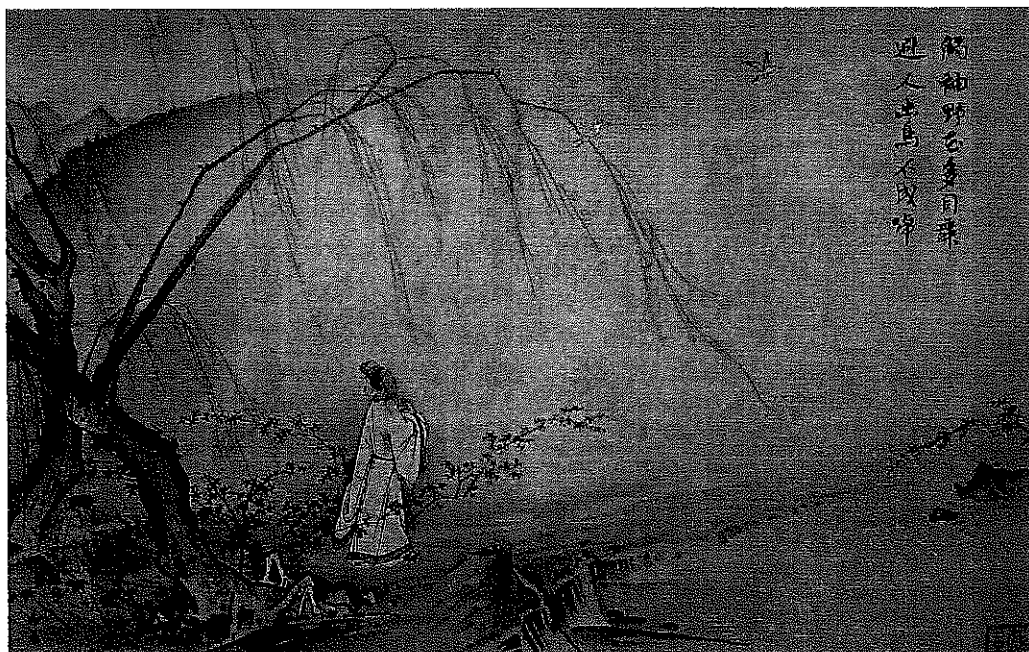


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Breaking Down the Barriers: Interdisciplinary Studies in Chinese Linguistics and Beyond

Volume 2



Edited by

Cao Guangshun, Hilary Chappell, Redouane Djamouri and
Thekla Wiebusch

Institute of Linguistics, Academia Sinica, Taipei, Taiwan

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綜古述今 鉤深取極

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Guangshun Cao, Hilary Chappell, Redouane Djamouri and
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Diachrony

- “完結短語”及漢語結果補語的語法化和完成體標記的演變過程
沈陽、玄瑛..... 553
- Syntactic Change in Chinese and the Argument-Adjunct Asymmetry
Redouane Djamouri (羅端), Waltraud Paul (包華莉) and
John Whitman (魏德中)..... 577
- Short Passives in Modern and Classical Chinese
Shengli Feng (馮勝利)..... 595
- Chinese Resultative Verb Compounds: Lexicalization and
Grammaticalization
Chaofen Sun (孫朝奮)..... 625
- 近、現代漢語裡“給+VP”的形成
張伯江..... 651
- 歷時與共時：起始類介詞的語意發展和多義現象
熊慧如..... 665
- 試說“連X+都VP”構式的語法化
楊永龍..... 687
- Classification*
- Peut-on compter les langues?
Gérard Lenclud 707
- On Principles and Practices of Language Classification
Katia Chirkova (齊卡佳) 715
- The Classification of Sinitic Languages: What is “Chinese”?
Victor H. Mair (梅維恆) 735

Short Passives in Modern and Classical Chinese

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While the long passive *bei*-sentences in Mandarin Chinese involve an A'-movement, the short passives, as argued in the paper, can be divided into two types of constructions: one is viewed as a lexical compound; while the other is viewed as a complex verb. From both synchronic and diachronic perspectives, it is further argued that if the chronology of emergence of the [*bei* VP] forms is taken into account, three types of operations ranging from morphology (the [*bei*-V] compound), to morphosyntax (the [[*bei* V] NP] generated by the verb complex via Verb Incorporation) and to phrasal syntax (the [*bei* V__] derived by NP-movement) are all observed in history and maintained in Mandarin Chinese. It is then concluded that while synchronic analyses should refer to historical facts, diachronic studies can just as effectively cast light on synchronic research.

Key words: long passive, short passive, A'-movement, Verb-incorporation

1. Introduction

In formal syntactic theory, passive constructions have been taken as fundamental syntactic processes involving NP-movement. According to Chomsky (1995), movements never occur unless the interactions of some principles or subtheories require it. Passivization, a case of NP-movement, is triggered by passive morphology and forced by case theory. But such kind of syntactic analysis is found difficult to apply to languages like Chinese, since there is simply no such passive morphology in Chinese as in English. For example:

- (1) a. 在戰爭中張三被敵人炸掉了一條腿。
Zài zhànzhēng zhōng Zhāngsān bèi dírén zhà-diào le yītiáo tuǐ.
at war inside Zhangsan BEI enemy blown-off ASP one.CL leg
'Zhangsan's one leg was blown off by the enemy in the war.'
- b. 張三_i被李四打了他_i好幾次。
Zhāngsān_i bèi Lísì dǎ le tā_i hǎo-jǐ cì.
Zhangsan_i BEI Lisi hit ASP him_i good-many times.
'Zhangsan was hit by Lisi many times.'

bei is traditionally called a passive marker and therefore the pattern of a full passive sentence in Modern Chinese is like the following.

- (2) [NP₁ *bei* NP₂ V NP₃/pronoun]

NP₁, the subject of a passive, is the logical object, and NP₂ is the logical subject. Since a pronoun or an NP in the object position needs Case according to the Case-filter, the verbs in (1) must have the ability to assign Case to the object. Therefore the passive marker *bei* does not function like *-en* in English, which absorbs the accusative case and the subject theta role from the verb.

Furthermore, although a pronoun is allowed to appear in the object position as seen in (1b), the sentence becomes ungrammatical if the agent NP is absent:

- (3) *張三,被__打了他,好幾次。
 *Zhāngsān_i bèi ___ dǎ le tā_i hǎo-jǐ cì.
 Zhangsan_i BEI ___ hit ASP him_i good-many times
 Intended meaning: 'Zhangsan was hit many times.'

However, the absence of the agent NP would not affect the grammaticality of (1a):

- (4) 在戰爭中張三被炸掉了一條腿。
 Zài zhànzhēng zhōng Zhāngsān bèi ___ zhà-diào le yìtiáo tuǐ.
 in war inside Zhangsan BEI ___ blown-off ASP one.CL leg
 'One of Zhangsan's leg was blown off in the war.'

