

CHAPTER FOUR

Verbal Semantic Framework Proposed in This Study

Before showing how different types of verbs can yield variable behaviors of *gen* (*cf.* Chapter 5), we will first present a review of previous studies on verb classification in section 4.1, briefly point out the inadequacies in these analyses with respect to the interpretations and functions of *gen* in section 4.2 and propose our own verbal semantic framework in section 4.3.

4.1 Previous studies on verb classification

There have been quite a number of studies devoted to the nature and classification of verbs. In this section, an overview of previous verbal semantic frameworks is provided. We begin with studies on English verb classification in section 4.1.1 and go on to studies on Chinese verb classification in section 4.1.2.

4.1.1 English verb classification

Vendler's (1967) verb classification is presented in section 4.1.1.1, followed by Levin's (1993) classification of verbs in section 4.1.1.2.

4.1.1.1 Vendler's (1967) classification of English verbs

To shed light on different behaviors of verbs in terms of the co-occurrence with the progressive form “-ing”, the two temporal markers *in* and *for*, Vendler (1967:97-121) proposes to divide English verbs into four main categories:

- (i) “State” verbs: *know, believe, love, think, understand, possess.*
- (ii) “Activity” verbs: *run, push a cart, think about, gaze upon, scrutinize, swim, pull.*
- (iii) “Accomplishment” verbs: *write a novel, make a chair, grow up, get ready, read a novel, recover from an illness.*
- (iv) “Achievement” verbs: *die, reach the summit, win the race, find, start, lose, realize, see, notice.*

Activity and accomplishment verbs can occur with the progressive form while state and achievement verbs cannot. Compare the grammaticality of (1a)-(1b) with the ungrammaticality of (2a)-(2b):

- (1) a. I am running. (Activity)
- b. He is drawing a circle. (Accomplishment)
- (2) a. * I am knowing him very well. (State)
- b. *He is finding the treasure. (Achievement)

The progressive aspect is what allows the above division, i.e. (1) and (2).

Furthermore, the occurrence of the two temporal markers *for* and *in* can help to distinguish activity verbs from accomplishment verbs. While activity verbs take a complement introduced by *for* (as an answer to *how long*), as in (3), accomplishment verbs only take a complement introduced by *in* (as an answer to *how long did it take*), as in (4).

- (3) Q: How long did you run?
- A: I ran for an hour. (Activity)
- (4) Q: How long did it take to draw the circle?
- A: He drew it in one hour. (Accomplishment)

On the other hand, “achievements” occur at a single moment, while “states” last for a period of time. They can be distinguished through different question types (*cf. at what time* and *for how long*). Consider sentences (5) and (6).

- (5) Q: At what time did you reach the top?
 A: At noon sharp. (Achievement)
- (6) Q: For how long did you love her?
 A: For three years. (State)

Table 4.1 Vendler’s (1967) English verb classification

	Progressive	<i>for</i>	<i>in</i>	<i>At what time</i>	<i>For how long</i>
State	-	+	-	-	+
Activity	+	+	-	-	+
Accomplishment	+	+	+	-	-
Achievement	-	-	+	+	-

4.1.1.2 Levin’s (1993) English verb classification

Levin (1993) investigates the syntactic and semantic properties of English verbs. Her working assumption is that the behavior of a verb, particularly with respect to the expression and interpretation of its arguments, is to a large extent determined by its meaning. For example, *spray* and *load* may subcategorize for their arguments in two different ways, as illustrated in the following examples (7a)-(7b) and (8a)-(8b).

- (7) a. Sharon sprayed water on the plants.
 b. Sharon sprayed the plants with water
- (8) a. The farmer loaded apples into the cart.
 b. The farmer loaded the cart with apples. Levin (1993:2)

However, some verbs which are apparently related to *spray* and *load* only have access to one option. Consider the following sentences (9) and (10).

- (9) a. Monica covered the baby with a blanket.
 b. *Monica covered a blanket over the baby.
- (10) a. Carla poured lemonade into the pitcher.
 b. *Carla poured the pitcher with lemonade. Levin (1993:2)

Consider another contrast with *break* and *appear*.

- (11) a. The window broke.
 b. The little boy broke the window.
- (12) a. A rabbit appeared out of the magician's hat.
 b. *The magician appeared a rabbit out of his hat. Levin (1993:3)

The verb *break* can be used in both transitive and intransitive usage while the verb *appear* can be used only as an intransitive verb.

In addition, some nouns can be used as a verb as in (13) while others cannot as in

- (14).
- (13) a. I will send him an email later.
 b. I will email him later.²³
- (14) a. I will go to the church.
 b. *I church the money. Levin (1993:2-3)

Taken altogether, Levin (1993) bases her classification of verbs upon their subcategorization frame, argument structure and other syntactic patterns. Her classification is thorough and detailed, including 57 types of verbs in total.

