng (1970:318)

2.2.3.2 *Gen* as a phrasal conjunction

Teng (1970:318) points out that recent literature has treated *gen* as a phrasal conjunction if:

- (i) *Yikuar* ‘together’ co-occurs with *gen* in the same clause as in (20). This sentence conveys a one-event interpretation. This is referred to as “situational constraint”.

- (20) Wang xiansheng gen Wang taitai yikuar dao Xianggang qu le
 王 先生 跟 王 太太 一塊 到 香港 去 了
 Wang Mr. GEN Wang Mrs. together reach Hong Kong go CRS
 ‘Mr. and Mrs. Wang went to Hong Kong together.’ Teng (1970:318)

- (ii) The semantics of the predicate, such as *pingxing* ‘to parallel’ and *chaojia* ‘to quarrel’, requires a subject of plural reference as in (21). This is referred to as “lexical constraint”.⁷

- (21) Zhongzheng lu gen Zhongshan lu pingxing.
 中正 路 跟 中山 路 平行
 Zhongzheng road GEN Zhongshan road parallel
 ‘Zhongzheng Road and Zhongshan Road are parallel.’ Teng (1970:320)

⁷ Lakoff and Peters (1967) based the notion of phrasal conjunction on this type of constraint.

(iii) The two coordinated noun phrases refer to two participants involved in a joint action in terms of “spatial togetherness”, “temporal togetherness” or “partnership” as in (22). This is referred to as “logical constraint”.

(22)	Zhangsan	gen	Lisi	yikuar	mai	le	yibu	che
	張三	跟	李四	一塊	買	了	一部	車
	Zhangsan	GEN	Lisi	together	buy	PFV	one-CL	car
	‘Zhangsan and Lisi bought one car together.’							Teng (1970:321)

Based on the above examples, Teng (1970:321) concludes that the usage of *gen* as a phrasal conjunction in (i) and (iii) should be subsumed under “joint participation”. There is a “common goal” involved: *dao Xianggang* ‘arrive in Hong Kong’ in (20) and *mai le yibu che* ‘buy one car’ in (22). In contrast, type (ii) being analyzed as a phrasal conjunction is actually a surface phenomenon whose underlying structure is “unidirectional” in nature. According to Teng (1970:321), type (ii) features the intrinsic reciprocity of the two coordinated nouns and there is no “common goal” involved.⁸

2.2.3.3 *Gen* as a preposition marking comitativity

Teng (1970:328ff) also discusses the usage of *gen* which serves to mark comitativity. In Chinese, the phrasal coordinating construction and the comitative construction are encoded by way of one surface structure as in (23).

⁸ In this thesis, we will build up on this notion of “common goal”. It will become clear that whether “common goal” is involved or not is important with respect to the interpretation and function of *gen*.

(23) Xiaoming gen Xiaohua yikuar chuqu le
 小明 跟 小華 一塊 出去 了
 Xiaoming GEN Xiaohua together out-go CRS

a. 'Xiaoming and Xiaohua went out together.'

b. 'Xiaoming went out with Xiaohua.' Teng (1970:330)

He was one of the first to mention that the syntactic position of modifying adverbials can help to distinguish phrasal coordinating construction as in (24a), (25a), (26a) from the comitative construction as in (24b), (25b), (26b). The elements in question include temporal adverbials, negators, and modals.

(24) Temporal adverbial

a. Xiaoming gen Xiaohua mingtian yikuar chuqu
 小明 跟 小華 明天 一塊 出去
 Xiaoming GEN Xiaohua tomorrow together out-go
 'Xiaoming and Xiaohua will go out together tomorrow.'

b. Xiaoming mingtian gen Xiaohua yikuar chuqu
 小明 明天 跟 小華 一塊 出去
 Xiaoming tomorrow GEN Xiaohua together out-go
 'Xiaoming will go out with Xiaohua tomorrow.' Teng (1970:329)

(25) Negator

a. Xiaoming gen Xiaohua bu yikuar chuqu
 小明 跟 小華 不 一塊 出去
 Xiaoming GEN Xiaohua NEG together out-go
 'Xiaoming and Xiaohua will not go out together.'

b. Xiaoming bu gen Xiaohua yikuar chuqu
 小明 不 跟 小華 一塊 出去
 Xiaoming NEG GEN Xiaohua together out-go
 'Xiaoming will not go out with Xiaohua.'