Why is the agent NP so crucial in licensing the object pronoun and why are object NPs not affected by the presence or absence of the agent? *Bei* sentences without the agent NP have been called *Short Passive* (Ting 1995, Huang 1999), hence the question is why pronouns should make any difference from NPs in the short passive construction.

In this paper, I argue that the synchronic problems may very well be resolved from a diachronic perspective. First, according to Feng (1998), there were three types of *bei* passive structures that developed one after the other in Chinese history. The [*bei*-V] compound passive is attested in Archaic Chinese (400 BC). The [*bei* VP] phrasal passive is attested during the Eastern Han (100 AD) and the [*bei* IP] full (long) passive is attested by the Late Han (200 AD) and further developed by the Six-dynasties (420-589 AD). These three stages of the developments of *bei* passives are historically related but structurally independent, and all of the three forms are kept in Modern Chinese.

This paper is organized as follows. Section 2 provides background from previous studies on short passives in Chinese. Section 3 supports the compound-analysis proposed

by McCawley (1992) from a historical perspective. Section 4 describes the origin of the three types of *bei* passive constructions in Chinese history. Section 5 argues for a Verb Incorporation (VI) analysis for the phrasal compounds, and §6 is a summary of this study.

2. Previous studies on short passive construction

The short passive has always been a problem in Chinese syntax. For example (taken from McCawley 1992).

- (5) *我被____從身上偷了手錶。
 *Wǒ bèi ____ cóng shēnshàng tōu le shǒubiǎo.
 I BEI ____ from body steal ASP watch
 'I had my watch stolen off my wrist.'

When the agent NP is absent, no prepositional phrases are allowed to be adjacent to the *bei*. To this problem, Cheng (1986) proposes a reanalysis rule, cited in (6) which seems to work very well for (5).

- (6) [VP P + e + V] → [V P V] (Cheng 1986)

It states that in the domain of VP, a preposition (i.e., *bei*) which is followed by an empty NP is reanalyzed as part of a compound verb. In Cheng's system the reanalysis is obligatory if the agent NP is empty. Cheng's (6) would rule out sentences like (5) by designating that *bei* is not adjacent to the verb and thus cannot be compounded with the verb. It seems to be a perfect solution to the problems caused by (5). There are, unfortunately, grammatical sentences in which the *bei* is not followed by a verb when the agent NP is absent, as pointed out by McCawley (1992) and Ting (1995):

- (7) a. 張三被秘密地逮捕了。
 Zhāngsān bèi mìmì.de dàibǔ le.
 Zhangsan BEI secretly arrest ASP
 'Zhangsan was arrested secretly.'
- b. 張三被殘忍地殺死了。
 Zhāngsān bèi cánrěn.de shā-sǐ le.
 Zhangsan BEI cruelly kill-die ASP
 'Zhangsan was killed cruelly.'

Obviously, when the reanalysis rule successfully rules out the ungrammatical ones in (5), it also rules out the grammatical ones in (7). It should be noted, however, that the reanalysis rule given by Cheng has captured an important property of the short passive sentences, as we will see in §3.

There is another problem brought up by short passives to the A'-movement analysis proposed by Feng (1990, 1995) and supported in Chiu (1995), Ting (1995, 1996) and Cheng, Huang, Li & Tang (1996). The A'-movement analysis was originally motivated by long passive sentences like the following (Feng 1990):

- (8) a. 張三_i被人把他_i打死了。
 Zhāngsān_i bèi rén bǎ tā_i dǎsǐ le.
 Zhangsan_i BEI someone BA him_i kill ASP
 'Zhangsan was killed by someone.'
- b. 教室_i被老師派李四找人掃乾淨_{t_i}了。
 Jiàoshì_i bèi lǎoshī pài Lǐsì zhǎo rén sǎo-gānjìng t_i le.
 classroom_i BEI teacher send Lisi find men sweep-clean t_i ASP
 '*The classroom was sent Lisi to find someone to sweep by the teacher.'
 'The classroom_i was cleaned by someone who the teacher sent Lisi to find.'

Feng (1990) argues that the *bei*-sentences in (8) involve an empty operator movement, taking the following structural analysis:

- (9) 張三被我打死了。
 Zhāngsān bèi [_{S'} OP_i [_S wǒ dǎ-le e_i]]

The operator *OP* is an EC and is semantically empty, therefore, [_{e_i}] is in effect a free variable, assigned no value by its operator in the embedded clause. As a result, it violates the principle barring vacuous operators. To satisfy the requirements that each LF variable be assigned a value by an antecedent that A-binds it, [_{e_i}] must be bound by an NP in the matrix subject position as in (10a):

- (10) a. 張三被我打了。
 Zhāngsān_i [bèi [OP_i [wǒ dǎ le e_i]]]
 Zhangsan BEI I hit ASP
 'Zhangsan was hit by me.'
- b. *Zhāngsān_i bèi [OP_j [wǒ dǎ-le e_j]]

Under this analysis, sentence (10b) can be readily ruled out, because [_{e_j}] is bound

only by OP_i , and is in effect a free variable, which must be ruled out. The advantage of this analysis is that it explains not only the grammaticality of long passives in Modern Chinese, but also those in Classical Chinese¹ (see Wei 1994), as in (11).

- (11) a. 墓上人...被石酒氣充入鼻中。(Suoshenji 搜神記 19, ca. 363 AD)
 Mù shàng rén... bèi Shí jiǔ qì chōng rù bí zhōng
 tomb up man... BEI Shi alcohol smell penetrate enter nose inside
 'The men on the tomb...got penetrated by Shi's alcoholic smell into their nose.'
- b. (金丹)若被諸物犯之...(Baopuzi 抱朴子, Neipian 內篇, ca. 300 AD)
 (Jīndān) ruò bèi zhūwù fàn zhī...
 (Jindan) if BEI everything attack him...
 'If Jindan was attacked (him) by everything...'

A retained object (11a) and especially a resumptive pronoun (11b) were also found to appear in the object position of long passive sentences in Classical Chinese which is exactly what the A'-movement analysis predicts.

However, the A'-movement analysis suffers from the challenge of short passive sentences. First, why are the following sentences ungrammatical?

- (12) *張三_t被打了他_i了。
 *Zhāngsān_i bèi dǎ le tā_i le.
 Zhangsan BEI hit ASP him ASP
 Intended meaning: 'Zhangsan was hit (him).'

There seems to be no reason for the A'-movement analysis to rule out the ungrammatical sentences, because the absence of the agent NP should not affect the structure for the Null Operator to move, if short passives are derived from the long form via deletion of the agent NP. In order to account for these sentences, Feng (1990), following Cheng (1986), proposes a reanalysis rule similar to (6) and claims that the $v_P[...bei X...]$ is reanalyzed as a compound. However, the reanalysis account, as seen before, is seriously challenged by the following examples (Ting 1995):

¹ The term 'Classical Chinese' is used here as a cover term referring to the literary language in Archaic and Ancient Chinese. 'Archaic Chinese' refers to the language used before the Qin Dynasty (220-206 BC) and 'Ancient Chinese' refers to the language from the Han Dynasty (206 BC-220 AD) to the Tang Dynasty (618-907 AD).

