



UiT The Arctic University of Norway

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***Bei* and *Bei* Passives**

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Abstract

The thesis is a generative study of the categorial status of *bei* in Standard Chinese and the derivation of its related passive structures. It first covers the fundamentals of Chinese grammar and provides an overview of previous research on *bei* and *bei* passives. This enables the reader to develop a preliminary understanding of this passive structure and empowers them to form their own judgments. By taking a progressive view of language competence and drawing upon insights from different theoretical frameworks of generative grammar, the thesis aims to provide an explanation for a dynamic view of the categorial status of *bei* and how it can function as a lexical verb, a functional verb, or a preposition under different circumstances. In the context of grammaticalisation as a result of competence development, this study diverges from prior research primarily in the proposition of the categorial status of *bei* being subject to conditioned computation. Such an approach is expected to shine new light on our understanding of *bei* and somehow unify the analysis of the derivation of *bei* passives featuring such issues as the chameleonic character showcasing both control and raising hues, the mono- or bi-clausal controversy, the difference between long and short *bei* passives, etc.

Keywords: generative study, *bei*, *bei* passives, grammaticalisation, competence development, categorial status, dynamic view

1 Introduction

Trees seem edifying. Under a bodhi tree, Shakyamuni attained enlightenment. Under *bei*-trees, I started to agree with him. *Madhyamā-pratipad*, the middle way, is the way to be taken when one approaches the problems of *bei* and *bei* passives. If asked one year earlier whether to choose Minimalist Program or Distributed Morphology, a verbal *bei* or a prepositional *bei*, a lexical *bei* or a functional *bei*, I would strive for a clear-cut answer in favour of one of the two options. Now, I hold the belief that both perspectives can be valid. *Anitya*, impermanence, is a concept that all phenomena are unstable and constantly changing. In this context, *bei* can be seen as an exemplification of dynamism with its changing nature.

The topic of *bei* passives has long been of great interest and much debate among syntacticians. Even within the generative tradition, there are conflicting arguments. In a word, one risks stumbling over controversy at every step when analysing this passive structure. In this chapter, my motivations and objectives for the study will be stated, followed by an overview of the structure of this thesis.

1.1 Motivations and objectives

Although the topic of *bei* passives has been the subject of much systematic investigation, the workings of this structure still seem to be shrouded in mystery.

Firstly, insightful arguments and analyses are so scattered in numerous works that it is bewildering for one to read and digest them in a coherent manner. Therefore, this thesis attempts to cover the fundamentals of Chinese grammar and provides an overview of the main debates surrounding *bei* and *bei* passives in the hope that it can serve as an introductory reference to the study of this structure. In addition, the thesis is intended to be friendly to those who are interested in passives across world languages but come equipped with limited knowledge of Chinese.

Secondly, logic problems must be addressed before any analysis. Although the thesis argues that *bei* is prone to be computed as verbal rather than prepositional, it does not exclude a prepositional possibility. As syntactic categories of certain lexical items in Chinese are uncertain, a minimalist approach might seem arbitrary in that categorial information is prescribed. Meanwhile, when turning to a top-down approach, one faces another issue that

argument structure and theta roles, which play a crucial role in this thesis as the starting point of analysis, must be stored somewhere prior to further derivation. Yet the lexicon is distributed with the model of Distributed Morphology. Therefore, I have decided to switch between Minimalism and Distributed Morphology by considering them as two developmental stages of language competence. Distributed Morphology represents an initial stage of competence, whereas a bottom-up model with a lexicon a developed one. The details of this approach will be elaborated in the chapter on the theoretical framework adopted in the thesis.

Thirdly, the categorial status of *bei* has been under much debate since it plays a fundamental role in the derivation of *bei* passives. The main departure of this study from previous research lies in my submitting the categorial status of *bei* to conditioned computation. This proposal aims to emphasise the inherent instability of *bei* as *bei* passives can be thought of as undergoing the process of grammaticalisation.

1.2 Thesis structure

The overall structure of the thesis takes the form of six chapters.

Following this chapter is Chapter 2 that provides basic information on the language and topic under study. In this chapter, the basics of Standard Chinese grammar will be presented, along with an overview of *bei* passives.

Chapter 3 focuses on the historical development of *bei* and *bei* passives, with a particular emphasis on the origin of *bei* and the drastic changes of *bei* passives that have been documented through corpus studies.

Chapter 4 serves as a comprehensive literature review, dedicated to previous analyses of *bei* and *bei* passives.

Chapter 5 is intended to address the major problems of *bei* and *bei* passives, including the theoretical framework adopted, the categorial status of *bei*, the derivation of long and short *bei* passives, and other related issues.

Chapter 6 concludes the thesis.

2 Basic grammar of Chinese and passive in Chinese: basic observations

This chapter provides essential information about the language and topic being studied. It presents an overview of the part of grammar considered to be relevant to the thesis and a brief introduction to *bei* passives.

2.1 Basic grammar of Chinese

Having emerged from several spoken varieties of Chinese, Standard Chinese (roughly means Mandarin) has become the lingua franca and the official language across China. It takes its phonology from the dialect spoken in Beijing, the capital of this country. Its vocabulary is mainly from the variety of the Mandarin group, while its grammar is based on the modern written vernacular. As a strongly analytic language, Standard Chinese virtually has no inflectional morphemes and relies on word order and particles to express relationships between the parts of a sentence (Norman 1988). Nouns are not marked for case and are rarely marked for number (Li and Thompson 1989). Likewise, verbs are not marked for agreement or grammatical tense, while aspect is marked using post-verbal particles (Li and Thompson 1989).

Syntactically, the basic word order of Standard Chinese is subject-verb-object (SVO). Two grammatical sentences with an SVO structure and an SV structure respectively are illustrated as follows:

- (1) a. S V O
 我 种 树。
 Wo zhong shu.
 I plant tree
 ‘I plant a tree/trees.’

- b. S V
- 树 活着。
- shu huozhe.
- Tree live-PROG
- ‘A tree/Trees are alive.’

In Standard Chinese, an aspectual marker can be encliticised onto a verb or at the end of a sentence. Take the perfective marker *-le* for instance:

- (2) a. 我 种了 树。
- Wo zhong-le shu.
- I plant-PFV tree
- ‘I have planted trees’

- b. 我 种 树 了。
- Wo zhong shu le
- I plant tree PFV
- ‘I have planted trees’

If the above sentence is to be negated, a negator can come before the verb:

(3) a. 我 不 种 树。

Wo bu zhong shu.

I not plant tree

‘I do/will not plant trees.’

b. 我 没有 种 树。

Wo meiyou zhong shu

I not plant tree

‘I have not planted trees.’

When a yes-no question is formed, *ma*, the yes-no question marker, is attached to the end of a statement:

(4) 我 种 树 了 吗?

Wo plant tree le ma?

I plant tree PFV Q

‘Have I planted trees?’

When a wh-question is formed, it is generally believed that the wh-expression takes the place of the part being questioned without further movement:

(5) 我 种了 什么?

Wo zhong-le shenme?

I plant-PFV what?

‘What have I planted?’

The aspects of the grammar of Standard Chinese introduced above might be relevant to the analysis in the following chapters.

2.2 *Bei* Passives

Among the passive markers in Standard Chinese, *bei* has been considered to be the most grammaticalised one. Passive structures marked by *bei* can be classified into two types, i.e. long *bei* passive and short *bei* passive.

2.2.1 Passive markers in Chinese

There are several passive markers in Standard Chinese as shown by the corpus-based study by McEnery and Xiao (2010). Table 1 offers the frequencies of long and short passives (which will be explained later in this section) in the LCMC and CallHome corpora. It also shows the proportions of these passive markers of the total occurrences in the two corpora.

Table 1 - Long and short passives in LCMC and CallHome

| Passive type | Passive Marker | % of total occurrences | Long passive | | Short passive | |
|-------------------|----------------------|------------------------|--------------|-------|---------------|------|
| | | | Frequency | % | Frequency | % |
| Syntactic passive | <i>bei</i> | 87.3 | 511 | 39.3 | 789 | 60.7 |
| | <i>wei . . . suo</i> | 60.0 | 69 | 100.0 | — | — |
| | <i>gei</i> | 1.5 | 17 | 42.5 | 23 | 57.5 |
| | <i>jiao</i> | 0.4 | 4 | 100.0 | — | — |
| | <i>rang</i> | 1.6 | 15 | 100.0 | — | — |
| Lexical passive | <i>ai</i> | 52.6 | 1 | 3.3 | 29 | 96.7 |
| | <i>shou</i> | 60.4 | 132 | 31.9 | 282 | 68.1 |
| | <i>zao</i> | 82.0 | 34 | 37.4 | 57 | 62.6 |

As indicated by the table, of the total occurrences of *bei*, 87.3 % of them act as a passive marker. Within these cases, 39.3% occur in long passive while 60.7 in short passive (frequency here is not relative frequency). Based on the fact that the total instances of *bei* used as a passive marker represents a proportion considerably higher than those for *gei*, *jiao*, and *rang*, McEnery and Xiao (2010) hold that *bei* enjoys a much higher degree of grammaticalisation over the other three syntactic passive markers. It is for this representativeness that I have chosen to focus specifically on *bei*.