4.1.2 Chinese verb classification

The studies on Chinese verb classification which are presented in this section include Chao's (1968), Teng's (1975) and Her's (1990) classifications.

²³ I have replaced the outdated word "modem" in Levin's example by the word "email" to make this point explicit to the reader.

4.1.2.1 Chao's (1968) Chinese verb classification

Chao's verb classification (1968:663-748) has been the foundation for further studies on Chinese verbs. His framework basically incorporates three criteria: syntactic transitivity versus intransitivity, semantic stativity²⁴ versus activity and co-occurrence constraints. Chao's (1968) classification is summarized in Table 4.2.

Table 4.2 Chao's (1968) Chinese verb classification

Intransitive	Verb
1. Action	<i>lai</i> 'to come'
2. Quality	<i>da</i> 'to be big'
3. Status	<i>bing</i> 'to be sick'
Transitive	Verb
4. Action	<i>chi</i> 'to eat'
5. Quality	<i>ai</i> 'to love'
6. Classificatory	<i>xing</i> 'to be surnamed'
7. The copula <i>shi</i>	<i>shi</i> 'to be'
8. <i>you</i> 'to have'	<i>you</i> 'to have, to exist'
9. Modal	<i>hui</i> 'can'

The co-occurrence constraint includes the following:

- (i) Aspect marker: *le, zhe, guo*

All intransitive verbs can take the aspect marker while some transitive verbs cannot. For example, the classificatory, the copula *shi*, modals cannot take the aspect *zhe*.

- (ii) Negative marker: *bu, mei, bie*

Most verbs can co-occur with negators *bu* and *mei* while intransitive quality

²⁴ Stativity here includes "status", and "quality".

verbs, classificatory verbs, *shi*, *you* and modals do not co-occur with *bie*.

(iii) Degree adverbial *hen* ‘very’

Both intransitive and transitive action verbs, classificatory verbs cannot co-occur with degree adverbial *hen* ‘very’.

(iv) Quantificational properties like *sanchi* ‘three meters’ and numeral occurrences like *yihui* ‘one time’

Classificatory verbs, the copula and modals cannot be modified by the quantificational properties. Besides, *you* is not compatible with *sanchi*. On the other hand, intransitive quality verbs do not co-occur with *yihui*.

(v) Reduplicative form

Only intransitive and transitive action verbs can be reduplicated.

(vi) Imperative form

Only intransitive and transitive action verbs can be employed in an imperative form.

(vii) Interrogative construction *lai bu lai*

Except for *you*, other verbs can be used in such interrogative construction.

4.1.2.2 Teng’s (1975) Chinese verb classification

Teng (1975:50-52) follows Chafe (1970) and divides Chinese verbs into three main categories:

- (i) “Action” verbs: *da* ‘to beat’, *pao* ‘to run’, *zuo* ‘to sit’ and *xie* ‘to write’.
- (ii) “State” verbs: *gao* ‘to be tall’, *pang* ‘to be fat’, *ben* ‘to be stupid’, and *qiong* ‘to be poor’.
- (iii) “Process” verbs: *si* ‘to die’, *chen* ‘to sink’, and *hua* ‘to melt’.

In his classification framework, *agent* is associated with Action verbs because Action verbs “specify what *agent* can [...] perform willfully and voluntarily” (Teng 1975:50). In contrast, *patient* is associated with State verbs. Between Action and State verbs, Teng thinks that Process verbs “characterize neither activity nor state, but change-of-state” (Teng 1975:51).

Teng (1975) shows that only Action verbs may occur in the progressive form.

- (15) ta zai ku.
 他 在 哭
 3SG PROG cry
 ‘He is crying’

State and Process verbs cannot occur in the progressive form.

- (16) State verbs
 *ta zai xiaoxin
 他 在 小心
 3SG PROG careful

- (17) Process verbs
 *ta zai si
 他 在 死
 3SG PROG die

Besides, only Action verbs may be embedded under such verbs as *wangle* ‘to forget’ and *jide* ‘to remember’.

- (18) ta wang le wen Zhangsan
 他 忘 了 問 張三
 3SG forget PFV ask Zhangsan
 ‘He forgot to ask Zhangsan’

State verbs and Process verbs cannot be embedded in such a context.

(19) State verbs

- *ta wang le xihuan Zhang xiaojie
 他 忘 了 喜歡 張 小姐
 3SG forget PFV like Zhang Miss

(20) Process verbs

- *ta wang le diao xia qu
 他 忘 了 掉 下 去
 3SG forget PFV fall down go

However, State verbs and Process verbs are different in that:

(i) Only State verbs may be modified by *hen* ‘very’.

- (21) ta hen shou
 他 很 瘦
 3SG very slim
 ‘He is very slim.’