- (13) a. *張三被在公園打死了。
 *Zhāngsān bèi zài gōngyuán dǎ-sǐ le.
 Zhangsan BEI at park hit-die ASP
 Intended meaning: 'Zhangsan was hit to death in a park.'
- b. 張三被秘密地打死了。
 Zhāngsān bèi mìmì.de dǎ-sǐ le.
 Zhangsan BEI secretly hit-die ASP
 'Zhangsan was hit to death secretly.'

The question is: if *bei* must be reanalyzed with the next element, why can it be so in (13b) but not in (13a)? Obviously, the reanalysis approach cannot account for the difference between (13a) and (13b).

In order to explain why there are two entirely different syntactic derivations operating in *bei* sentences, Ting (1995) proposes that there are actually two separate BEIs. BEI-1 is a two place predicate, taking an infinitive clause as its internal argument and an NP as its external argument, hence giving rise to an A'-movement. But BEI-2 can only take a VP as its internal argument, hence an A-movement is involved.

The Two-BEI analysis avoids the problem caused by the Reanalysis Hypothesis (Cheng 1986, Feng 1990), because what must be said about the short passives like (13b) in terms of a reanalysis can now be attributed directly to the syntactic properties of the BEI-2. Since BEI-2 only takes a bare VP, only VP adverbials (13b) but not sentential adverbials (13a) are allowed (See Ting 1996 for detailed analyses).

While distinguishing two BEIs is really a correct solution, as can be seen in §5, the NP-movement analysis for short passives is not without problems as it stands. First, as Huang (1999) points out, the *bei* passives (both long and short) may contain a subject-oriented adverb like *gùyì* 'intentionally', which the *bei* passive in English does not allow. For example (taken from Huang 1999):

- (14) a. 張三故意被打了。
 Zhāngsān gùyì bèi dǎ le.
 Zhangsan intentionally BEI hit ASP
 'Zhangsan intentionally got hit.'
- b. 張三故意被李四打了。
 Zhāngsān gùyì bèi Lǐsì dǎ le.
 Zhangsan intentionally BEI Lisi hit ASP
 'Zhangsan intentionally got hit by Lisi.'
- c. *Zhangsan was hit intentionally.'

This suggests that the subject is base-generated in place and receives an independent thematic role from *bei*. If this is so, the Theme object cannot undergo an NP-movement to the subject position, because the subject position is not dethematized.

Second and most importantly, it is difficult for an NP-movement analysis to account for the grammatical sentence properly, as seen in (4) and more in (15).

- (15) a. 張三被咬掉了一隻手。
 Zhāngsān bèi yǎo-diào le yīzhī shǒu.
 Zhangsan BEI bite-off ASP one hand
 'Zhangsan had one of his hands bitten off.'
- b. 房頂被吹掉了一個角。
 Fángdǐng bèi chuī-diào le yíge jiǎo.
 roof BEI blow-off ASP one corner
 'A corner of the roof was blown off.'
- c. 愚人被他打頭。(Baiyujing 百喻經, ca. 500 AD)
 Yúrén bèi tā dǎ tóu.
 simpleton BEI he hit head
 'The simpleton was hit (his head) by someone.'
- d. 近者被截髮。(Luoyang Qielanji 洛陽伽藍記, ca. 500 AD)
 Jìn zhě bèi jié fà.
 close one BEI cut hair
 'The intimate ones had their hair cut off.'
- e. 龜被生揭其甲。(Lingbiao Luyi 嶺表錄異, ca. 850 AD)
 Guī bèi shēng jiē qí jiǎ.
 turtle BEI alive take-off its shell
 'The turtle's shell was taken off while it was still alive.'

In these sentences, a retained object can still appear in the object position. The above grammatical sentences therefore argue against an A-movement analysis as given in the standard theory that NP-movement is forced by the lack of Case.² In fact, for whatever motivations that one can come up with to make the object NP (or part of it) to

² Note that the retained object can probably be said to have an inherent Case not necessarily assigned by the verb. If this is so, why are the same sentences ungrammatical in English?

*The roof was blown off a corner.

*Zhangsan was bombed off one leg in the war.

*Zhangsan was bitten off one hand.

As seen below, the difference between Chinese and English can be explained by the theory developed here.

move (or stay), the movement process must be optional and not obligatory, which obviously leads to a situation in which an NP-movement is not called for.³ In what follows I argue that an appropriate analysis for the short passives should not only account for synchronic examples, but also accommodate diachronic facts. This is particularly so in the study of *bei* passives because, as we will see later, the short passives were not only independent of the long passives, but also developed during several historical stages. Most importantly, each stage of their developments created an independent structure used in Modern Chinese. Therefore, without a historical perspective, it is hard to see the independence of the short form from the long one and difficult to capture the variety of short passives established in history which have endured until the present day.

3. [*bei*-V] as compounds

Although current syntactic analyses have adopted the A'-movement analysis for long passive *bei* sentences, there is no agreement upon the short passive sentences. The problems involved in various types of short passives can be summarized in examples given in (16):

- (16) a. 張三被人秘密地逮捕了。
 Zhāngsān bèi rén mìmì.de dàibǔ le.
 Zhangsan BEI people secretly arrest ASP
 'Zhangsan was secretly arrested by someone.'
- a'. 張三被____秘密地逮捕了。
 Zhāngsān bèi ____ mìmì.de dàibǔ le.
 Zhangsan BEI secretly arrest ASP
 'Zhangsan was secretly arrested.'
- b. 張三被人秘密地把他殺害了。
 Zhāngsān_i bèi rén mìmì.de bǎ tā_i shāhài le.
 Zhangsan BEI people secretly BA him murder ASP
 'Zhangsan was secretly murdered (him) by someone.'
- b'. *張三被____秘密地把他殺害了。
 *Zhāngsān_i bèi ____ mìmì.de bǎ tā_i shāhài le.
 Zhangsan BEI secretly BA him murder ASP
 Intended meaning: 'Zhangsan was secretly murdered (him).'

³ Huang (1999) proposes an 'NP-movement-plus-control analysis' for the [NP *bei* V__] short passives and, as seen in below, diachronic facts also argue for the NP-movement in this type of *bei* sentences.