2.2.2 Long and short *bei* passives

Chinese *bei* passive sentences typically take either of the two forms as stated by Huang *et al.* (2009):

(6) 张三 被 李四 打了。
 Zhangsan bei Lisi da-le.
 Zhangsan BEI Lisi hit-PFV
 ‘Zhangsan was hit by Lisi.’

(7) 张三 被 打了
 Zhangsan bei da-le.
 Zhangsan BEI hit-PFV
 ‘Zhangsan was hit.’

Both forms involve the passive morpheme *bei*. In (6) *bei* is followed by an NP (the Agent) and a VP, whereas in (7) *bei* is followed directly by the VP. In the latter case, the

existence of an Agent is implied. We shall refer to these two forms of *bei* passive structures as the “long *bei* passive” and the “short *bei* passive”, respectively.

2.3 Middle construction

It is worth noting that Standard Chinese also features a middle construction, which will be discussed in the argument against previous analysis later in the thesis.

As mentioned in Huang *et al.* (2009), there is a type of sentence with the semantics of a passive, where both the Agent argument and the passive morpheme *bei* are missing:

(8) 衣服 洗 干净 了。

yifu xi ganjing le.

clothes wash clean LE

‘The clothes have been washed clean.’

This type of passive is taken to be an example of the middle construction, akin to English sentences like *The book sold well*.

3 Historical development of *bei* and *bei* passives

This chapter centers around the historical development of *bei* and *bei* passives, with a specific focus on the origin of *bei* and the significant changes observed in *bei* passives through corpus studies.

3.1 Origin of *bei*

There was no structural passive in Proto-Chinese (Wang 2018). It was not until after the Han Dynasty that passives took shape. *Bei*, orthographically realised with the Chinese character 被, originally denotes a kind of nightwear. As a man lay down wearing this clothing, he could feel something resting on top of his body. A passive reading may thus be derived. Then it evolved into a lexical verb with the meaning of ‘to suffer’, which indicates that it semantically selected a restricted group of NPs as complements. The following example is from Wang (2018) and *Strategies of the Warring States* written in the Warring States Period (about 475 BCE to 221 BCE):

(9) 秦王 复 击 轲, 被 八 创。

Qin-Wang fu ji Ke bei ba chuang

The King of Qin repeatedly attack Ke BEI eight wound

‘The King of Qin attacked Ke repeatedly, and Ke suffered eight wounds.’

Wang (2018) notes that later *bei* could precede a verb (it can be argued whether *lu*, ‘kill’, is verbal or nominal) as in the following example from *Records of the Grand Historian* written in the Han dynasty (written from 109 BCE to 91 BCE):

(10) 错 卒 以 被 戮。

Cuo zu yi bei lu

Cuo die because BEI kill

‘Cuo died for getting killed.’

Around the end of the Han dynasty, an agent could appear after *bei* as in the following example from Wang (2018) and *New Account of the Tales of the World* written in Northern and Southern dynasties (around 440 CE).

(11) 祢衡 被 魏武 谪 为 鼓 吏。

Mi-Heng bei Wei-Wu zhe wei gu li

Mi-Heng BEI King of Wei Wu demote to be drum officer

‘Mi-Heng was demoted by King of Wei Wu to drum officer.’

As can be seen from the above examples, *bei* enjoys a strong heritage that is both verbal and lexical.

3.2 Drastic changes of *bei* passives

Bei passives have undergone drastic changes throughout history. This section is intended to pave the way for the discussion of the grammaticalisation of *bei*.

Wang (2018) mentions that the New Culture Movement at the beginning of the 20th century strengthened the status of passives as a grammatical component of Chinese by integrating the grammar of Indo-European languages.

A diachronic corpus-based study (He 2008) demonstrates drastic changes in the use of *bei* passives. The study contrasts the semantic prosody between *bei* passives in novels written in old vernacular Chinese and those in modern Chinese:

Table 2 - Semantic prosody of bei passives in old vernacular Chinese (He, 2008)

| Sources | Time | Negative (occurrences/percentage) | Neutral (occurrences/percentage) | Positive (occurrences/percentage) | Total |
|--|--------------------------|--------------------------------------|-------------------------------------|--------------------------------------|-------|
| Journey to the West | 16 th century | 586 / 95.4% | 19 / 3.1% | 9 / 1.5% | 614 |
| The Scholars | 18 th century | 98 / 98.0% | 2 / 2.0% | 0 / 0.0% | 100 |
| Dream of the Red Chamber | 18 th century | 209 / 88.2% | 24 / 10.1% | 4 / 1.7% | 237 |
| A Tale of Heroic Lovers | 19 th century | 156 / 89.1% | 16 / 9.1% | 3 / 1.7% | 175 |
| Bizarre Happenings Eyewitnessed over Two Decades | 1902 | 301 / 91.2% | 20 / 6.1% | 9 / 2.7% | 330 |
| Total | | 1350 / 92.7% | 81 / 5.6% | 25 / 1.7% | 1456 |

Table 3 - Semantic prosody of bei passives in modern Chinese (He, 2008)

| Sources | Time | Negative (occurrences/percentage) | Neutral (occurrences/percentage) | Positive (occurrences/percentage) | Total |
|-----------------------------|-------------|--------------------------------------|-------------------------------------|--------------------------------------|-------|
| Contemporary literary works | 1923 - 1936 | 129 / 61.7% | 63 / 30.1% | 17 / 8.1% | 209 |
| Modern literary works | 1956 - 1995 | 218 / 60.2% | 109 / 30.1% | 35 / 9.7% | 362 |
| Modern academic works | 1994 - 1996 | 168 / 43.0% | 197 / 50.4% | 26 / 6.7% | 391 |
| Total | | 515 / 53.5% | 369 / 38.4% | 78 / 8.1% | 962 |

As is shown by the tables, in old vernacular Chinese, the instances of *bei* passives that express a negative connotation account for over 90% of the total instances of *bei* passives, with a neutral connotation at 5.6% and positive at 1.7%. This shows that *bei* passives were overwhelmingly used in negative situations in old vernacular Chinese. In contrast, neutral and positive use of *bei* passives has significantly increased in modern Chinese after the New Culture Movement, rising to 38.4% and 8.1% respectively. Below are two instances of *bei* passives with neutral and positive semantic prosodies:

(12) Neutral (from the novel *the Two Ma's* by Lao She 1929)

羊群 跑动, 正 像 一片 雪 被 风 吹着 流动 似的。
yangqun paodong, zheng xiang yi-pian xue bei feng chui-zhe liudong shi-de.
sheep flock run just like one-CL snow BEI wind blow-ASP flow like-DE
'The flock of sheep ran like a piece of snow blown by the wind and flowing.'

(13) Positive (from the essay *Letters to Young Readers* by Bingxin 1926)

被 上帝 祝福的 小朋友! 你们 正 在 母亲的 怀抱里。
bei shangdi zhufu-de xiaopengyou! ni-men zheng zai muqin-de huaibao-li.
BEI God bless-DE small friend you-PL now locate mother-DE embrace-inside
'Children blessed by God! You are now in your mother's arms.'

The above two sentences can be contrasted with an example from a novel written in the 16th century when *bei* passives were overwhelmingly negative:

(14) Negative (from *Journey to the West* by Wu Cheng'en)

当时 我父 曾 被 水贼 伤生。

dangshi wofu ceng bei shuizei shangsheng.

then my father in the past BEI water thief kill

'At that time, my father was injured by water thieves.'

It is worth noting that Table 3 also shows sporadic cases of neutral and positive use of *bei* passives in the period of old vernacular Chinese, which could be indicative of the emergence of the grammaticalisation of *bei* that was accelerated by language contact.

Another drastic change takes place in the animacy of the patient of *bei* passives. Based on 3,414 tokens of passive constructions from three comparable corpora across two significant time periods in Chinese linguistic history, one of the findings of Guo and Chow (2014) is that animacy as one of the pragmatic constraints on the *bei* passives in modern Standard Chinese has changed significantly from the era when there was no contact between Chinese and English. Three comparable corpora were established for their study, namely, the *Honglouloumeng* corpus (HLMC), a modern Chinese corpus (MCC) and a translated Chinese corpus (TCC). The *Honglouloumeng* corpus (HLMC) serves as the baseline for comparison for *Honglouloumeng* was written in old vernacular Chinese in the mid-eighteenth century. The modern Chinese corpus (MCC) is constructed by extracting randomly a number of latest novels from a popular magazine. The research predicts that if English has triggered the variation in the use of passive constructions in Chinese, more variation will be exhibited in the use of passive constructions in the translations from English. For this reason, a translated Chinese corpus (TCC) which is believed to have the most direct influence from English is constructed.