(22) State verbs

- *ta hen shang
 他 很 傷
 3SG very injured

(ii) Only State verbs may be intensified through reduplication.

- (23) ta gaogao de
 他 高高 的
 3SG tall-RED DE
 ‘He is tallish.’

(24) Process verbs

- *chuan chengcheng de
 船 沉沉 的
 boat sink-RED DE

(iii) Only Process verbs may be negated by *meiyou* ‘not’.

(25) men meiyou huai
 門 沒有 壞
 door NEG bad
 ‘The door did not break’

(26) State verbs

*ta meiyou keqi.
 他 沒有 客氣
 3SG NEG polite

(iv) Only Process verbs may be subject to numeral occurrences.

(27) ta xing le liang ci
 他 醒 了 兩 次
 3SG wake PFV two times
 ‘He woke up twice.’

(28) State verbs

*ta gaoxing liang ci
 他 高興 兩 次
 3SG happy two times

4.1.2.3 Her’s (1990) Chinese verb classification

Her (1990) bases his Chinese verb classification on verb subcategorization and grammatical relations in the perspective of Lexical Functional Grammar, differing from previous analyses which focus on case roles and constituents. Her (1990:120) points out the “importance of the traditional distinction of active versus stative verbs” but also shows that a “simple distinction between stativity and activity may not be adequate for Mandarin verbs”. He proposes (1990:121) a four-way distinction based on two binary features, i.e. ACTIVE and PROCESS, and these verbs are State, Process, Action and Action-process respectively.

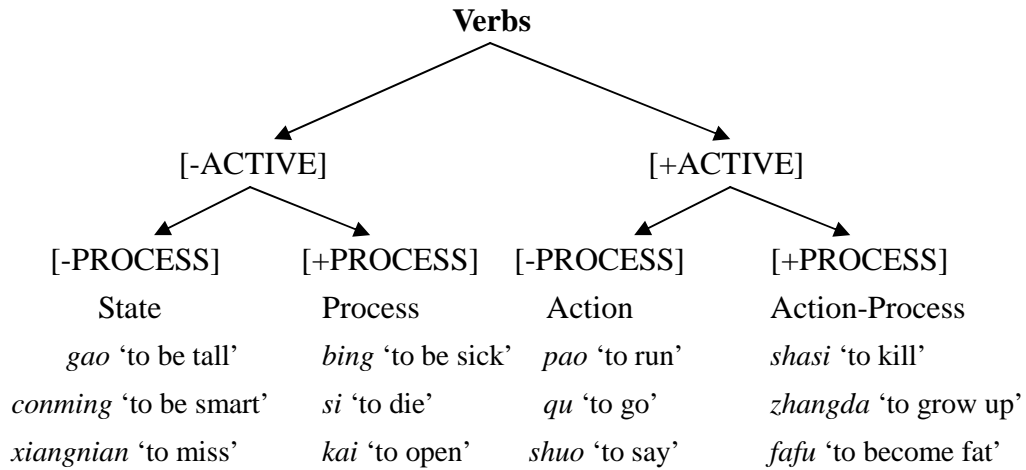


Figure 4.1 Her's classification of Chinese verbs

4.2 Inadequacies in the previous analyses

In the exploration into the interpretations of *gen*, we find that none of the frameworks offers an adequate account. For example, though Vendler's framework distinguishes between accomplishment and achievement verbs, we find that both types of verbs do not make a distinction with respect to the interpretations of *gen*. First, consider the achievement verb *kanjian* 'to see'. When *gen* and *kanjian* co-occur in a sentence, *gen* can be interpreted in three ways. It can serve as a preposition marking comitativity as in (29), as a phrasal conjunction as in (30), or as a sentential conjunction as in (31).

- (29) Zhangsan zuotian gen Lisi yiqi kanjian nawei
 張三 昨天 跟 李四 一起 看見 那位
 Zhangsan yesterday GEN Lisi together see that-CL
 diangying mingxing
 電影 明星
 movie star
 'Zhangsan, together with Lisi, saw that movie star yesterday.'

(30) Zhangsan gen Lisi zuotian yiqi kanjian nawei
張三 跟 李四 昨天 一起 看見 那位
Zhangsan GEN Lisi yesterday together see that-CL
diangying mingxing
電影 明星
movie star
‘Zhangsan and Lisi saw that movie star together yesterday.’

(31) Zhangsan gen Lisi zuotian dou kanjian nawei
張三 跟 李四 昨天 都 看見 那位
Zhangsan GEN Lisi yesterday all see that-CL
diangying mingxing
電影 明星
movie star
‘Both Zhangsan and Lisi saw that movie star yesterday.’

We find the same case with accomplishment verbs. For example, when *gen* and *du le yiben xiaoshuo* ‘read a novel’ co-occur in a sentence, *gen* can be interpreted in exactly the same ways as in (29)-(31). It can serve as a preposition marking comitativity as in (32), as a phrasal conjunction as in (33), and as a sentential conjunction as in (34).