- c. 張三被人把他打死了。
 Zhāngsān_i bèi rén bǎ tā_i dǎ-sǐ le.
 Zhangsan BEI people BA him hit-die ASP
 'Zhangsan was killed (him) by someone.'
- c'. *張三被把他打死了。
 *Zhāngsān_i bèi bǎ tā_i dǎ-sǐ le.
 Zhangsan BEI BA him hit-die ASP
 Intended meaning: 'Zhangsan was killed (him).'
- c''. *張三被打死了他_i。
 *Zhāngsān_i bèi dǎ-sǐ le tā_i.
 Zhangsan BEI hit-die ASP him
 Intended meaning: 'Zhangsan was killed (him).'
- d. 那隻狗被人打掉了一條腿。
 Nèizhī gǒu bèi rén dǎ-diào le yītiáo tuǐ.
 that dog BEI one strike-off ASP one.CL leg
 'That dog had his one leg struck off by someone.'
- d'. 那隻狗被____打掉了一條腿。
 Nèizhī gǒu bèi ____ dǎ-diào le yītiáo tuǐ.
 that dog BEI strike-off ASP one.CL leg
 'That dog has his one leg struck off.'
- d''. 那隻狗被____活活地打掉了一條腿。
 Nèizhī gǒu bèi ____ huóhuó.de dǎ-diào le yītiáo tuǐ.
 that dog BEI alive strike-off ASP one.CL leg
 'That dog had his one leg struck off alive.'

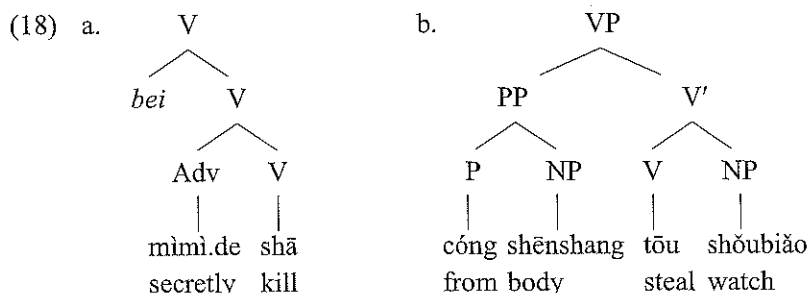
The problems are: first, if [*bei* V] cannot take a resumptive pronoun (16c''), why can it take an NP (16d')? Second, why do the [*bei* ADV V] (16d'') and the [*bei* V] (16d') behave alike in taking an object NP, and why does the [*bei* ADV V] in (16b') and the [*bei* V] in (16c'') act alike in rejecting a resumptive pronoun? All in all, why should the presence or absence of the agent NP make any difference to the acceptability of a *bei* sentence with a pronoun? As seen below, all these properties would naturally follow if the [*bei* V] and [*bei* ADV V] are analyzed as compounds.

McCawley (1992) argues that in short passives of Modern Chinese, *bei* is not an independent word but a part of a compound verb. First, he observes that the omission of the agent NP is not possible when anything intervenes between the *bei* and the V (see Li 1990:156), as seen in (17) (taken from McCawley 1992).

- (17) a. 張三被人在公園打死了。
 Zhāngsān bèi rén zài gōngyuán dǎ-sǐ le.
 Zhangsan BEI man ZAI park hit-die ASP
 'Zhangsan was killed by someone in a park.'
- a'. *張三被____在公園打死了。
 *Zhāngsān bèi ____ zài gōngyuán dǎ-sǐ le.
 Zhangsan BEI at park hit-die ASP
 Intended meaning: 'Zhangsan was killed in a park.'
- b. 我被他從身上偷了手錶。
 Wǒ bèi tā cóng shēnshang tōu le shǒubiǎo.
 I BEI him from body steal ASP watch
 'I had my watch stolen off my wrist by him.'
- b'. *我被____從身上偷了手錶。
 *Wǒ bèi ____ cóng shēnshang tōu le shǒubiǎo.
 I BEI from body steal ASP watch
 Intended meaning: 'I had my watch stolen off my wrist.'
- c. 那些人被李四都請來了。
 Nèixiē rén bèi Lìsì dōu qǐnglái le.
 those people BEI Lisi all invite ASP
 'Those people were all invited by Lisi.'
- c'. *那些人被都請來了。
 *Nèixiē rén bèi dōu qǐnglái le.
 those people BEI all invite ASP
 Intended meaning: 'Those people were all invited.'
- d. 我被八戒怎麼領導起來了？
 Wǒ bèi Bājiè zěnmē lǐngdǎo qǐlái le?!
 I BEI Bajie why lead start ASP
 'Why I am starting to be led by Bajie?'
- d'. *我被____怎麼領導起來了？
 *Wǒ bèi ____ zěnmē lǐngdǎo qǐlái le?!
 I BEI why lead start ASP
 Intended meaning: 'Why I am starting to be led?'

McCawley notes that the adverbial quantifier *dōu* 都 can appear before the V if the agent NP is present, but cannot do so if that NP is omitted. When the agent NP is absent, however, the following sentences are still grammatical even if there are interventions between the *bei* and the V, as seen in (7). McCawley argues that the items that can

separate *bei* from the verb are verb-modifiers, not V'-modifiers, S-modifiers, or Verb-complements. According to McCawley, "the combination of modifier and modified constituent is of the same category as the modified constituent." If this is so, it follows that the combination of a V-modifier with a V is still a V (and not a V'). Thus, *mìmì.de dǎsǐ* in (7a) is a V and so is *mìmì.de shā* in (7b), given the assumption that *mìmì.de* and *cánrěn.de* are V modifiers, rather than V' modifiers. If both *mìmì.de dǎsǐ* and *cánrěn.de shā* are verbs, they are eligible for compounding with *bei*, whereas expressions of the other types do not combine with a V into any syntactic unit at all, let alone a V, and are thus not eligible for compounding with *bei*. This is shown in (18).



The [*bei*-ADV-V] in (18a) is a compound, because the *bei* and the [ADV-V] belong to the same syntactic category, while the combination of *bei* with a P in (18b) would not result in any syntactic unit at all. This is why sentences given in (17a'-b') and (17c'-d') are all ungrammatical.

I will adopt McCawley's hypothesis and provide further evidence for his analysis. Note that, given McCawley's assumption, sentences such as *Zhāngsān bèi mìmì.de dàibù le* 'Zhangsan was arrested secretly' is in fact an [NP V] structure. No resumptive pronoun is therefore allowed to appear in the object position coindexed with the subject, because of an obvious violation of the Principle B of the Binding theory. This is exactly the case as we have seen before:

- (19) a. 李四_i被警察偷偷地打了他_i一頓。
 Lǐsì_i bèi jǐngchá tōutōu.de dǎ le tā_i yí dùn.
 Lisi BEI policeman secretly hit ASP him once
 'Lisi was hit secretly by a policeman.'
- b. *李四_i被____偷偷地打了他_i一頓。
 *Lǐsì_i bèi ____ tōutōu.de dǎ le tā_i yí dùn.
 Lisi BEI secretly hit ASP him once
 Intended meaning: 'Lisi was secretly hit (him).'