The patient is the subject of a *bei* passive sentence. Guo and Chow (2014) report that the variable of animacy of the patient varies greatly between HLMC and the other two corpora, as can be seen in the following table:

Table 4 - Distribution of animacy of patient and agent (Guo and Chow, 2014)

| | | HLMC | | MCC | | TCC | |
|---------|-----------|-------|----|-------|----|-------|----|
| | | Freq. | % | Freq. | % | Freq. | % |
| Patient | Animate | 94 | 81 | 267 | 54 | 347 | 55 |
| | Inanimate | 22 | 19 | 230 | 46 | 285 | 45 |
| Agent | Animate | 96 | 83 | 331 | 67 | 439 | 70 |
| | Inanimate | 20 | 17 | 164 | 33 | 185 | 30 |

Animate patients occur in a more substantial proportion than inanimate patients in early modern Chinese (81% vs. 19%). In contrast, the other two modern Chinese corpora show no significant difference in terms of the frequency of animate vs. inanimate patients. It is apparent that there is a rise in using inanimate objects as the patients of *bei* passives (46% and 45% respectively), indicating that the use of inanimate patients has become increasingly frequent in modern Standard Chinese than in the old vernacular language.

These are the two major changes of *bei* passives throughout linguistic history. One change is the rise in using *bei* passives in a non-negative way. The other is the increasingly frequent use of inanimate patients as subjects. The following sentence is grammatical for modern Standard Chinese yet highly impossible for old vernacular Chinese:

(15) 这 画 被 人 喜爱。

Zhe hua bei ren xi'ai.

this painting BEI people like

'This painting is liked by people.'

4 Previous analyses of *bei* and *bei* passives

The primary objective of this chapter is to provide a comprehensive literature review, with a specific focus on previous analyses of *bei* and *bei* passives. Through this review, the reader is expected to gain a functional understanding of the potential structures of *bei* passives and the key debates surrounding *bei* and *bei* passives. It covers three competing approaches to the derivation of long and short *bei* passives, the categorial status of *bei*, the chameleonic character of *bei* passives, and the argument for the non-finiteness of the embedded clause that *bei* selects for.

4.1 Derivation of *bei* passives

It has been believed that long and short *bei* passives are not derived in a uniform manner. The reason why the sections for the derivation of long and short *bei* passives precede the one that focuses on the previous research on the categorial status of *bei* is that an overall structural knowledge of *bei* passives can facilitate the reader's understanding of the later discussion.

4.1.1 Derivation of long *bei* passive

This section is dedicated to the three competing approaches to the derivation of the long *bei* passive, viz the NP-movement approach, the complementation approach and the NOP approach, as recorded in Huang *et al.* (2009).

4.1.1.1 NP-movement approach

P.Wang (1970) is an early proponent of this movement approach and followers include A. Li (1985, 1990), Travis (1984), and Koopman (1984).

The following two sentences and the accompanying tree diagram show how the NP-movement hypothesis works:

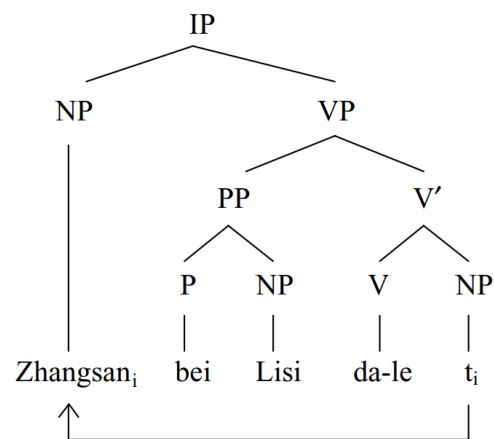
(16) 李四 打了 张三。

Lisi da-le Zhangsan.

Lisi hit Zhangsan

‘Lisi hit Zhangsan.’

(17)



According to Huang *et al.* (2009), several controversies over this NP-movement approach include the non-thematic claim of the derived subject position (Zhangsan is not base-generated), the *bei*-NP sequence as a PP, the coordination test of the Agent NP, and the *ziji* ‘self’ test.

First, the following sentence suggests that the subject (Zhangsan) may receive a thematic role of its own. This is evidenced by the following passive sentence containing subject-oriented adverbs like *guyi* ‘deliberately, intentionally’:

(18) 张三 故意 被 李四 打了。

Zhangsan guyi BEI Lisi da-le.

Zhangsan intentionally bei Lisi hit-le

‘Zhangsan intentionally got hit.’

This test of inserting *guyi* is conducted on the assumption that Zhangsan is the subject of the sentence. However, it is also likely that Zhangsan is the topic rather than the subject, which will be discussed in the chapter addressing the categorial status of *bei*.

Second, the *bei*-NP sequence does not behave as a PP because it cannot move (as a constituent) across a time phrase or prepose to a sentence-initial position (Huang *et al.*, 2009):

(19) a. 张三 昨天 被 李四 打了。

Zhangsan zuotian bei Lisi da-le.

Zhangsan yesterday BEI Lisi hit-LE

b. * 张三 被 李四 昨天 打了。

Zhangsan bei Lisi zuotian da-le.

Zhangsan BEI Lisi yesterday hit-LE

c. * 被 李四 张三 昨天 打了。

bei Lisi Zhangsan zuotian da-le.

BEI Lisi Zhangsan yesterday hit-LE

Thirdly, Huang *et al.* (2009) note that the following coordination test indicates that the Agent NP forms a clausal constituent with the VP that follows it, to the exclusion of the preceding *bei*:

- (20) 他 被 李四 骂了 两声, 王五 踢了 三下。
ta bei Lisi ma-le liang-sheng, Wangwu ti-le san-xia
he BEI Lisi scold-LE twice Wangwu kick-LE three times
'He was scolded twice by Lisi and kicked three times by Wangwu.'

This shows that *bei* + NP is not a PP in that it does not form a constituent that excludes the following VP.

A fourth argument against the PP analysis of the *bei*-NP comes from the referential interpretation of a reflexive pronoun like *ziji* 'self.' It is now widely known that the reflexive *ziji* is "subject-oriented," i.e., it must take a subject as its antecedent (Huang *et al.* 2009). In the following sentence, *ziji* can refer to Zhangsan or to Lisi, suggesting that they are both subjects (Huang *et al.* 2009):

- (21) 张三 被 李四 关 在 自己 的 家里。
Zhangsan bei Lisi guan zai ziji de jiali.
Zhangsan BEI Lisi lock at self DE home
'Zhangsan was locked by Lisi in self's home.' (ZS' or LS')

As is shown by this example, if *bei*-Lisi is a PP, then "Lisi" cannot be a subject and bind the subject-oriented reflexive *ziji*.

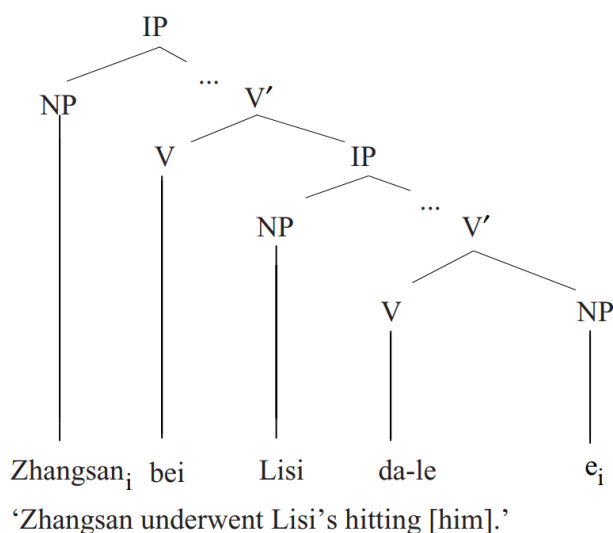
Contrary to Huang *et al.* (2009), the thesis argues that the *bei*-NP sequence operates as a PP under a specific circumstance, which will be discussed in detail in Chapter 5.

Thus the above considerations of thematic relations, constituency, and anaphora jointly call into question an NP-movement analysis of passives (Huang *et al.* 2009).

4.1.1.2 Complementation approach

Huang *et al.* (2009) mention that the considerations in the preceding section favour a complementation analysis, where *bei* is treated as the main verb, a two-place predicate meaning ‘undergo,’ ‘experience,’ etc. The predicate selects an Experiencer (Patient) as its subject and an Event as its complement. The object of the Event complement clause is obligatorily deleted under identity with the matrix subject. The complementation analysis of a long passive has the following structure:

(22)



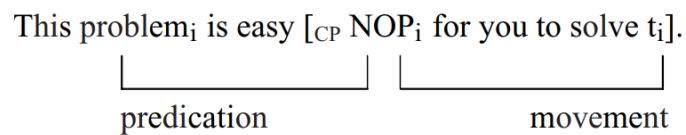
A problem with this approach is the obligatoriness of deleting the embedded object. As indicated in (22), the embedded null object would be an empty pronoun. Whether a true *pro* is possible in object position is still controversial at best (see Huang 1984a, 1989, and references

cited). Even if it is possible, the question remains as to why it cannot be replaced by an overt pronoun or reflexive (Huang *et al.* 2009).