(26) Modal

a. wo gen ta keyi yikuar gongzuo le
 我 跟 他 可以 一塊 工作 了
 1SG GEN 3SG can together work CRS
 'He and I can work together now.'

b wo keyi gen ta yikuar gongzuo le
 我 可以 跟 他 一塊 工作 了
 1SG can GEN 3SG together work CRS
 ‘I can work with him now.’ Teng (1970:329)

Besides, some syntactic and semantic factors also help to distinguish phrasal conjunction from a preposition marking comitativity. The syntactic factors include the following:

(i) In topicalized constructions, the co-referent pronoun is plural if the nouns are conjoined by *gen* as in (27a), but it is singular if *gen* functions as a preposition as in (27b).

(27) a. Xiaoming gen Xiaohua a, tamen yiquar chuqu le
 小明 跟 小華 啊 他們 一塊 出去 了
 Xiaoming GEN Xiaohua PART 3PL together out-go CRS
 ‘Xiaoming and Xiaohua, THEY went out together.’
 b. Xiaoming a, ta gen Xiaohua yiquar chuqu le
 小明 啊 他 跟 小華 一塊 出去 了
 Xiaoming PART 3SG GEN Xiaohua together out-go CRS
 ‘Xiaoming, HE went out with Xiaohua.’ Teng (1970:330)

(ii) When two noun phrases are conjoined, the focus particle *shi* occurs after the two nouns as in (28a) but when *gen* is a preposition, *shi* can precede *gen* as in (28b).

(28) a. Xiaoming gen Xiaohua shi yiquar chuqu le
 小明 跟 小華 是 一塊 出去 了
 Xiaoming GEN Xiaohua FOC together out-go CRS
 ‘XIAOMING AND XIAOHUA went out together.’
 b. Xiaoming shi gen Xiaohua yiquar chuqu le
 小明 是 跟 小華 一塊 出去 了
 Xiaoming FOC GEN Xiaohua together out-go CRS
 ‘Xiaoming went out WITH XIAOHUA.’ Teng (1970:330)

The semantic factors include the following:

(i) Sentences (29a)-(29b) carry different truth values, as shown below.

- (29) a. Xiaoming gen Xiaohua mei yikuar chuqu
 小明 跟 小華 沒 一塊 出去
 Xiaoming GEN Xiaohua NEG together out-go
 ‘Xiaoming and Xiaohua did not go out together.’
- b. Xiaoming mei gen Xiaohua yikuar chuqu
 小明 沒 跟 小華 一塊 出去
 Xiaoming NEG GEN Xiaohua together out-go
 ‘Xiaoming did not go out with Xiaohua.’

Teng (1970:331-332)

In the coordinating construction (29a), the two referents, *Xiaoming* and *Xiaohua*, went out separately, not together. However, in the comitative construction (29b), the second referent, *Xiaohua*, went out but *Xiaoming* might or might not go out.

(ii) In coordinating constructions, the two nouns assume the same semantic role. In

(30a), both nouns are agents. In contrast, when *gen* is a preposition, it marks the “principal”⁹ noun in the sentence, as shown in (30b). Teng (1970:333) regards *Li taitai* ‘Mrs. Li’ as the principal noun in the sense that Mrs. Li initiates the event of going to Japan.

- (30) a. Li xiansheng gen Li taitai yao dao Riben qu
 李 先生 跟 李 太太 要 到 日本 去
 Li Mr. GEN Li Mrs. want reach Japan go
 ‘Mr. and Mrs. Li want to go to Japan.’
- b. Li xiansheng yao gen Li taitai dao Riben qu
 李 先生 要 跟 李 太太 到 日本 去
 Li Mr. want GEN Li Mrs. reach Japan go

⁹ We will show in Chapters 3 and 5 that the notion of “principality” is most obvious with motion verbs like *qu* ‘to go’.

‘Mr. Li wants to go to Japan with Mrs. Li.’

Teng (1970:332)

Although differences exist in the comitative construction and phrasal coordinating construction, Teng (1970:335) also points out that “common goal” is the shared characteristic of both phrasal coordinating construction and comitative construction. In (31a) and (31b), we know that both *Xiaoming* and *Xiaohua* did the same thing *chang le yizhi ge* ‘sing a song’, which is the “common goal” by Teng’s definition.