- c. *李四_i被_j____打了他_i一頓。
 *Lǐsì_i bèi_j ____ dǎ le tā_i yí dùn.
 Lisi BEI hit ASP him once
 Intended meaning: 'Lisi was hit (him).'

Why is (19b) not grammatical while (19a) is? The different grammaticality status between (19a) and (19b) shows that the two structures [*bei* NP ADV V] and [*bei* ADV V] must be different. On the other hand, why are (19b) and (19c) both ungrammatical? The same grammaticality status between (19b) and (19c) shows that they must have identical structures. This will lead naturally to a conclusion that the [*bei*-ADV-V] must be a single compound verb like [*bei* V].

4. History of short passives

The history of *bei* passives in Classical Chinese also confirms the hypothesis that the [*bei* V] and [*bei*-ADV-V] are compounds. First, the [*bei* V] short passives originated from the [*bei* NP] structure ('*bei*' means 'to receive' or 'to get'), for example:

- (20) a. 天下被其利。(Mozi 墨子, *Shangxian* 尚賢, ca. 468-376 BC)
 Tiānxià bèi(pī) qí lì.
 world receive its benefit
 'The world got benefit from it.'
- b. 身被三累。(Hanfeizi 韓非子 2.3.52, ca. 281-233 BC)
 shēn bèi sān lěi.
 body receive three trouble
 'You got three troubles.'

Through a reanalysis, i.e., [*bei* N] → [*bei* V], the N in [*bei* NP] changed into a V, giving rise to the [*bei* V] structure during the Warring States (475-221 BC) (See Peyraube 1996, Wang 1989, Wei 1994), as seen in (21).

- (21) a. bèi lù 'got killed', 'got a death penalty' 被戮
 b. bèi shāng 'got wounded', 'got a wound' 被傷
 c. bèi rǔ 'got insulted', 'got an insult' 被辱
 d. bèi qīn 'got invaded', 'got an invasion' 被侵
 e. bèi xíng 'got executed', 'got an execution' 被刑
 f. bèi fēn 'got disrupted', 'got a disruption' 被分

Although there is no argument against the category change from N to V in [*bei* NP] sentences, one fact seems not to have received enough attention in the literature, namely only disyllabic [*bei* X⁰] forms are possible for an interpretation as either a [*bei* N] or a [*bei* V], as seen in (21). (21) shows that all recognizable [*bei* V] forms prior to the Han Dynasty (221 BC-206 AD) are overwhelmingly disyllabic forms, which I will call the Archaic forms. Of course there were trisyllabic [*bei* σσ] forms before Han, however, these forms like (22) were more likely a [*bei* NP] rather than a [*bei* V], as argued by Wang (1980:425).⁴

(22) Pre-Qin (before 221 BC)

厚者入刑罰，薄者被毀醜。(Mozi 墨子, *Gui yi* 貴義, ca. 468-376 BC)

Hòu zhě rù xíngfá, bó zhě bèi huǐchǒu.

thick one enter punishment thin one get condemnation

‘The kind ones get into punishment and the mean ones get condemnation.’

(22) shows that the trisyllabic [*bei* σσ] is different from the disyllabic [*bei* σ] structure (21). The disyllabic complements of *bei* before Han are more likely to be NP and therefore are unlikely to be reinterpreted as a verb. However the change from [*bei* NP] to [*bei* VP] needs a proper environment in which a reanalysis of N as V could take place, i.e., an environment that could enable the next generation to have trigger experiences for generating a new grammar (see Lightfoot 1991). Obviously, only the disyllabic [*bei* σ] forms can serve this purpose, as indicated in (21). The contrast between (21) and (22) shows clearly that the transition from [*bei* NP] to [*bei* VP] proceeded from a disyllabic environment. That is:

(23) N → V / [*bei* ___]_{σσ}

The necessary disyllabic environment for this change therefore leads naturally to a conclusion that the new [*bei* V] structure was born as a Prosodic Word, given the theory of Prosodic Morphology of Classical Chinese developed in Feng (1997).

⁴ One may argue that *bèi xínglù* 被刑戮 ‘was executed’ is also found in *Guānzǐ* 管子 (Pre-Qin?). If *bèi xínglù* is a [*bei* V] structure in *Shǐjì* 史記, it should also be analyzed as a [*bei* V] in *Guānzǐ*. As a result, the [*bei* σσ] forms that are analyzed as [*bei* V] must date from before the Han. However, it is well known that *Guānzǐ* was not written by a single person at one period of time. Although the phrase *bèi xínglù* did appear in *Guānzǐ*, according to previous studies (see Luo 1981, Xie 1983, and many others), the Section in which *bèi xínglù* occurs (i.e., *Chéngmǎshù* 乘馬數) was written by Han Scholars during the time of Emperor Wu and Zhao—exactly the same time that the *Shǐjì* was written. As a result, *Chéngmǎshù* cannot be considered as a Pre-Qin text and *bèi xínglù* is therefore not a Pre-Qin language.

Furthermore, the fact that no adverbs can appear inside the [*bei* V] PrWds in Pre-Qin (221 BC) indicates that the [*bei* V] forms may have been lexicalized as a compound. This is shown in (24).

- (24) a. 被圍于趙 (*Zhanguoce* 戰國策, *Qice* 齊策, ca. 300 BC)
 bèi wéi yú Zhào
 ‘got surrounded by Zhao’
- b. *被必圍于趙
 bèi bì wéi yú Zhào (=not attested)
 Intended meaning: ‘got certainly surrounded by Zhao’
- c. *被未圍于趙
 bèi wèi wéi yú Zhào (=not attested)
 Intended meaning: ‘got not surrounded by Zhao’

If the Archaic short passives were born as PrWds and lexicalized as compounds, then it is not surprising that the modern short passives also inherit this property.⁵

Third, as seen before, a resumptive pronoun in Ancient Chinese is allowed to appear after the embedded verb co-occurring with an agent NP. For example:

- (25) a. (李子敖) 被鳴鶴吞之。 (*Soushenji* 搜神記, ca. 363 AD)
 (Lǐ Zǐ'áo) bèi míng hè tūn zhī.
 (Li Zi'ao) get chirping crane swallow him.
 ‘Li Zi’ao got swallowed (him) by a chirping crane.’

⁵ Note that, even if the [*bei* -V] forms in Archaic Chinese are compounds, it does not mean that after the Han the two elements in the compound cannot form a phrase. Hence, synchronically (at any particular time after the Qin) there may be both compounds and phrases that share the same surface form. However, the compounds are inherited from Archaic Chinese, and their counterpart phrases are created anew. As a result, it would be extremely difficult to identify whether a given form such as *bèi hài* 被害 ‘be harmed’ in Han is an (old) compound or a (new) phrase according to their non-analyzed surface form. In fact, it may be a compound in one environment (without an object) but a phrase in another (with an adverb). This situation is similar to that of Modern Chinese: it is difficult to decide whether *guān-xīn* ‘concern heart, to concern’ is a compound or a phrase without the kind of syntactic information available to the researcher (for example, *guan-xin* is a compound when it takes an object, but it is a phrase in *guān shén.me xīn* ‘what on earth are you concerning about’). The point I am trying to make here is this: the [*bei*-V] compounds and the [*bei* VP] phrases can be distinguished clearly by their diachronic developments. Hence diachronic studies can reveal distinct syntactic structures that emerged one after another historically, which synchronized and overlapped later on, making it difficult (if not impossible) to distinguish them in some cases.