4.1.1.3 NOP approach

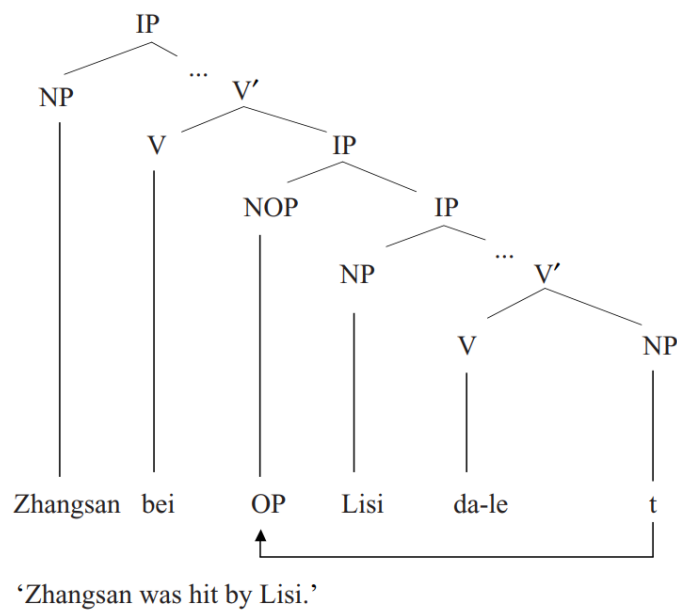
As stated by Huang *et al.* (2009), an analysis that came close to a solution to the dilemma was first proposed by Feng (1995), whose essential spirit is that Chinese passives should be analysed on a par with current treatments of the tough construction in English, where the complement of *tough* is analysed as involving null operator (NOP) movement and predication:

(23)



The “*tough*-movement” analysis of a passive sentence is as depicted in (24):

(24)



As shown by this analysis, the structure of a long *bei* passive involves both complementation and movement (Huang *et al.* 2009), as *bei* selects an NP as its subject and a clausal category as its complement and the derivation involves movement of the embedded null object. The NOP movement here is an instance of A'-movement.

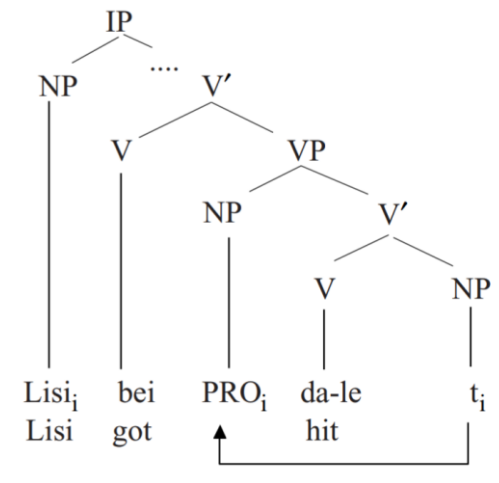
Huang *et al.* (2009) argue that an immediate argument for (24) is that it has the virtues of both the NP movement analysis and the complementation analysis, but none of their problems. Firstly, the property of the obligatoriness of an empty category in object position is well represented in this analysis. Secondly, since the subject is assigned a theta role of its own (Experiencer as assumed by Huang *et al.* (2009) in this classic model), a subject-oriented adverb can be used. Thirdly, the analysis claims that the NP following *bei* is a subject that forms a clausal constituent with the following VP, but does not form a constituent with the morpheme *bei*, thus explaining why the *bei* + NP sequence cannot move like a PP.

In addition to a host of other independent syntactic motivations, the NOP analysis is supported by important semantic and historical considerations as well (Huang *et al.* 2009). The NOP movement has the effect of turning a proposition into a predicate describing the property of one of its arguments by substituting into the argument's position a variable. Thus the NOP clause in (24) expresses "the property of being an x such that Lisi hit x". Then an appropriate paraphrase of the *bei* in (24) would be 'get, acquire, or end up with the property of ...'. The NOP analysis correctly predicts the obligatoriness of a null object in passive constructions for several considerations including the historical development of the passive construction, long distance passives, island sensitivity, a particle *suo* and resumptive pronouns (Huang *et al.* 2009).

4.1.2 Derivation of short *bei* passive

The classic model for the derivation of the short *bei* passive takes the form depicted in (25), following Hoshi's (1991, 1994a, b) analysis of English *get* passives and Japanese "ni passives":

(25)



As can be seen, *bei* has the status of a deontic modal auxiliary or light verb, selecting an Experiencer (Patient) as its subject and a predicate (a property) as its complement, and subcategorising for a VP as the structural realisation of the predicate complement (Huang *et al.* 2009).

This analysis meets all the following considerations of the short passive (Huang *et al.* 2009). These considerations can also argue against the assumption about the short passive that it is derived from the long form via the deletion of the Agent NP.

First, because it is assumed that the auxiliary-like *bei* selects a VP, it follows that only manner adverbs may occur in short passives, to the exclusion of sentential adverbs whereas sentential adverbials as well as VP-adverbials are allowed with long passives (Huang *et al.* 2009):

(26) a. 张三 被 李四 莫名其妙 地 骗走了。

Zhangsan bei Lisi momingqimiao de pianzou-le.

Zhangsan BEI Lisi confused DE abduct-LE

‘Zhangsan was abducted in a state of confusion by Lisi.’

b. 张三 被 李四 在 学校 骗走了。

Zhangsan bei Lisi zai xuexiao pianzou-le.

Zhangsan BEI Lisi at school abduct-LE

‘Zhangsan was abducted at school by Lisi.’

(27) a. 张三 被 莫名其妙 地 骗走了。

Zhangsan bei momingqimiao de pianzou-le.

Zhangsan BEI confused DE abduct-LE

‘Zhangsan was abducted in a state of confusion.’

b. * 张三 被 在 学校 骗走了。

Zhangsan bei zai xuexiao pianzou-le.

Zhangsan BEI at school abduct-LE

‘Zhangsan was abducted at school.’

The argument is based on the assumption that the locative PP in (26b) is attached to some functional Infl projection that is missing in the short passives, while the adverbial in (26a) can be adjoined to VP.

Second, because *bei* assigns an independent Experiencer (Patient) role to its subject, it follows that adverbs like *guyi* ‘intentionally’ are allowed (Huang et al. 2009).

Third, because the short passive involves A-movement, the particle *suo* as seen below in (28-29) that indicates A'-movement and resumptive pronouns are correctly excluded (Huang *et al.* 2009).

As Huang *et al.* (2009) have noted, a long *bei* passive may contain the particle *suo*, a property they share with relative clauses, which is taken to provide evidence for A'-movement in the literature of Chinese grammar studies, while the short passive disallows *suo*:

(28) 这些 事情 不 能 被 他们 所 了解。

zhexie shiqing bu neng bei tamen suo liaojie.

these thing not can BEI they SUO understand

'These things cannot be understood by them.'

(29) *这些 事情 不 能 被 所 了解。

zhexie shiqing bu neng bei suo liaojie.

these thing not can BEI SUO understand

'These things cannot be understood.'

Resumptive pronouns constitute another indicator for different ways of derivation for long and short passives (Huang *et al.* 2009). A long passive may employ the pronoun strategy in cases like (30), while a short passive does not admit any resumptive pronoun under similar circumstances:

(30) 张三 被 李四 打了 他 一下。

Zhangsan bei Lisi da-le ta yi-xia.

Zhangsan BEI Lisi hit-LE him once

‘Zhangsan was hit once by Lisi.’

(31) * 张三 被 打了 他 一下。

Zhangsan bei da-le ta yi-xia.

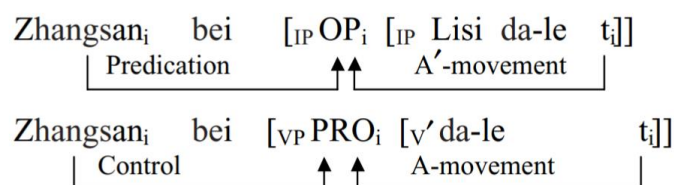
Zhangsan BEI hit-LE him once

‘Zhangsan was hit once.’

Based on previous evidence, it seems legitimate to claim that a short passive is not simply an Agent-deleted version of a long passive.

As Huang *et al.* (2009) have summarised, there are two ways to derive passive sentences in Chinese. The long passive involves the main verb *bei* with a clausal complement which undergoes null-operator movement and type-shifts into a property predicated on the Experiencer (Patient) subject. The short passive involves an auxiliary-like *bei* with a VP complement whose PRO object is NP-moved and controlled by the Experiencer (Patient) subject (Huang *et al.* 2009):

(32)



While Huang *et al's* analysis has set the tone for *bei* studies, it still has its drawbacks, which will be discussed further in Chapter 5.

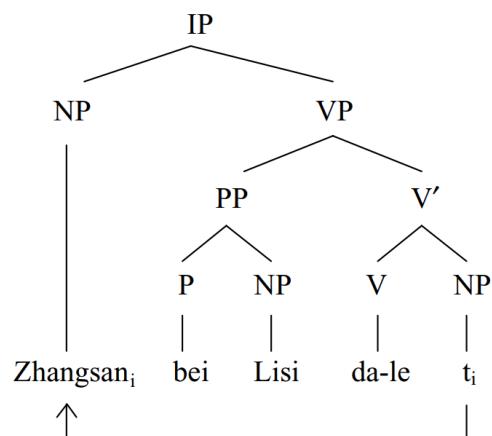
4.2 Categorical status of *bei*

The major division concerning the categorial status of *bei* is whether *bei* is a preposition or a verb. There have been three major analyses: *bei* is a preposition or is a verb, or it has the dual status of being both a verb and a preposition (Liu 2016).