(31) a. *Gen* as a phrasal conjunction

Xiaoming gen Xiaohua zuotian yikuar chang le yizhi ge
小明 跟 小華 昨天 一塊 唱 了 一支 歌
Xiaoming GEN Xiaohua yesterday together sing PFV one-CL song
‘Xiaoming and Xiaohua sang a song together yesterday.’

b. *Gen* as a comitative marker

Xiaoming zuotian gen Xiaohua yikuar chang le yizhi ge
小明 昨天 跟 小華 一塊 唱 了 一支 歌
Xiaoming yesterday GEN Xiaohua together sing PFV one-CL song
‘Xiaoming sang a song with Xiaohua yesterday.’ Teng (1970:335)

2.2.3.4 Other interpretations of *gen* as a preposition

Besides marking comitativity, *gen* as a preposition can also show a unidirectional relationship between two referents as in (32a) and (32b).

(32) a. Xiaoming zuotian gen Xiaohua da le yige dianhua
小明 昨天 跟 小華 打 了 一個 電話
Xiaoming yesterday GEN Xiaohua hit PFV one-CL telephone
‘Xiaoming phoned Xiaohua yesterday.’

b. Laozhang yao gen Laoli jie qian
老張 要 跟 老李 借 錢
Laozhang want GEN Laoli borrow money
‘Laozhang wants to borrow money from Laoli.’ Teng (1970:342-343)

In this construction, the denoted action usually proceeds in a one-way fashion, i.e.

either from the first noun to the second or vice versa. The issues related to the functions and interpretations of *gen* will be further discussed to a comprehensive extent in Chapter 3.

2.2.4 Gu (2000): A more fine-grained analysis of the interpretations of *gen* as a preposition

Though Teng (1970) shows that *gen* as a preposition can indicate a unidirectional¹⁰ relationship, this notion needs to be further elaborated. Gu (2000) discusses the prepositional functions of *gen* in a more transparent fashion. He points out that *gen* basically displays three types of semantic orientations between the two referents in the sentence.

(i) The first type is a reciprocal relationship between the two referents as shown in

(33) (Gu 2000:39).

(33)	Zhangsan	changchang	gen	Lisi	dajia
	老張	常常	跟	李四	打架
	Zhangsan	often	GEN	Lisi	fight

‘Zhangsan often fights with Lisi.’

In this type of relationship, *Zhangsan* and *Lisi* share equal participation in the event *dajia* ‘fight’: *Zhangsan* hits *Lisi* and *Lisi* hits *Zhangsan*.

(ii) The second type features the goal towards which the action is directed, as illustrated in (34) (Gu 2000:39).

¹⁰ In Chapter 4, we will propose that those verbs which cause such a unidirectional relationship be termed “unidirectional” verbs.

(34) wo zuotian gen ni shuo guo najian shi
 我 昨天 跟 你 說 過 那件 事
 1SG yesterday GEN 2SG say EXP that-CL matter
 ‘I talked to you about that matter yesterday.’

In this type of relationship, *gen* introduces the recipient of the denoted event and the whole action is unidirectional in nature from the first NP to the second NP introduced by *gen*.

(iii) The third type highlights the source from which the action originates, as exemplified by sentence (35) (Gu 2000:39).

(35) ta zuotian gen wo jie le yiben shu
 他 昨天 跟 我 借 了 一本 書
 3SG yesterday GEN 1SG borrow PFV one-CL book
 ‘He borrowed one book from me yesterday.’

Gen in this type of relationship introduces the *source* of the denoted event. Like in (ii), the whole action is also unidirectional in nature but the direction goes from the second NP to the first NP.

2.2.5 Paris (2005a): A comparison between French *et/avec* and Mandarin *gen*

Though Tang (1979) and Teng (1970) propose tests to distinguish the coordinative and the comitative usages of *gen*, Paris (2005a) provides a more comprehensive discussion. She compares French *et/avec* (*cf.* section 2.2.5.1) with Chinese *gen* (*cf.* section 2.2.5.2).

2.2.5.1 The comitative and coordinative constructions in French

Paris (2005a) makes two claims: first, it is possible to distinguish between the

meaning of *et* ‘and’ and *avec* ‘with’ in French in one given construction; second, it is also possible, both from a syntactic and semantic point of view, to distinguish between the coordinative and the comitative usages of *gen*.