(32) Zhangsan zuotian gen Lisi yiqi du le
張三 昨天 跟 李四 一起 讀 了
Zhangsan yesterday GEN Lisi together read PFV
yiben xiaoshuo
一本 小說
one-CL novel
‘Zhangsan read a novel with Lisi yesterday.’

(33) Zhangsan gen Lisi zuotian yiqi du le
張三 跟 李四 昨天 一起 讀 了
Zhangsan GEN Lisi yesterday together read PFV
yiben xiaoshuo
一本 小說
one-CL novel
‘Zhangsan and Lisi read a novel together yesterday.’

(34) Zhangsan gen Lisi zuotian dou du le
張三 跟 李四 昨天 都 讀 了
Zhangsan GEN Lisi yesterday all read PFV
yiben xiaoshuo
一本 小說
one-CL novel
‘Both Zhangsan and Lisi read a novel yesterday.’

Levin (1993) proposes a detailed classification framework but her classification is too complicated for the purpose of this thesis. For example, some of her verb classifications are redundant and unnecessary with regard to the interpretation of *gen*. To cite but a few examples, *put* and *pour*, under the label “Verbs of Putting”, are classified as different types of verbs. However, both types of verbs exhibit the same behavior with respect to the function of *gen*. Similarly, *eat* and *chew*, though under the label “Verbs of Ingesting”, are treated as different types of verbs but both verbs show no distinction in terms of the behavior of *gen*.

Chao’s (1968) analysis distinguishes between intransitive quality verbs like *da* ‘to be big’ and transitive quality verbs like *ai* ‘to love’ but we find that both verbs behave the same with respect to the interpretations of *gen*: *gen* in co-occurrence with these two verbs can serve only as a sentential conjunction. On the other hand, he subsumes *lai* ‘to come’ and *zuo* ‘to sit’ under the label “Intransitive Action” verbs but we will show that these two verbs behave differently with respect to the behavior of *gen*. Consider the following examples (35) and (36).

(35) wo zuotian gen ta lai taibei
 我 昨天 跟 他 來 台北
 1SG yesterday GEN 3SG come Taipei

a. I followed him to Taipei.

b. I came to Taipei with him.

(36) wo zuotian gen ta zuo zai zheli
 我 昨天 跟 他 坐 在 這裡
 1SG yesterday GEN 3SG sit LOC here

‘I sat here with him yesterday.’

In (35) whereby *gen* co-occurs with motion verbs *lai* ‘to come’, *gen* is likely to be perceived two ways, either as a verb or as a preposition. However, when *gen* co-occurs with non-motion verbs *zuo* ‘to sit’, *gen* can only be analyzed as a preposition, as demonstrated in sentence (36).

Teng’s (1975) three-way classification, Action, State, Process, and Her’s (1990) four-way classification, Action, State, Process, Action-process, also fail to capture some idiosyncratic patterns exhibited by *gen*. Take Her’s framework as an example. In his classification, *shuo* ‘to say’ and *qu* ‘to go’ are subsumed under Action verbs. However, we find that when *gen* co-occurs with *shou* and *qu* respectively, *gen* will be interpreted differently. Consider the following examples (37)-(38).

(37) wo zuotian gen ta qu taibei
 我 昨天 跟 他 去 台北
 1SG yesterday GEN 3SG go Taipei

a. ‘I followed him to Taipei yesterday.’

b. ‘I went to Taipei with him yesterday.’

(38) wo zuotian gen ta shuo le yixie hua
 我 昨天 跟 他 說 了 一些 話
 1SG yesterday GEN 3SG say PFV some word

‘I said some words to him yesterday.’

In example (37), *gen* co-occurs with a motion verb *qu*, and *gen* is likely to be analyzed as a verb or as a preposition marking comitativity while *gen* in (38) co-occurs with a non-motion verb *shuo*, *gen* is perceived only as a preposition introducing the goal of the denoted event, as clearly illustrated by the English preposition *to*.

Accordingly, in the following sections, we will propose our own verb classification framework in order to provide a more adequate account for the various interpretations of *gen*.

4.3 Our own verb classification framework

We will propose our own framework in this section with the consideration of earlier classifications of English and Chinese verbs. In Chapter 5, we will show how such a framework accounts for our posited continuum whereby the behavior of *gen* is determined by the verb type it co-occurs with.

In our classification framework, verbs are classified along the following parameters:

- (i) Verbal semantics: verbs are classified in terms of (a) stativity, (b) reciprocity, and (c) motion.
- (ii) Verb subcategorization: verbs are distinguished according to whether they take an object, a clausal complement or they are simply a VO compound.

(iii) Aspectual variations: verbs are also differentiated in terms of whether they are marked for aspect.

We will explain these three parameters in the following sections.