4.2.1 *Bei* as preposition

The prepositional view of *bei* is closely related to the NP movement approach to the derivation of the long passive shown in (7) as repeated below:

(33)



Problems with the prepositional view of *bei* have been discussed in the preceding section.

4.2.2 *Bei* as verb

The evidence against the prepositional view of *bei*, along with the NOP approach to the derivation of the long *bei* passive, points to a verbal interpretation of *bei* as discussed in the previous section.

4.2.3 Double *bei* analysis

Shi and Hu (2005) point out some problems of treating *bei* as a verb and propose the double *bei* analysis.

First, they argue that the evidence that *bei*-DP cannot be preposed to the sentence-initial position as common PPs can is not strong enough for its purpose because some prepositional phrases cannot be preposed to the sentence-initial position either:

(34) 小偷 可能 从 小路 逃走了。

xiaotou keneng cong xiaolu taozou-le.

thief might from small-lane escape-away-LE

‘The thief might escape away from the small lane.’

(35) * 从 小路 小偷 可能 逃走了。

cong xiaolu xiaotou keneng taozou-le.

from small-lane thief might escape-away-LE

Second, they argue that the coordination test shown in (20) may also be explained by assuming that the coordinated part involves the omission of the preposition *bei* because Chinese prepositions, when appearing repeatedly, can be omitted:

- (36) 他 以 山风 作 旋律, (以) 大漠 高原 作 舞台。
 ta yi shanfeng zuo xuanlv, (yi) damo gaoyuan zuo wutai.
 he with mountain-wind make melody, with desert plateau make performance-stage
 ‘He treated the mountain wind as melody, and desert and plateau as the performance stage.’

Third, Shi and Hu (2005) observe that *bei*-DP can undergo coordination tests as shown in (37), which suggests that the string of *bei* and the Agent DP is a constituent.

- (37) 这 声音 被 树、被 草、被 一个 广漠 的 空间 吞噬了。
 zhe shengyin bei shu, bei cao, bei yige guangmo de kongjian tunshi-le.
 this voice BEI tree, BEI grass, BEI one-CL wild DE space swallow-LE
 ‘This voice got swallowed by trees, grass and a wild space.’

Thus Shi and Hu (2005) assume that there are two *bei*'s in the long passive: the passive morpheme *bei* that heads the passive phrase and the prepositional *bei* that takes the Agent DP as its complement. They are designated as *bei*₁ and *bei*₂ as in (38). Since the two *bei*'s are adjacent and homophones, the second one undergoes haplology and gets deleted.

- (38) [_{PassiveP} *bei*₁ [_{VP} [_{PP} *bei*₂ DP] VP]]

4.3 Chameleonic character of *bei* passives

Studies by Huang (2011, 2013, 2014) and Liu (2012) have shown that the *bei* passive allows for both a control and a raising analysis, which is called the chameleonic character of *bei* passives.

If *bei* takes an idiom chunk subject, as shown in (39), the subject position is non-thematic and the *bei* passive is a raising structure:

- (39) 便宜 都 被 他 占光了。
- Pianyi dou bei ta zhan-guang-le.
- advantage all BEI he take-empty-LE
- ‘All the advantage was taken by him.’

The underlined parts constitute an idiom in Chinese (占便宜, *zhan pianyi*, ‘take advantage’).

When subject-oriented adverbs are present, as shown in (40), the subject can be regarded as thematic and the control analysis is considered by Huang *et al.* (2009) and Liu (2016) the only possibility.

- (40) 张三 故意 被 李四 打了。
- Zhangsan guyi BEI Lisi da-le.
- Zhangsan intentionally bei Lisi hit-le
- ‘Zhangsan intentionally got hit by Lisi.’

To explain why *bei* exhibits both the control and raising behaviours, Huang (2013, 2014) argues that *bei* is a semi-lexical verb, whose meaning may include multiple points in the causative-unaccusative continuum as in (41), with the points that denote *undergo* (with experiencer subject), *be affected by* (with an affectee subject) and *become* (with no thematic subject).

(41) The causative-unaccusative continuum: (Huang 2013:103)

cause > let > witness > undergo > be affected by > become > exist > be

4.4 Non-finiteness of embedded clause

Liu (2016) argues that the *bei* subcategorises for a non-finite clause.

Shi and Hu (2005) observe that in the formation of negatives in Chinese, it is *bei* rather than the embedded VP can be negated, as shown below:

(42) a. 还 有 许 多 洞 穴 没 有 被 我 们 发 现。

Hai you xuduo dongxue mei you bei women faxian.

still have many cave not have BEI us discover

‘There are still a lot of caves that have not been discovered by us.’

b. *还 有 许 多 洞 穴 被 我 们 没 有 发 现。

Hai you xuduo dongxue bei women mei you faxian.

still have many cave BEI us not have discover

Given that Chinese negators and the predicates that they negate must be in the same clause, Shi and Hu (2005) argue that the complement of *bei* should not be a clause.

Contrary to this viewpoint, Liu (2016) identifies that negation can indicate a non-finite clausal complement combined with *bei*. Jiang (1994) provides the following example with the negator *bu*, which can be traced back to the Song Dynasty:

(43) 眼 去 眉 来, 被 那 女 孩 不 瞅 不 睬。 (董西厢, 卷一)

Yan qu mei lai, bei na nvhai bu chou bu cai. (Dong Xixiang, Vol.1)

eye go eyebrow come BEI that girl not look-at not look-at

‘He conversed with eyes, but was ignored by that girl.’

In modern Standard Chinese, it is normal for *bu* to appear under *bei*:

(44) 他的 论文 被 人 不 理解。

Ta-de lunwen bei ren bu lijie.

his thesis BEI person not understand

‘His thesis is not understood by people.’

The above examples show that the negation test might not support the claim that *bei* does not subcategorise for a clause. The key may lie in the difference between the two negators *meiyou* and *bu*, which many linguists have researched, including Li and Thompson (1981), Lin (2003), etc. To make a long story short, Liu (2016) concludes that *meiyou* negates the existence of an event while *bu* indicates that an entity is plunged into a situation where the entity is treated negatively. As noted by Liu (2016), in the case of *bei*, *bei* can mean ‘to undergo or to suffer from some event’, and *meiyou* negates the existence of an event. Therefore, one cannot state that someone or something undergoes or suffers an event, and then deny the existence of this event. Please compare:

(45) # Many caves have undergone not being discovered.

Differently from *meiyou*, *bu* does not cause any semantic conflict with *bei* in the sense that it indicates that somebody or something finds itself in a circumstance where it is subjected to negative treatment (such as ‘not to pay attention to’, ‘not to think highly of’, etc.).

Furthermore, according to Liu (2016), it has been observed on the basis of the studies of the distributions of *meiyou* and *bu* (Wang 1965; Li and Thompson, 1981; Liu 2004) that *meiyou* negates perfective aspect while *bu* negates the verbs without being marked with aspect as *-le* and *(mei)you* can be in complementary distribution. Thus, the fact that *bu* can occur below *bei* whereas *meiyou* cannot indicate that there is no AspP in the complement of *bei*. Taking a clause without AspP to be non-finite, Liu (2016) comes to a crucial conclusion that the verb *bei* selects a non-finite clausal category as its complement, which can be evidenced by the following pair of sentences:

(46) a. 张三 逼 李四 不 吃 饭。

Zhangsan bi Lisi bu chi fan.

Zhangsan force Lisi not eat meal

‘Zhangsan forced Lisi not to eat.’

b. *张三 逼 李四 没有 吃 饭。

Zhangsan bi Lisi meiyou chi fan.

Zhangsan force Lisi not eat meal

Then the remaining problem is that the perfective marker *-le* is able to appear below *bei* although it has been argued that there is no AspP in the complement of *bei*:

(47) 张三 被 李四 打了。

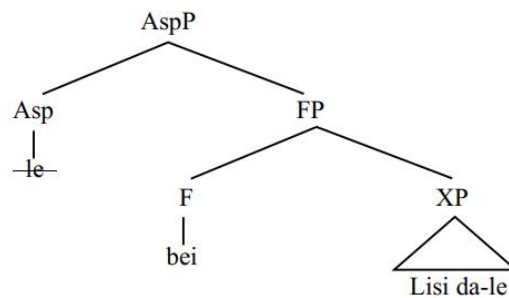
Zhangsan BEI Lisi da-le.

Zhangsan bei Lisi hit-PFV

‘Zhangsan got hit.’

Regarding this problem, Liu (2016) proposes that *-le* in these *bei* sentences is base-generated at the matrix level above *bei* and then lowered to attach to the embedded verb through the process of Functional Restructuring (Grano 2011). *Bei* is assumed to be a light verb that does not allow suffixation to it. The perfective marker *-le* has to pass over *bei* to be attached to the base verbs:

(48)



The reason why the perfective marker may be interpreted at the matrix level is considered to lie in ‘actuality entailment’ (Liu 2016), which means that the event associated with the embedded clause has been realised. If *-le* is interpreted at the embedded level, it would have a ‘relative past’ reading which may indicate that the embedded event precedes the matrix event:

(49) 老师 会 表扬 那些 种了 树 的 人。

Laoshi hui biaoyang naxie zhong-le shu de ren.