Paris (2005a) first starts with an examination of *et* and *avec* in French. She shows that:

- (i) From a syntactic point of view, (a) *avec* ‘with’ falls under the scope of negation (e.g., *Jean n’est pas parti à Séoul avec Marie* ‘John did not leave for Seoul with Mary’), in contrast to *et* ‘and’ as in *Jean et Marie ne sont pas partis à Séoul* ‘John and Mary did not leave for Seoul’, whereby only the predicate is negated, (b) two comitative phrases cannot co-occur simultaneously (e.g., **Jean est parti à Séoul avec Marie avec Jeanne* ‘*John left for Seoul with Mary with Janet’), (c) a relative clause can be based on a comitative phrase (e.g., *Cet étudiant_i [avec qui_i Jean est parti à Séoul] s’appelle Paul* ‘This student [with whom John left for Seoul] is called Paul’), not on a conjoined NP (e.g., **Cet étudiant_i [qui [Jean et e_i] sont partis à Séoul] s’appelle Paul* ‘*This student [who [John and e_i] left for Seoul] is called Paul’), (d) in a comitative phrase, the noun need not have the same quantificational properties as the other noun; a conjoined noun needs to share similar quantificational properties (cf. *Pierre s’est disputé avec chaque étudiant* ‘Peter quarreled with each student’ as opposed to **Pierre et chaque*

étudiant se sont disputés *‘Peter and each student quarreled’).

- (ii) From a semantic point of view, two conjoined NPs can give rise to a collective-event reading or a distributive-event reading (e.g., *Jean et Marie se promènent* ‘John and Mary are taking a walk’), while a comitative phrase gives rise to only one reading, i.e., a collective-event reading (cf. *Jean se promène avec Marie* ‘John is taking a walk with Mary’).

2.2.5.2 The case of Chinese *gen*

Paris (2005a) then examines the syntax and semantics of *gen* in Chinese and points out that *gen* can function as a conjunction and as a preposition marking comitativity. However, she notes that, as suggested in previous analyses, whether *gen* is a conjunction or a comitative marker is not clear as in sentence (36).

(36) Zhangsan *gen* Mali chaojia
張三 跟 瑪莉 吵架
Zhangsan GEN Mali quarrel

a. ‘Zhangsan and Mali quarrel.’

b. ‘Zhangsan quarrels with Mali.’

Paris (2005a:1)

Paris (2005a) proposes a number of syntactic and semantic tests to disambiguate these two functions of *gen*. The syntactic tests include:

- (i) *Clefting*

The clefted element can be either the whole coordinating construction as in sentence (37) or simply the prepositional phrase as in sentence (38). This shows that these two structures are manifested by one surface form.

(37) shi [Zhangsan gen Mali] chaojia de, bu shi [Lisi gen Meifang]
 是 張三 跟 瑪莉 吵架 的 不 是 李四 跟 梅芳
 FOC Zhangsan GEN Mali quarrel DE, NEG FOC Lisi GEN Meifang
 ‘It is [Zhangsan and Mali] who quarreled, not Lisi and Meifang.’

(38) Zhangsan shi [gen Mali] chaojia de, bu shi [gen Meifang]
 張三 是 跟 瑪莉 吵架 的 不 是 跟 梅芳
 Zhangsan FOC GEN Mali quarrel DE, NEG FOC GEN Meifang
 ‘It is with Mali that Zhangsan quarreled, but not with Meifang.’

Paris (2005a:6)

(ii) *Anaphora*

When *gen* conjoins two singular noun phrases, the following co-referent pronoun has to be plural as in (39). However, when the conjoined phrase is broken by inserted elements (i.e. *gen* functions as a preposition), the following pronoun is usually singular as in (40).

(39) [Zhangsan gen Mali] meiyou chaojia, tamen hao de hen
 張三 跟 瑪莉 沒有 吵架 他們 好的 很
 Zhangsan GEN Mali NEG quarrel 3PL good DE very
 ‘[Zhangsan and Mali] did not quarrel. They are on excellent terms.’

(40) [Zhangsan] meiyou [gen Mali] chaojia, ta gen Mali hen hao
 張三 沒有 跟 瑪莉 吵架 他 跟 瑪莉 很 好
 Zhangsan NEG GEN Mali quarrel 3SG GEN Mali very good
 ‘[Zhangsan] did not quarrel [with Mali]. They are on excellent terms.’

Paris (2005a:6)

(iii) *Relativization*

When *gen* conjoins two noun phrases as in (41), relativization of the first coordinand leads to the ungrammaticality of the sentence as shown by sentence (42). However, when *gen* is a preposition, relativization of the first coordinand is unproblematic as in (43)-(44).