4.3.1 Verbal semantics

This framework basically takes a binary-distinction approach toward verbal semantics and posits that verbs can be classified into:

- (i) stative vs. non-stative verbs
- (ii) reciprocal vs. non-reciprocal verbs
- (iii) motion vs. non-motion verbs.

4.3.1.1 Stative/Non-stative verbs

As has been shown in previous classification frameworks (e.g. Vendler 1967, Chao 1968, Teng 1975, Her 1990 among others), verbs can be basically divided into stative and non-stative verbs. Stative verbs usually refer to mental states or physical characteristics and do not involve any action. They include verbs like *xihuan* ‘to like’, *haipa* ‘to be afraid’, *xiwang* ‘to hope’, *yongyou* ‘to possess’, *renwei* ‘to think’, *gao* ‘to be tall’, *qiong* ‘to be poor’, *kaixin* ‘to be happy’, *hao* ‘to be good’, and *man* ‘to be slow’. Consider sentences (39) and (40).

(39) The stative verb *xihuan* ‘to like’ refers to a mental state.

Zhangsan	<u>xihuan</u>	youyong
張三	喜歡	游泳
Zhangsan	like	swimming

‘Zhangsan likes swimming.’

(40) The stative verb *gao* ‘to be tall’ refers to a physical trait.

Zhangsan	hen	<u>gao</u>
張三	很	高
Zhangsan	very	tall

‘Zhangsan is very tall.’

Stative verbs also include copular predicates which mainly consist of nouns such

as *xuesheng* ‘student’, *laoshi* ‘teacher’ introduced by the copula *shi* ‘be’, as in (41).

(41) Zhangsan	<u>shi</u>	laoshi
張三	是	老師
Zhangsan	COP	teacher

‘Zhangsan is a teacher.’

Non-stative verbs, however, constitute a complex category, which encompasses

different types of verbs, e.g., motion verbs such as *lai* ‘to come’, *qu* ‘to go’ as in (42a),

non-motion verbs such as *tiaowu* ‘to dance’, *he* ‘to drink’, *xie* ‘to write’ as in (42b),

unidirectional verbs²⁵, such as *xue* ‘to learn’, *jie* ‘to borrow’ as in (42c), *jiang* ‘to speak’ as in (42d).

- | | | | | |
|---------|----------|-----------|---------|-----|
| (42) a. | Zhangsan | <u>qu</u> | xuexiao | le |
| | 張三 | 去 | 學校 | 了 |
| | Zhangsan | go | school | CRS |
- ‘Zhangsan has gone to school.’
- | | | | | | |
|----|-----|------------|-----|--------|--------|
| b. | wo | <u>xie</u> | le | yifeng | xin |
| | 我 | 寫 | 了 | 一封 | 信 |
| | 1SG | write | PFV | one-CL | letter |
- ‘I wrote a letter.’
- | | | | | | | | |
|----|------|-----|-----|------------|-----|--------|-----|
| c. | Lisi | gen | wo | <u>jie</u> | le | yizhi | bi |
| | 李四 | 跟 | 我 | 借 | 了 | 一枝 | 筆 |
| | Lisi | GEN | 1SG | borrow | PFV | one-CL | pen |

²⁵ As mentioned in Chapter 3, “unidirectional” is the term we use in this thesis to refer to those verbs which entail a denoted event happening in a one-way fashion between two referents preceding and following *gen*. The directionality of the event is either source-oriented such as *jie* ‘borrow’ or goal-oriented such as *shuo* ‘say’.

‘Lisi borrowed a pen from me.’

- d. Lisi gen wo jiang le yixie hua
李四 跟 我 講 了 一些 話
Lisi GEN 1SG speak PFV some word
‘Lisi spoke a few words to me.’

4.3.1.2 Reciprocal/Non-reciprocal verbs

Following Lichtenberk (1994), reciprocal verbs are defined as requiring two (or more) participants involved in the same action. These two participants may either act one upon the other, e.g., *chaojia* ‘to quarrel’, *xiangai* ‘to love each other’ as in (43) or take part in the same action together, e.g., *taolun* ‘to discuss’, *hezuo* ‘to collaborate’ as in (44). Verbs like *taolun* and *hezuo* are termed “collective” verbs in this study²⁶.

- (43) Zhangsan gen Lisi changchang chaojia
張三 跟 李四 常常 吵架
Zhangsan GEN Lisi often quarrel
‘Zhangsan and Lisi often quarrel with each other.’

- (44) Zhangsan gen Lisi changchang yiqi taolun zuoye
張三 跟 李四 常常 一起 討論 作業
Zhangsan GEN Lisi often together discuss homework
‘Zhangsan and Lisi often discuss their homework together.’