Teacher will praise those plant-PFV tree DE person

‘The teacher will praise those who have planted trees’

The thesis has uncovered an alternative approach that can achieve similar effects. This finding will be elaborated upon in Chapter 5.

5 Problems and possible solutions

This chapter aims to tackle the prominent challenges pertaining to *bei* and *bei* passives. It encompasses the theoretical framework employed, the categorial status of *bei*, the derivation of long and short *bei* passives, as well as other related issues.

5.1 Theoretical framework

5.1.1 Challenges of applying generative grammar to Chinese

On the one hand, as evidenced in Section 4.2, the categorial status of *bei* has been a topic of heated debate. The challenge of blurred boundaries between word classes in Chinese presents an obstacle to the implementation of a bottom-up approach such as the Minimalist Program, which demands precise feature specifications.

On the other hand, the analysis of theta roles plays a crucial role in this thesis. As demonstrated in Section 4.1.1.1, the determination of whether the subject of a *bei* sentence is base-generated relies on referencing its theta role. However, most work in Distributed Morphology, a typical top-down framework, does not seem to recognise a set of discrete theta roles. Instead, it positions the semantic interpretation towards the end of derivation.

These two challenges point to the problem that relying solely on a pure top-down or bottom-up framework may not yield satisfactory results.

5.1.2 Developmental view of language competence

This is a generative study of *bei* and *bei* passives. Taking into consideration the challenges of applying generative grammar to the Chinese language, the thesis endeavours to adopt a model that integrates both top-down and bottom-up approaches. To tackle the challenge of understanding *bei* and *bei* passives in the context of grammaticalisation, the thesis has chosen to adopt a developmental view of language competence. By embracing a developmental perspective on language competence, the model aims to strengthen the connection between generative grammar and grammaticalisation.

After reading work on Distributed Morphology, my reaction is that it differs fundamentally from the Minimalist Program. If the Minimalist Program expounds on the

concept of Merge, DM represents a mechanism for de-Merge as it follows a reversed manner of derivation. If Merge holds significance, then de-Merge should likewise be deemed equally significant. A human infant is born equipped with Universal Grammar yet lacks anything to merge. Perhaps he or she must first undergo the process of de-merging what has been merged.

In this vein, the thesis posits that as UG has been activated to develop a particular grammar, it undergoes its own development from a predominantly top-down mode to a primarily bottom-up one. There are thus two stages for the development of language competence: an initial stage and a developed stage. The initial stage model operates without a lexicon, primarily employing top-down syntactic computation, while the model for the developed stage incorporates a lexicon, relying on bottom-up featural projection of lexical items. Language competence at its developed stage retains the computational power characteristic of the initial stage.

The thesis argues that grammaticalisation is the result of competence development in the sense that grammaticalisation arises from competence development that progresses from top-down de-Merge to bottom-up Merge.

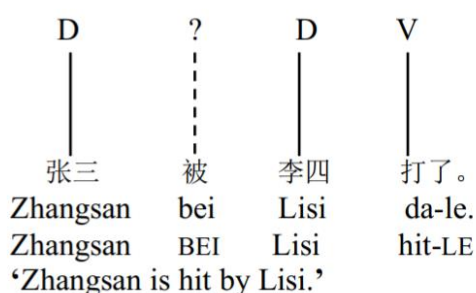
Van Gelderen (2011) examines the relationship between grammaticalisation and generative grammar. The paper summarises the tension between studies of grammaticalisation, which often emphasises functional and typological aspects, and generative grammar, which delves into the inherent capacity for forming language. The conclusion drawn is that grammaticalisation is primarily driven by the child's innate principles, suggesting that generative grammar stands to benefit significantly from studying grammaticalisation.

Van Gelderen (2011) notes that reanalysis has been used among generativists as a reaction to grammaticalisation. This thesis holds that the process of reanalysis undertaken by the learner leads to the phenomenon of grammaticalisation on the part of language. Neither reanalysis nor grammaticalisation is the underlying cause of language change. The underlying cause is the progressive development of competence, which involves a transition from top-down de-Merge to bottom-up Merge.

It is obvious that one of the purposes of de-Merge should be lexicon building. Morphology can constrain paths of de-Merge. Due to the minimal inflection in Chinese, there is a possibility of wild de-Merge taking place. During the process of grammaticalisation, multiple paths may emerge, competing for a stable status in the lexicon.

Due to the minimal morphology of Chinese that allows for multiple paths of de-Merge of *bei* from *bei*-passives, the categorial status of *bei* can be subject to different ways of top-down computation relative to the other lexical items in an unstable process of grammaticalisation:

(50)



Chinese speakers have a clear understanding of the syntactic categories of *Zhangsan*, *Lisi* and *da* (easier to be de-merged using terms within the framework of competence development), but the categorial status of *bei* is subject to the computation relative to the feature specifications of *Zhangsan*, *Lisi* and *da*. Solid lines in this diagram indicate bottom-up projection, while dashed lines represent top-down computation.

It is worth noting that Van Gelderen (2011) mentions that Roberts (1993) is the first to give a formal account of the grammaticalisation of the future in Romance. He argues that grammaticalisation involves ‘the loss of thematic structure [of the V] and a related shift in category from V to I’ (1993: 227). This is a result of a parametric shift, but the motivating factor is a strategy of least effort that eliminates movement. This finding could be potentially relevant to the subsequent analysis.

5.2 Categorial status of *bei*

5.2.1 Competing and questionable arguments

In Sections 4.1 and 4.2, we can see three competing views of *bei*: *bei* as a verb, *bei* as a preposition and *bei* as both a verb and a preposition.

Furthermore, as noticed by Svenonius (2024), even on the assumption that *bei* is verbal, there remain numerous questions. Huang *et al.* (2009) liken it to an auxiliary or light verb, but auxiliary or light verbs do not normally introduce an embedded clause.

5.2.2 Potentials and conditioned computation

Under the assumption that *bei* is undergoing grammaticalisation, this section is intended to explore the potential categorial nature of *bei* within the framework of competence development and pave the way for the derivation of *bei* passives. Three possibilities will be discussed: *bei* computed as a lexical verb, *bei* computed as a functional verb, *bei* computed as a preposition and *bei* computed as a complementizer. It is reasonable to argue that an unstable and transitional state can accommodate multiple possibilities.

5.2.2.1 Potential for *bei* being computed as lexical verb

Section 3.2 demonstrates the dramatic changes that *bei* passives have undergone throughout history. Prior to the New Culture Movement, the usage of *bei* passives was predominantly observed in negative contexts, primarily featuring an animate patient serving as the subject. Based on this observation, this thesis assumes that the *bei* in this context is largely lexical.

Thus, the construction of the *bei* passives before the New Cultural Movement can be summarised as: animate sufferer + *bei* + ... (semantic prosody: overwhelmingly negative).

Meanwhile, taking into consideration the verbal heritage discussed in Section 3.1, the test of the subject-oriented adverb *guyi* ‘intentionally’ as in (18) and the test of the subject-oriented reflexive *ziji* ‘self’ as in (21) in Section 4.1.1.1, the thesis also assumes that the *bei* in this context is largely verbal in the sense that the subject of a passive in this context may receive a theta role from *bei* and thus can be considered base-generated.

The conditions for *bei* being computed (de-merged) as a lexical verb include an inflictive reading and an animate subject.

5.2.2.2 Potential for *bei* being computed as functional verb

The period following the New Culture Movement has witnessed drastic changes happening to *bei* passives. The usage of *bei* passives has been no longer confined to negative situations and inanimate patients have gained an equal status with animate ones as subjects.

Therefore, the construction of the *bei* passives after the New Cultural Movement can be summarised as: animate being/inanimate thing + *bei* + ... (semantic prosody: non-negative + negative).

The abovementioned the *guyi* ‘intentional’ test is not infallible. Huang *et al.* (2009) use *guyi* as a subject-oriented adverb to argue that the DP preceding *bei* is base-generated. There are at least two problems with the test of *guyi*.

One problem with *guyi* is that Zhangsan can also be the topic of the sentence as in (18) since it is difficult to distinguish between subject and topic in Chinese. If Zhangsan is the topic, *guyi* can be in the domain of CP rather than TP. If *guyi* is in the domain of CP, the interpretation of this sentence can be ‘Zhangsan got hit by Lisi. This is out of deliberate reasons.’ Another example in Chinese can be given to further illustrate this point:

(51) 张三 肯定 被 李四 打了。

Zhangsan kending bei Lisi da-le

Zhangsan be certain BEI Lisi hit-LE

‘It is certain that Zhangsan was hit by Lisi.’ (easier interpretation)

‘Zhangsan is certain of having been hit by Lisi.’ (harder interpretation)

For the easier interpretation, Zhangsan can be considered to be the topic, whereas for the harder interpretation, Zhangsan can be regarded as the subject. It is the topic reading that is readily derived for this case.

The other problem with *guyi* is that it can hardly be inserted in a sentence with an inanimate subject:

(52) *这 画 故意 被 人 喜爱。

Zhe hua guyi bei ren xi'ai.

this painting deliberately BEI people like

'This painting is deliberately liked by people.'