- b. (天女) 被池主見之。(Soushenji 搜神記, ca. 363 AD)
 (Tiān nǚ) bèi chí-zhǔ jiàn zhī.
 (Heaven woman) BEI pool-owner see them.
 'The Heaven fairies were seen (them) by the pool-owner.'
- c. (金丹) 若被諸物犯之。(Baopuzi 抱朴子, Neipian 內篇, ca. 300 AD)
 (Jīndān) ruò bèi zhūwù fàn zhī...
 (Jindan) if BEI everything attack it...
 'If Jindan was attacked (it) by everything...'

There is no sentence found with a structure of [NP_i bei ___ V pro_i]. Given the historical origin of the [bei-V] PrWd and compound, and given our analysis above, it is clear that the [bei V] sequence must be a verb compound, resulting in the ungrammatical structure: *[NP_i [bei-V]_v Pro_i]. The fact is that there were many sentences formed with a [NP_i bei NP V pro_i] structure, but hardly any [NP_i bei V pro_i] cases in the language.⁶ The non-existent *[NP_i bei V pro_i] sentences strongly indicate that the *bei* and the

⁶ There is only a single exception among all the grammatical sentences in my data:

- (i) 過在什摩處，即被打之？(Zutangji 祖堂集, 4. Shitou Heshang 四·石頭和尚, ca. 10th century)

Guò zài shén.me chù, jí bèi dǎ zhī.
 wrong at what place then *bei* hit it
 'What was wrong, then (he) was hit?'

However, the *zhī* in this case may be used as a place holder, rather than a resumptive pronoun. The reason is as follows: First, we cannot find *zhī* appearing in *[bèi dǎ zhī] 'was hit *it', but only in a four-syllable environment: [(jìbèi) (dǎzhī)]. Hence it is possible that *zhī* was used as a place holder for filling up the four-syllable pattern. Second, the function of *zhī* in (i) parallels the function of *suǒ* (an object clitic which is also licensed in the context of a null operator, see Chiu 1995, Ting 1996) in the same environment:

- (ii) a. 恐被所算 (Sanguo Yanyi 58 三國演義·第58回)
 kǒng bèi suǒ suàn
 afraid got SUO trick
 'afraid to be tricked'
- b. 必被所侵 (Sanguo Yanyi 94 三國演義·第94回)
 bì bèi suǒ qīn
 definitely get SUO catch
 '(will) definitely be caught'

Both *zhī* 之 and *suǒ* 所 are disallowed by the null operator movement in (i-ii), but both *zhī* and *suǒ* did appear there. However, all of the environments in which they appear are four-syllable environments, and we could not find examples of *[bèi suǒ V] or *[bèi V zhī]. This indicates that it is the four-syllable environment (i.e., the prosody) that forces *zhī* and *suǒ* to appear, making them function as a place holder.

following V must be a single predicate. This undoubtedly supports the analysis that [*bei* V] is a compound, not only in Modern Chinese, but also in Classical Chinese.

Fourth, contrary to the case of resumptive pronoun, an NP is very commonly seen to occur after the [*bei*-V] compound, as seen in (26) below.

- (26) a. 行至雪山南畔，當被劫奪國策及諸敕信。(Dunhuang Bianwen 敦煌變文, 8-10th c.)
 (Wáng Duānzhāng) xíng zhì xuě shān nán pàn,...
 (Wang Duanzhang) travel arrive snow mountain south side
 dāng bèi jiéduó guócè jí zhū chì xìn.
 immediately get seize credential and every imperial letter.
 ‘When Wang Duanzhang traveled to the south of the snow mountain,...
 he got his credentials and every imperial letters seized.’
- b. 被損落一板齒。(Dunhuang Bianwen 敦煌變文, 8-10th century)
 (Qín Gùrán) bèi sǔn-luò yì bǎnchǐ.
 (Qin Guyan) et harm-fall one incisor
 ‘Qin Guyan got his incisor knocked out.’
- c. 任奸終被變形儀。(Dunhuang Bianwen 敦煌變文, 8-10th century)
 Rèn jiān zhōng bèi biàn xíng-yí.
 indulge evil finally get change appearance-bearing
 ‘If one indulges evil, he will finally get his appearance and bearing changed.’

The non-existent [NP₁ [*bei*-V]_V zhi_i] and the commonly occurring [NP *bei*-V NP] follow exactly what the theory predicts. That is, the [*bei*-V] is a verb compound hence a pronoun is not allowed by Principle B of the Binding Theory, and since the NP would not be affected by the binding requirement, it is legitimate to appear in the object position.

Fifth, if the [NP *bei* V NP] sentences are grammatical in Classical Chinese, the [NP *bei* ADV V NP] structure should also turn out to be grammatical. This is because if [*bei*-V] is a compound and thus does not reject the NP object, the [*bei* ADV V] would act similarly in allowing an NP object because according to McCawley’s analysis we adopt here, the [*bei*-ADV-V] is a verb compound as well. This, as seen in (27), is exactly the case.

- (27) a. 龜被生揭其甲。(Lingbiao Luyi 嶺表錄異, ca. 850 AD)
 Guī bèi shēng jiē qí jiǎ.
 turtle BEI lively take-off its shell
 ‘The turtle’s shell was taken off while it was still alive.’

- b. (燕子) 橫被強奪窟。(Dunhuang Bianwen 敦煌變文, 8-10th century)
 (Yànzi) héng bèi qiáng duó kū.
 (swallow) flagrantly get forcibly seize nest
 'The swallow got his nest seized flagrantly and forcibly.'

Undoubtedly, *shēng* 'alive' and *qiáng* 'forcibly' were V-modifiers in Ancient Chinese, hence the [*bèi-shēng/qiáng-V*] is a legitimate verb compound. The theory predicts that if the [*bei-ADV-V*] sequence is a legitimate compound, it can only take an NP, rather than a resumptive pronoun, as its object. The existent [*bei-ADV-V NP*] and the non-existent *[*NP; bei-ADV-V pro*] indicate, once again that the [*bei-ADV-V*] in Classical Chinese must be a verb compound.⁷

5. Verb incorporation

So far we have seen that [*bei-V*] and [*bei-ADV-V*] are compounds in both Modern and Archaic Chinese. While the compound analysis has solved the V-adverbial and the resumptive pronoun problems, there are still questions difficult to answer.