As mentioned in Liu (1999:123), “in Mandarin, the common way of marking reciprocity is to add an adverbial (e.g., *xianghu* or *huxiang* ‘mutually’ in front of the verb).” Thus, verbs that are originally not reciprocal can be made reciprocal through the addition of such an adverbial. Compare sentences (45a)-(45b).

- (45) a. Zhangsan taoyan Lisi
張三 討厭 李四

²⁶ These verbs are termed “collective” verbs, based on Frajzyngier (1999). They are treated as one type of reciprocal verbs and we find that they also behave like reciprocal verbs with respect to the interpretation of *gen*.

- Zhangsan dislike Lisi
 ‘Zhangsan dislikes Lisi.’
- b. Zhangsan gen Lisi huxiang taoyan
 張三 跟 李四 互相 討厭
 Zhangsan GEN Lisi mutual dislike
 ‘Zhangsan and Lisi dislike each other.’

Reciprocal verbs can be stative in nature as in (46a) or non-stative as in (46b).²⁷

- (46) a. Zhangsan gen Lisi huxiang xihuan
 張三 跟 李四 互相 喜歡
 Zhangsan GEN Lisi mutual like
 ‘Zhangsan and Lisi like each other.’
- b. Zhangsan gen Lisi huxiang chaoxiao
 張三 跟 李四 互相 嘲笑
 Zhangsan GEN Lisi mutual ridicule
 ‘Zhangsan and Lisi laugh at each other.’

A certain type of stative reciprocal verb is headed by the copula *shi* taking a nominal predicate such as *fuqi* ‘couple’, *tongxue* ‘classmate’ and *pengyou* ‘friend’. These nominal predicates serve to establish a “converse”²⁸ relationship between the two referents conjoined by *gen* (see Lichtenberk 1999). Consider sentence (47).

- (47) Zhangsan gen Mali shi fuqi
 張三 跟 瑪莉 是 夫妻
 Zhangsan GEN Mali COP couple
 ‘Zhangsan and Mali are husband and wife.’

4.3.1.3 Motion/Non-motion verbs

Motion verbs involve spatial movement from one place to another while non-motion verbs do not feature any movement. Motion verbs include verbs like *qu*

²⁷ We will show in Chapter 5 that stative and non-stative reciprocals behave the same with respect to the interpretation of *gen*.

²⁸ When two referents are in a converse relationship, “A is related in a certain way to B, and B is conversely related to A” (Lichtenberk 1999:34).

‘to go’, *lai* ‘to come’, and *dao* ‘to reach’ as in (48). Non-motion verbs include verbs like *chi* ‘to eat’, *shui* ‘to sleep’, *zuo* ‘to sit’, *shuo* ‘to say’ and *jie* ‘to borrow’ as in (49).

(48) Zhangsan dao taibei le
 張三 到 台北 了
 Zhangsan reach Taipei CRS
 ‘Zhangsan has arrived in Taipei.’

(49) Zhangsan zuo zai bandeng shang
 張三 坐 在 板凳 上
 Zhangsan sit LOC bench up
 ‘Zhangsan sits at the bench.’

It is important to point out that certain non-motion verbs like *shuo* ‘to say’ and *jie* ‘to borrow’ behave differently with respect to the interpretations of *gen* as opposed to other non-motion verbs like *zuo* ‘to sit’ and *shui* ‘to sleep’. As illustrated in Chapter 3 (cf. section 3.2.2), when *gen* co-occurs with verbs like *shuo* ‘to say’ and *jie* ‘to borrow’, *gen* can mark a unidirectional relationship between the two referents. Accordingly, these verbs are labeled “unidirectional” verbs for the purpose of this thesis. Unidirectional verbs can be further divided into two types of verbs:

(i) Source-oriented verbs: *jie* ‘to borrow’, *xue* ‘to learn’, *lesuo* ‘to extort’, *mai* ‘to buy’, and *yao* ‘to ask for’.

(50) wo gen fuwusheng yao le yi bei shui
 我 跟 服務生 要 了 一 杯 水
 1SG GEN waiter ask-for PFV one cup water
 ‘I asked the waiter to give me a cup of water.’

(ii) Goal-oriented verbs: *shuo* ‘to say’, *jieshi* ‘to explain’, *xuanbu* ‘to announce’, *jieshao* ‘to introduce’, *tiqu* ‘to mention’ and *baogao* ‘to report’.

(51) wo gen dajia xuanbu le zhege hao xiaoxi
 我 跟 大家 宣佈 了 這個 好 消息
 1SG GEN everybody announce PFV this-CL good news
 ‘I announced the good news to everybody.’

4.3.1.4 Summary

Section 4.2.1 can be summarized in the form of Figure 4.2.