If no rhetorical effect is intended, the use of *guyi* is not possible in such cases.

Also discussed in Chapter 4 is that *bei* passive allows for both a control and a raising analysis, which is called the chameleonic character of *bei* passives.

If *bei* takes an idiom chunk subject, the subject position is non-thematic and the *bei* passive is a raising structure. In addition to the previous example of *zhan pianyi* 'take advantage', numerous other idiomatic expressions can be used to further illustrate this point. The following scene occurs when a supervisor discovers that his student's thesis is poorly written. He says:

(53) 脸 都 被 你 丢尽了。

Lian dou bei ni diu-jin-le.

face all BEI you drop-complete-LE

'You have completely embarrassed me.'

Diu lian 'drop face, to embarrass' is also an idiom chunk in Chinese. This sentence obviously represents a raising structure.

Compared with the *bei* that is verbal and lexical, it seems that this *bei* lost its thematic structure and has become functional. The analysis in this section can point to a verbal and functional interpretation of *bei*.

The thesis argues that the reason why *bei* can be de-merged as functional is likely due to the mechanism represented by DM. With DM, the encyclopaedia is accessed towards the end of derivation. This suggests that the initially merged lexical *bei*, which is loaded with negative semantics, is likely to be de-merged as functional at the beginning in the sense that syntactic computation is expected to be semantically neutral or blind to semantics. As a result, *bei* passives have allowed for inanimate subjects and positive interpretations.

Since inanimate subjects and positive interpretations have become established, it is temporarily assumed in this thesis that the conditions for *bei* being computed (de-merged) as a functional verb include a non-negative reading and an inanimate subject. Yet the motivation behind this lies in de-Merge.

5.2.2.3 Potential for *bei* being computed as preposition

Section 2.3 presents a brief introduction to the middle construction in Chinese, a type of sentence with the semantics of a passive:

(54) 老师 在 上课。(active)

laoshi zai shangke.

teacher ZAI teach

‘The teacher is teaching.’

(55) 学生 在 上课。(middle)

xuesheng zai shangke

student ZAI teach

‘The student is being taught.’

(54) is an active sentence, while (55) represents an example of middle construction. Now we turn to this sentence again:

(56) 张三 被 李四 打了。

Zhangsan bei Lisi da-le.

Zhangsan BEI Lisi hit-LE

‘Zhangsan is hit by Lisi.’

If we assume that *da* ‘hit’ is in its middle voice, then we can obtain a middle construction with a passive meaning:

(57) 张三 打了。

Zhangsan da-le.

Zhangsan hit-LE

‘Zhangsan is hit.’

This sentence normally means ‘Zhangsan hits’, but the above reading can be justified on the assumption that *da* ‘hit’ is in its middle voice. Then *bei*-Lisi sequence can be regarded as a PP headed by *bei* as claimed by the NP-movement approach to the derivation of the long *bei* passive.

The conditions for *bei* being computed (de-merged) as a preposition are:

- (i) *bei* is in a long passive (there is no DP that follows *bei* in a short passive)
- (ii) the verb is interpreted as in its middle voice

Therefore, for a long passive as (56), when the categorial status of *Zhangsan, Lisi* and *da* can be determined, the fuzzy *bei* might be computed to be prepositional in relation to the other lexical items, especially to *da* that is in middle voice.

5.2.2.4 Potential for *bei* being computed as complementizer

Svenonius (2024b) notes that *bei* can be a special kind of complementizer, which variably selects for VP (in short passives) or VoiceP (in long passives). Irish is said to have special C heads which can select small clauses

It has the C-like property associated with the top of a clause that hosts a null operator. It has been observed that C and P are closely related, for example, some words can be P or C (before dinner, before we ate; after dinner, after we ate; since dinner, since we ate). So for *bei* to function as C is also a sense in which *bei* operates as P.

The thesis assumes at the present stage that *bei* is likely to be de-merged as a complementizer if discursal relevance is perceived in a strengthened manner as the C domain can be considered related to discursal factors.

5.2.2.5 Summary

As evident from the above, there are at least four different paths for computing *bei*. Crucial drawbacks in previous research are adopting a static view on both *bei* and *bei* passives and not specifying which *bei* or which path for computing *bei* is under question, which has compounded the issues surrounding *bei* and *bei* passives as each path has its own related phenomena.

Based on the analysis of the four paths, it can be inferred that *bei* has been undergoing a process from the lexical (lexical verb) to the functional (functional verb, preposition and complementizer). These potentials may be vying for a stabilised status in the lexicon.

5.3 Aspectual marker *-le*

The perfective marker *-le* plays a pivotal role in the analysis of the derivation of *bei* passives.

Liu (2016) proposes that *-le* in these *bei* sentences is base-generated at the matrix level above *bei* and then lowered to attach to the embedded verb through the process of Functional Restructuring (Grano 2011). This analysis aims to argue for the non-finiteness of the embedded clause.

The major problem with Liu (2016) is that it excludes a lexical possibility of *bei*.

This thesis has uncovered an alternative approach that can achieve a similar effect and accommodate both a lexical and a functional *bei* by arguing that *bei* and *-le* are hierarchically closer.

5.3.1 OV order

Li and Thompson (1974) hold that Mandarin had been undergoing a change from SVO to SOV as a result of grammaticalisation of serial verb constructions. On the contrary, LaPolla (1989) argues that Proto-Sino-Tibetan had verb-final word order, and that Pre-Chinese (Proto-Chinese) had changed from verb-final to verb-medial order. In the light of pairs of word order correlations proposed by Dryer (1992, 2008), Jin and Yu (2012) adopt the middle way and advocate that Standard Chinese is a language that oscillates between VO and OV orders. Based on these studies, it can be assumed that a latent OV order has been shaping some structures in Standard Chinese.

5.3.2 Relationship between *bei* and aspectual markers

The corpus-based research on Chinese passives by Xiao and McEnery (2010) identifies that passive constructions in Chinese syntactically marked by *bei* etc. are closely linked to aspect. Table 5 shows the interaction between syntactic and lexical passives with various aspect-related constructions:

Table 5 - Interaction between passives and aspect (Xiao and McEnery, 2010)

| Marker | -le | -zhe | -guo | RVC | de-result | Negation | Bare | Total |
|---------------------|----------------|--------------|--------------|----------------|--------------|--------------|----------------|----------------|
| <i>bei</i> | 213 (16.4%) | 19 (1.5%) | 4 (0.3%) | 462 (35.5%) | 48 (3.7%) | 50 (3.8%) | 504 (38.8%) | 1300 66.2% |
| <i>wei...suo</i> | — | — | — | — | — | 5 (7.2%) | 64 (92.8%) | 69 (3.5%) |
| <i>gei</i> | 19 (47.5%) | 1 (2.5%) | — | 11 (27.5%) | 5 (12.5%) | — | 4 (10.0%) | 40 (2.1%) |
| <i>jiao</i> | 3 (75%) | — | — | — | — | — | 1 (25%) | 4 (0.2%) |
| <i>rang</i> | 6 (40%) | — | — | 2 (13.3%) | — | 4 (26.7%) | 3 (20%) | 15 (0.8%) |
| Syntactic- total | 241 (16.9%) | 20 (1.4%) | 4 (0.3%) | 475 (33.3%) | 53 (3.7%) | 59 (4.1%) | 576 (40.3%) | 1428 |
| <i>ai</i> | 7 (23.3%) | — | 1 (3.3%) | 2 (6.7%) | — | — | 20 (66.7%) | 30 (1.5%) |
| <i>shou</i> | 42 (10.1%) | 4 (1.0%) | 12 (2.9%) | — | — | 37 (8.9%) | 319 (77.1%) | 414 (21.1%) |
| <i>zao</i> | 11 (12.1%) | 2 (2.2%) | 1 (1.1%) | — | — | — | 77 (84.6%) | 91 (4.6%) |
| Lexical total | 60 (11.2%) | 6 (1.1%) | 14 (2.6%) | 2 (0.4%) | — | 37 (6.9%) | 416 (77.8%) | 535 |
| Total/ Average | 301 (15.3%) | 26 (1.3%) | 18 (0.9%) | 477 (24.3%) | 53 (2.7%) | 96 (4.9%) | 992 (50.6%) | 1963 (100%) |

The thesis focuses on *bei*. The diagram shows that there are 213 instances of *bei* co-occurring with the perfective aspect marker *-le*, which accounts for 16.4% of all instances where *bei* co-occurs with the aspectual markers listed, while occurrences of bare *bei* make up 38.8% of the instances. It is argued by Xiao and McEnery (2010) that syntactic passives in Chinese convey an aspectual meaning of result that cannot be cancelled when they interact with perfective aspects.