First, if the [*bei-ADV-V*] is on a par with the [*bei-V*] compound such as *bèi-bǔ* 'got arrested' (28) in Modern Chinese, and *bèi-wéi* 'got surrounded' (24c) in Archaic, an immediate question is why the [*bei-V*] compounds cannot take an adverb to form a [*bei-ADV-V*] compound. For example:

- (28) *張三被秘密地捕了。
 *Zhāngsān bèi mìmì.de bǔ le.
 Zhangsan BEI secretly arrest ASP
 Intended meaning: 'Zhangsan got arrested secretly.'

- (24) c. *被未圍于趙
 bèi wèi wéi yú Zhào (=not attested)
 Intended meaning: 'got not surrounded by Zhao'

Bèi-bǔ in Modern Chinese and *bèi-wéi* in Archaic Chinese are compounds hence no intervention of adverbs is allowed between the *bei* and the verb. If the [*bei-ADV-V*]

⁷ There is a part-whole relation between the subject and the retained object and this relation can be captured by assuming that the subject of the *bei* passive is an experiencer base-generated on the Spec of IP, and the embedded VP is a predicate of the *bei* (see Huang 1999). Thus, the event/action denoted by the VP must be something that has 'happened to X' where X is the experiencer. This thematic structure will give rise to a part-whole relation observed in examples like (27). I would like to thank the anonymous reviewer for pointing out this question to me.

forms are also compounds, what is the difference between the [*bei*-ADV-V] compounds which allow an adverb inside the [*bei* V] and the [*bei*-V] compounds which do not?

Second, as the following examples in (29) show, the lexical [*bei*-V] compounds (both Modern and Archaic) cannot take an object, but an NP can easily appear in the object position of [*bei* VP] short passives, as seen in (4) for Modern Chinese and (15) for Archaic Chinese.

- (29) a. *他們家被捕了一個人。
 *Tā.men jiā bèi bǔ le yí.ge rén.
 they family BEI arrest ASP one.CL person
 Intended meaning: 'Their family had one person arrested.'
- b. *他們家被警察捕了一個人。
 *Tā.men jiā bèi jǐngchá bǔ le yí.ge rén.
 they family BEI policeman arrest ASP one person
 Intended meaning: 'Their family had one person arrested by a policeman.'
- c. *萬乘之國被圍城 (in Archaic Chinese)
 Wàn shèng zhī guó bèi wéi chéng. (=not attested)
 ten.thousand chariot 's country get surround city.
 Intended meaning: 'A state with ten thousand chariots got surrounded
 *their city.'

Both the Modern and the Archaic [*bei*-V] compounds reject an object NP and both the Modern and the Ancient [*bei*-ADV-V] compounds accommodate an object NP⁸. Why is that so?

Third, [*bei*-V] compounds are (almost) all disyllabic forms and they are undoubtedly lexical items, while the [*bei*-ADV-V] forms can hardly be considered, and have never been used as individual lexical items. Of course sizes and usages cannot be taken as an argument against a syntactic analysis of compounding. However, together with their different behaviors with respect to the intervention of adverbs and the ability to take objects, we have good reasons to conclude that the [*bei*-V] passives are different from the [*bei*-ADV-V] ones. The former is a morphological compound, while the latter is

⁸ Aside from Archaic Chinese, in Modern and Classical Chinese there are some [*bei* V] forms which can also take an NP object, as shown in (15). According to the present analysis, the [*bei* V NP] forms have a D-structure like [[*bei* [V NP]]], rather than [[*bei*-V] NP], even though after VI, the [*bei* [V NP]] becomes [[*bei*-V] NP], as we will see later. This is so because otherwise there would be no distinction between the grammatical [*bei* [V NP]], as in (15), and the ungrammatical [[*bei*-V] *NP], as in [[*bèi-bǔ*] **rén*] 被捕人 'got arrested *person' in Modern Chinese and [[*bèi wéi*] **chéng*] 被圍城 'got surrounded *city' in Archaic Chinese.

more like a phrase-word (Zwicky 1990:206) which involves an utterance larger than a word. Just as Huang (1999) characterizes, it is “combining *bei* with a verb phrase to form a ‘passive verb phrase’”. As a result, even though the [*bei*-ADV-V] forms should better be analyzed as a compound as argued by McCawley and supported by historical facts given above, they seem to be a different type of compounds from the [*bei*-V] forms, given that “compound” has been used as a cover term for a collection of related, but by no means identical phenomena in the literature.

Considering the lexical property of [*bei*-V] compounds and the phrasal characteristics of the [*bei*-ADV-V] passives, I suggest that the former be seen as morphological compounds formed by (prosodic) morphological rules, whereas the latter are phrasal compounds derived by a syntactic operation of Verb Incorporation (Feng 2001). There are good reasons to consider this hypothesis to be highly plausible, as seen below.

First, Verb Incorporation is a process of both morphological and syntactic structure: syntactic in that its distribution and consequences for the structure are determined by syntactic principles; morphological in that the resulting [V+V] structure acts like a compound. Obviously, those properties are what we want the [*bei*-ADV-V] to have — a syntactically determined phrasal compound.

Second, by Verb Incorporation, the [*bei*-ADV-V] compound would have a biclausal underlying structure and a combined surface structure. This is also what we expect. If [*bei*-ADV-V] is derived from a source containing two verbs (*bei* and the embedded V), the adverb is naturally expected to appear before the embedded verb. When VI takes place, the verb could first form a compound with the adverb and then combine with *bei*, yielding a larger verb form. As a result, the compound properties and the phrasal characteristics can both be captured in the resulting complex predicate.

Third, historical facts provide solid evidence for the possibility of VI in the [*bei*-ADV-V] structure. As seen below, the [*bei*-ADV-V] has a [*bei* VP] origin developed independently in the history of Chinese. As argued by Feng (1998), there were three types of *bei* passive structures clearly attested in the history of Chinese:

I. [*bei* V] compound passive (ca. 300 BC)

- (30) I. 萬乘之國被圍于趙。 (*Zhanguoce* 戰國策, *Qice* 齊策, ca. 300 BC)
 Wàn shèng zhī guó bèi wéi yú Zhào.
 ten thousand chariot 's country get surround by Zhao
 ‘A state with ten thousand chariots got surrounded by Zhao.’