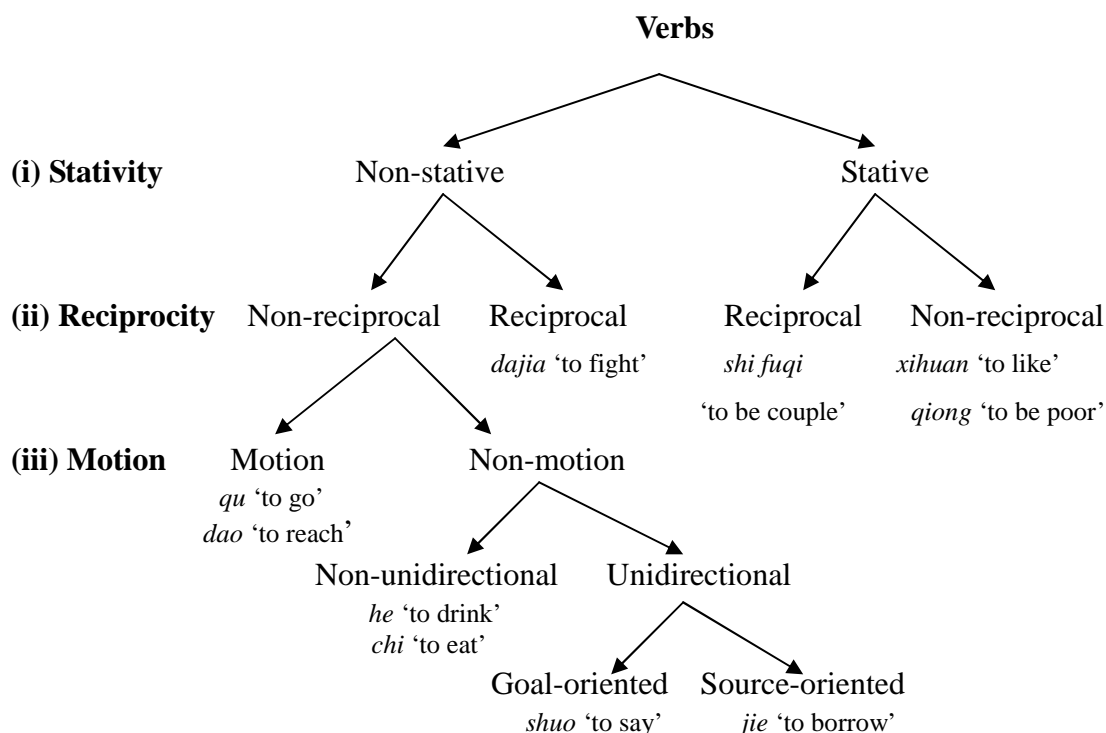


Figure 4.2 Preliminary verbal semantic framework in this thesis

4.3.2 Verb subcategorization

In terms of subcategorization frame, verbs can be basically defined as taking an object or not, i.e. transitive or intransitive.

Stative verbs which are intransitive encompass verbs like *gao* ‘to be tall’ as in (52), *xiao* ‘to be small/little’, *hao* ‘to be good’, *huai* ‘to be bad’, *kuai* ‘to be fast’, and *man* ‘to be slow’. Such verbs can also occur in “complex stative verb constructions”

(Li and Thompson 2005:623) as in (53).

(52) ta hen gao
 他 很 高
 3SG very tall
 ‘He is very tall.’

(53) ta zoulu zou de hen man
 他 走路 走 得 很 慢
 3SG walk walk DE very slow
 ‘He walks very slowly.’

Stative verbs which are transitive include verbs like *xihuan* ‘to like’ as in (54), *ai*

‘to love’, *taoyan* ‘to dislike’, *haipa* ‘to fear’, or *xiangxin* ‘to believe’ as in (55).

(54) wo xihuan da lanqiu
 我 喜歡 打 籃球
 1SG like hit basketball
 ‘I like to play basketball.’

(55) wo hen xiangxin ta
 我 很 相信 他
 1SG very believe 3SG
 ‘I trust him very much.’

Non-stative verbs which are intransitive include verbs like *qu* ‘to go’, *tiao* ‘to jump’, *youyong* ‘to swim’, *gongzuo* ‘to work’ as in (56).

(56) Lisi zuotian qu taibei
 李四 昨天 去 台北
 Lisi yesterday go Taipei
 ‘Lisi went to Taipei yesterday.’

Non-stative verbs which are transitive include verbs like *da* ‘to beat’, *chi* ‘to eat’,

jie ‘to borrow’, *shuo* ‘to say’, or *taolun* ‘to discuss’ as in (57).

(57) Zhangsan jie le sanben shu
 張三 借 了 三本 書
 Zhangsan borrow PFV three-CL book
 ‘Zhangsan borrowed three books.’

Non-stative transitive verbs can also form a VO compound, e.g., *jiehun* ‘to get married’, *dajia* ‘to fight’, *qianshou* ‘to hold hands’, *jiewen* ‘to kiss each other’, and *jianmian* ‘to meet’ as in (58).