- (41) [mianbao gen pingguo] dou zai zhuozi shang
 麵包 跟 蘋果 都 在 桌子 上
 bread GEN apple all LOC table up
 ‘Both bread and apple are on the table.’
- (42) *[(gen pingguo dou zai zhuozi shang de) mianbao] hen ying
 跟 蘋果 都 在 桌子 上 的 麵包 很 硬
 GEN apple all LOC table up DE bread very hard
- (43) mianbao yijing gen pingguo yiqi fangzai zhuozi shang le
 麵包 已經 跟 蘋果 一起 放在 桌子 上 了
 bread already GEN apple together put-LOC table up CRS
 ‘The bread has already been put on the table together with the apples.’
- (44) [(gen pingguo yiqi fangzai zhuozi shang de) mianbao] hen ying
 跟 蘋果 一起 放在 桌子 上 的 麵包 很 硬
 GEN apple together put-LOC table up DE bread very hard
 ‘The bread which is put on the table together with the apples is hard.’
- Paris (2005a:6-7)

Semantically, when *gen* functions as a conjunction, a sentence such as (45) will be given two interpretations—a distributive-event reading, as in (46) or a collective-event reading, as in (47)¹¹.

- (45) Zhangsan gen Lisi kan le liangben shu
 張三 跟 李四 看 了 兩本 書
 Zhangsan GEN Lisi see PFV two-CL book
 ‘Zhangsan and Lisi read two books.’
- (46) Zhangsan gen Lisi dou kan le liangben shu
 張三 跟 李四 都 看 了 兩本 書
 Zhangsan GEN Lisi all see PFV two-CL book
 ‘Both Zhangsan and Lisi read two books.’ (*dou* suggests a distributive reading)
- (47) Zhangsan gen Lisi yiqi kan le liangben shu
 張三 跟 李四 一起 看 了 兩本 書
 Zhangsan GEN Lisi together see PFV two-CL book
 ‘Zhangsan read two books with Lisi.’ (*yiqi* suggests a collective reading)
- Paris (2005a:7)

¹¹ *Gen* in this sentence is treated as a preposition by Paris (2005a) while we will show that *gen* in this type of context can be identified as a preposition or as a phrasal conjunction.

2.3 Summary and further issues

In this section, a summary of previous studies on *gen* is provided, followed by an outline of the issues that will be further discussed in Chapters 3 and 5.

2.3.1 Summary

Gen was originally a noun referring to “the heel of the foot” (Gu 2000). As shown in Paris (2005b), the usage of *gen* as a noun in present-day speech is often attested in nominal compounds like *jiaogen* ‘the heel of the foot’ and *xiegen* ‘the heel of a shoe’.

Gen later started to develop as a verb meaning ‘to follow’ (see Liu and Peyraube 1994:194). When *gen* functions as a verb, it constitutes the predicate of the sentence, as illustrated in (48).

- (48) bie lao gen zhe wo
 別 老 跟 著 我
 NEG always GEN DUR 1SG
 ‘Don’t always follow me.’

Gen in the above sentence is treated as a verb because it forms the predicate of the sentence and takes the durative aspect marker *zhe* (*cf.* Paris 2005b).

When *gen* functions as a preposition, it can serve to mark comitativity, reciprocity and unidirectionality. When *gen* functions as a conjunction, it serves to conjoin two NPs to form a larger syntactic unit. However, there are two levels which need to be distinguished. When *gen* co-occurs with *dou* ‘all’, *gen* serves to conjoin the

two coordinands at a sentential level. *Gen* in this sense is a sentential conjunction.

When *gen* co-occurs with *yiqi* ‘together’, *gen* serves to conjoin the two coordinands at a phrasal level and is treated as a phrasal conjunction.

It is important to note that the function of *gen* is not always clear-cut. It can be ambiguous in some cases. A number of tests have proven that it is possible to draw a distinction between *gen* as a preposition and *gen* as a conjunction and that it is also possible to distinguish a phrasal conjunction from a sentential conjunction.

2.3.2 Issues to be further considered

Previous studies mostly center on discerning ambiguous functions of *gen*. However, given the multifunctional usages of *gen*, it is worth exploring the syntactic distribution of *gen* and the nature of the nouns that either precede or follow *gen* with a view to uncovering the nature of *gen* in each function. These issues will be taken up in Chapter 3. We will show in Chapter 5 that it is possible to establish a continuum whereby different types of verbs can yield different behaviors of *gen*. These findings will be corroborated and substantiated by the syntactic position of modifying elements and the co-occurrence of adverbial elements such as *dou* ‘all’ and *yiqi* ‘together’.