5.3.3 *Bei-le*

The observations of the word order of Chinese and the interaction between passives and aspect can be combined via Hierarchy of Projections. In Standard Chinese, a question can be formed with the addition of a question marker at the end of a sentence:

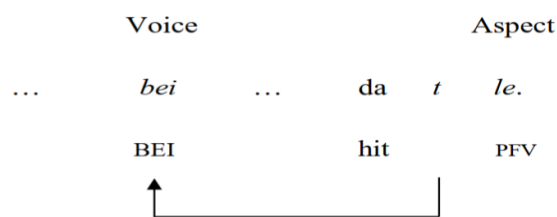
(58)

| | | | | | | |
|----------|-----|------|-----|-----|----|---|
| 张三 | 被 | 李四 | 打 | 了 | 吗 | ? |
| Zhangsan | bei | Lisi | da | le | ma | |
| Zhangsan | BEI | Lisi | hit | PFV | Q | |
| | | | V | T | C | |

‘Was Zhangsan hit by Lisi?’

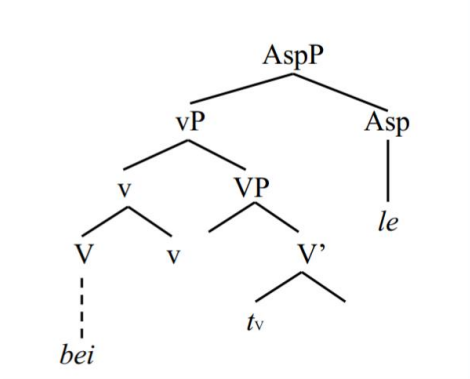
As can be seen, there might be a missing link of *v* between V and T. It can be assumed, on the basis of an OV order and the pattern of co-occurrence of *bei* and *-le*, that *bei* can fill this gap as an auxiliary verb in *v* or Voice position if the underlying order is V-*v*-T-C. In other words, hierarchically speaking, it is *bei-le* rather than *da-le*. Somehow there has been an unknown reason that has driven the Chinese language to be in C-T-V order, whereby *bei* moves to a head position of VoiceP:

(59)

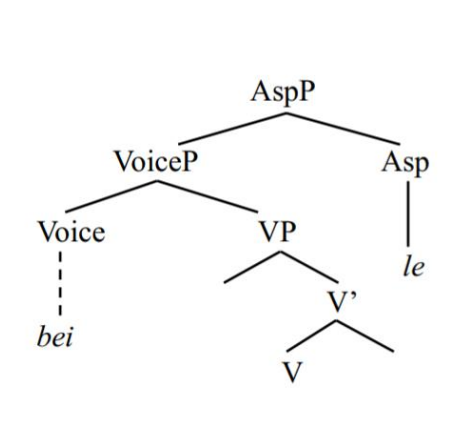


This way, the reason for the hierarchical closeness between *bei* and the aspectual mark *-le* can be explained, and the non-finiteness of an embedded clause if there is one can be guaranteed. The following diagram represents a possible skeleton of a passive with a lexical verbal *bei* and a functional verbal *bei* respectively:

(60) Lexical verbal *bei*:



(61) Functional verbal *bei*:



5.4 Mono- or bi-clausal

The thesis argues that the mono- or bi-clausal debate over *bei* passives is intertwined with different paths for de-merging *bei*.

5.4.1 Two readings

Based on the discussion regarding the possibilities for computing *bei* in Section 5.2.2, it can be inferred that one *bei* passive can have multiple structures depending upon how *bei* is de-merged.

Take the two old acquaintances for instance:

(62) 张三 被 李四 打 了。

Zhangsan bei Lisi da le.

Zhangsan BEI Lisi hit PFV

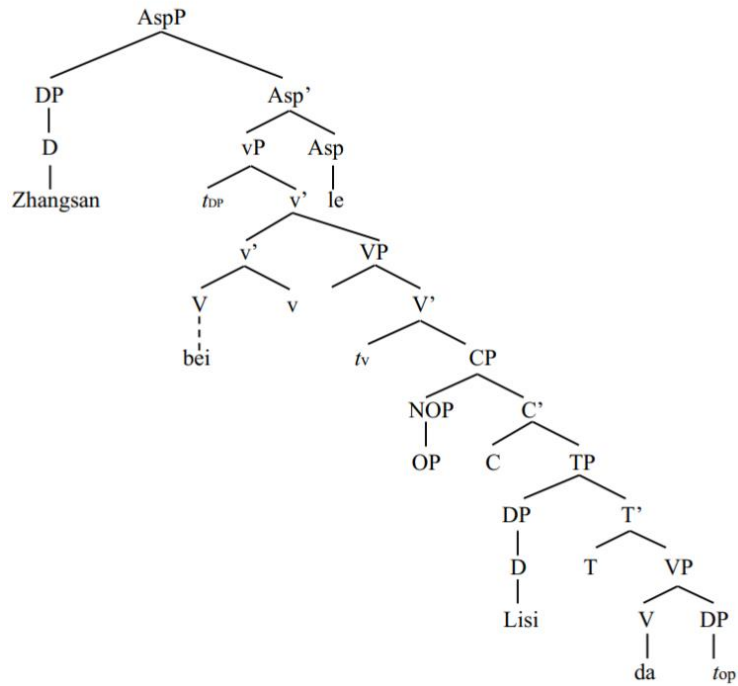
‘Zhangsan is hit by Lisi.’

There can be two readings for this sentence, a negative one and a non-negative one. With the negative reading, the subject (patient) Zhangsan acts as an innocent sufferer and the *bei* can be lexical. On the other hand, a non-negative reading is also possible. If Zhangsan is a bully, people would feel that justice has been done. The *bei* in such a non-negative reading can be functional.

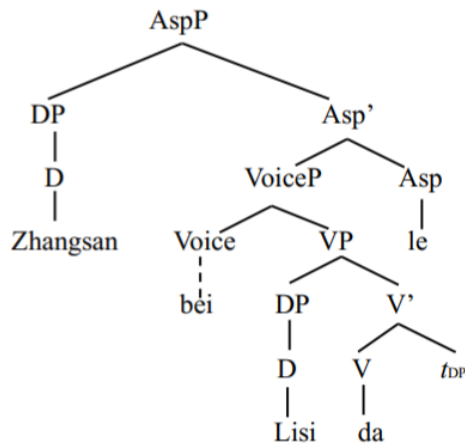
5.4.2 Two structures

The two readings can be represented with the following two structures:

(63) Structure for negative reading:



(64) Structure for non-negative reading:



As can be seen, (63) embodies a control/predication analysis whereas (64) reflects a raising analysis. Therefore, it can be assumed that a lexical verbal *bei* is associated with a control/predication analysis and a bi-clausal structure while a functional verbal *bei* with a raising analysis and a mono-clausal structure.

As is known, the reflexive *ziji* is used to argue for the verbal status of *bei* as it is subject-oriented. *Ziji* in the following sentence can refer to Zhangsan or to Lisi, which suggests that they can both be subjects (Huang *et al.*, 2009):

(65) 张三 被 李四 关 在 自己 的 家里。

Zhangsan bei Lisi guan zai ziji de jiali.

Zhangsan BEI Lisi lock at self DE home

‘Zhangsan was locked by Lisi in self’s home.’ (ZS’ or LS’)

This sentence is a long passive, whose *bei* can be either lexical or functional. Thus, it can be assumed that *ziji* in a lexical *bei*-sentence refers back to the subject of the embedded clause (Lisi) in terms of a bi-clausal control/predication analysis, while *ziji* in a functional *bei*-sentence refers back to the subject (Zhangsan) in terms of a mono-clausal raising analysis.

6 Conclusion

The Buddha recounted the tale of the blind men and the elephant. Similarly, in the realm of Chinese language studies, researchers usually find themselves blind due to the dearth of morphological cues. Consequently, we have to investigate perplexities in darkness and from individual perspectives.

The thesis first attempts to equip the reader with sufficient knowledge to facilitate his or her understanding and judgements, including the basics of Chinese grammar, structures of long and short *bei* passives, the historical development of *bei* and *bei* passives. The thesis also summarises the key debates surrounding *bei* and *bei* passives. It covers three competing approaches to the derivation of long and short *bei* passives, the categorial status of *bei*, the chameleonic character of *bei* passives, and the argument for the non-finiteness of the embedded clause that *bei* selects for.

Taking into consideration the challenges of applying generative grammar to the Chinese language, the thesis proposes a model that integrates both top-down and bottom-up approaches. To meet the challenge of understanding *bei* and *bei* passives in the context of grammaticalisation, the thesis embraces a developmental view of language competence. With a developmental perspective on language competence, the thesis is intended to strengthen the link between generative grammar and grammaticalisation. Building upon the framework of competence development, such issues as the categorial status of *bei*, the relationship between *bei* and the perfective marker *-le*, and the debate over the mono- or biclausal nature of *bei* passives have been discussed.

Due to my limited knowledge and time, the thesis has the following drawbacks.

Firstly, a thorough historical investigation of *bei* and *bei* passives should be conducted. Secondly, the judgement of the negative and non-negative semantic prosodies of *bei* passives seems arbitrary without a corroborative questionnaire. Thirdly, the thesis does not cover all types of *bei* passives. In the examples of the previous chapters, the subject of a passive sentence is coindexed with the direct object of the verb in the embedded clause. These are direct passives. However, the passive can also be indirect, where the subject is related to something other than the direct object, or not to any apparent syntactic position in the main clause. Fourthly, I originally planned to apply the phase theory to the analysis of *bei* passives, but I do not fully understand this theory. Let these deficiencies be made up for in future studies.

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