- (58) tamen yijing jiehun le
 他們 已經 結婚 了
 3PL already marry CRS
 ‘They have already got married.’

4.3.3 Aspectual variations

We find that aspectual encoding in reciprocal verbs can play a role with regard to the interpretations of *gen*. First, consider sentences (59a)-(59b).

- (59) a. Zhangsan gen Mali jiehun
 張三 跟 瑪莉 結婚
 Zhangsan GEN Mali get-married
 ‘Zhangsan and Mali got married.’
- b. *Zhangsan gen Mali dou jiehun
 張三 跟 瑪莉 都 結婚
 Zhangsan GEN Mali all get-married

Gen in the reciprocal event *jiehun* ‘to get married’ is treated only as a phrasal conjunction. Therefore, the sentential conjunction marker *dou* ‘all’ will yield the ungrammaticality of sentence (59b). However, when an aspect marker is added to the compound, the reciprocal verbal compound does not necessarily require a subject of plural reference. Consider sentences (60) and (61).

- (60) Zhangsan gen Mali zuotian jie le hun
 張三 跟 瑪莉 昨天 結 了 婚
 Zhangsan GEN Mali yesterday tie PFV marriage
 ‘Zhangsan and Mali got married yesterday.’

- (61) Zhangsan gen Mali zuotian dou jie le hun
 張三 跟 瑪莉 昨天 都 結 了 婚
 Zhangsan GEN Mali yesterday all tie PFV marriage
 ‘Both Zhangsan and Mali have got married separately.’”

In (60), the reciprocal event takes place between the two referents *Zhangsan* and *Mali*.

Gen in this case is treated as a phrasal conjunction. In (61), however, the reciprocal event separately refers to each referent. *Gen* in this case is treated as a sentential conjunction.

4.3.4 Elaboration on our verbal semantic framework

With the consideration of subcategorization frame, we can further elaborate our preliminary semantic framework, as shown by Figure 4.3.²⁹

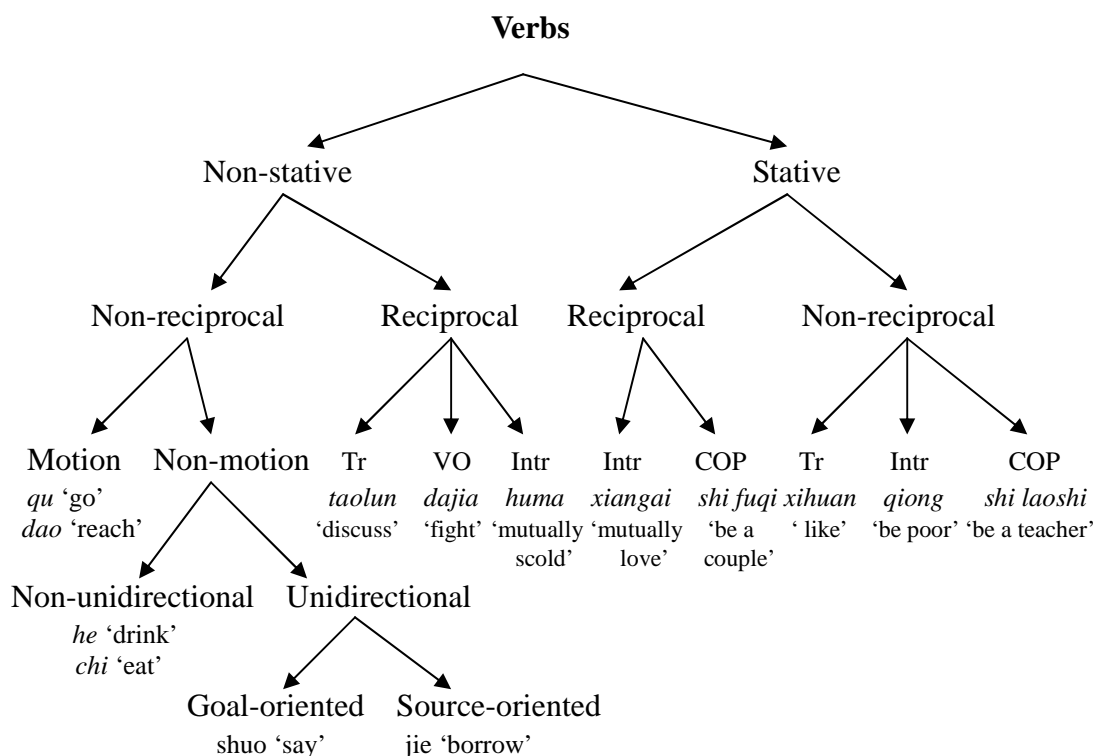


Figure 4.3 Revised verbal semantic framework with consideration of verb subcategorization

²⁹ Whenever irrelevant for the present discussion, we will not be using binary features.