II. [bei VP] phrasal passive (ca. 100 AD)

- II.a. 橫被暴誅 (*Wuyuechunqiu* 吳越春秋, *Helü Neizhuan* 闔閭內傳, ca. 50 AD)
 héng bèi bào zhū
 unexpectedly get violently kill
 ‘got violently killed unexpectedly.’
- II.b. 紛遭外禍，累害之也。(*Lunheng* 論衡, *Leihai* 累害, ca.100 AD)
 Fēnzāo wài huò, lěi hài zhī yě...
 suffer external disaster accumulatively harm them PRT
 生動之累，咸被累害。
 shēng-dòng zhī lèi, xián bèi lěi hài.
 live-move 's kind all get accumulatively harm
 ‘One suffers from disasters caused by external factors (because) the situation accumulatively harmed them...all kinds of living and moving creatures will get accumulatively harmed.’
- II.c. 被棺殮 (*Lunheng* 論衡, *Duizuo* 對作, ca. 100 AD)
 bèi guān liàn
 get coffin bury
 ‘got coffin-buried’
- II.d. 多被陰害 (*Taipingjing* 太平經, ca. 100 AD)
 duō bèi yīn hài
 frequently get invisibly harm
 ‘frequently got invisibly harmed.’
- II.e. 即被怒責 (*Weishu* 魏書, *Guangpingwang zhuan* 廣平王傳, ca. 550 AD)
 jí bèi nù zé
 then get angrily scold
 ‘immediately got angrily scolded.’
- II.f. 嘗被急召 (*Nanshi* 南史, *Renfang zhuan* 任昉傳, ca. 650 AD)
 cháng bèi jí zhāo
 ever get urgently call
 ‘once got urgently called in’

III. [*bei* IP] long passive (ca. 200 AD)⁹

III.a. 臣被尚書召問。(Cai Yong 蔡邕, *Beishoushibiao* 被收時表 132-192 AD)

Chén bèi Shàngshū zhāo-wèn.

I get Minister call-ask

'I, the subject, got questioned by the Minister.'

III.b. 被明公逼，且喜且懼。(Dongguan Hanji 東觀漢記, *Min Gong zhuan* 明公傳, ca. 200 AD)

(Wú) bèi Míng-Gōng bī, qiě xǐ qiě jù.

(I) get Honorable-duke summon also glad also fear

'I was summoned by (your) Honorable-Duke, I felt both happiness and fear.'

III.c. 被火氣劫故也。(Shanghanlun 傷寒論, ca. 200 AD)

Bèi huǒqì jié gù yě.

get fire attack reason PRT

'Because (the body) was attacked by internal heat.'

As seen in §4, the [*bei*-V] forms in Archaic Chinese were compounds and the compound passives are kept in Modern Chinese as shown in (16). On the other hand, the examples given in (30-II) must not be analyzed as a compound: an adverb appears before the V, indicating that the V can take a modifier of its own and hence the [ADV V] is not part of a compound but an independent constituent (see Feng 1998) for more arguments). This type of example is extremely important because if the [ADV V] is not part of a compound, it must be analyzed as a VP embedded under *bei*. If so, it follows that the [*bei* VP] structure was developed before the long passives in a chronological order of [*bei* VP] → [*bei* IP]. This further entails that the [*bei* VP] structure was established independently of the long passives in history. This discovery confirms Ting's hypothesis that there are two *bei* structures in Modern Chinese: one is a long passive ([*bei* IP]) and the other is a short ([*bei* VP]). Given the historical evidence, the questions why there are two BEIs in Modern Chinese and how they come about are no longer a mystery: the two *bei* structures are inherited from Classical Chinese. In fact, the [*bei* VP] short passive is not only independent of the [*bei* IP] long passive, but also older than the long form in the history. This provides solid evidence for the argument

⁹ *Shanghanlun* 傷寒論 was completed by 205 AD, and Cai Yong 蔡邕 (132 AD-192 AD) was the last person who was involved in compiling the *Dongguan Hanji* 東觀漢記. Given this, examples in (30III) can be taken as the earliest full passives, dating from around 200 AD.

that the short passives ([*bei* VP]) are not derived from deletion of the agent NP in long passives, since when the [*bei* VP] structure was established, the [*bei* IP] structure had not even appeared. The diachronic fact shows that not only the short did not come out of the long, but the other way around might be the case, that is, the long passives were developed from the [*bei* VP] short passives by introducing the agent NP into the embedded clause, creating an IP when the lexical strength of the matrix verb *bei* was weakened from a transitive (in [*bei* VP]) to an intransitive (or may be an auxiliary) verb (in [*bei* IP]).

According to previous studies (Peyraube 1989, 1996, Tang 1987, Wei 1994, and many others), a relative chronological order of the developments of all *bei* passives can be summarized as follows:

Table 1: Relative chronology of *bei* passives in Classical Chinese

Chronology	Origin	Step-I	Step-II	Step-III
400 BC	<i>bei</i> NP			
300 BC	<i>bei</i> NP	<i>bei</i> N/V		
200 BC	<i>bei</i> NP	<i>bei</i> V		
100 AD	<i>bei</i> NP	<i>bei</i> V	<i>bei</i> ADV V	
200 AD	<i>bei</i> NP	<i>bei</i> V	<i>bei</i> (ADV) V	<i>bei</i> NP V
400 AD	<i>bei</i> NP	<i>bei</i> V	<i>bei</i> (ADV) V (NP)	<i>bei</i> NP V (NP)
...				
Modern		<i>bei</i> V	<i>bei</i> (ADV) V (NP)	<i>bei</i> NP V (NP)

Table 1 shows that the *bei* sentences originated from a [*bei* NP] structure and further developed a [*bei* N/V] alternation. As seen before, only in disyllabic environments can the [*bei* N/V] alternation be observed and the N be reanalyzed as V, giving rise to the [*bei*-V] compound passive. The [*bei*-V] compound passive was further developed into a [*bei* [ADV V]_{VP}] phrasal passive around the Eastern Han dynasty (ca. 100 AD) and finally gave rise to the full passive [*bei* [NP V]] structure by the late Han (ca. 200 AD). What is important to note here is the fact that every step of the development of the *bei* sentence was realized by the creation of a new structure: first the [*bei*-V] compound passive, then the [*bei* VP] phrasal passive, and finally the [*bei* IP] full passive. Each structure is historically related but syntactically independent: related in the sense that the latter form would not have come into being without the former one; independent in the sense that the former was not destroyed by the latter one. Instead they both survived and developed into their respective present versions. They had coexisted throughout the history. This is why in Modern Chinese there are still [*bei*-V] compound passives and why the [*bei* VP] and [*bei* IP] behave differently syntactically. Of course, this does not

mean that they would not influence each other. In fact, as seen in Table 1, the appearance of [*bei* V NP] cases was found only after the birth of the [*bei* IP] structure, suggesting that the [*bei* V NP] was further developed under the influence of [*bei* IP].

Given the historical evidence above, we now have a solid ground to propose that the [*bei* VP] structure is independent of the [*bei*-V] compound structure and of the [*bei* IP] full passive structure. If this is true, it is only natural to expect an independent syntactic operation involving only the [*bei* VP] structure. As we will see below, the Verb Incorporation is permitted only in the [*bei* VP] structure.

First, the [*bei*-V] compound would not involve the VI, simply because they are formed in morphology. Second, the [*bei* IP] cannot be derived by VI either, because as argued by Li Yafei (1990), the lower verb in an IP complement cannot be incorporated into the matrix verb, as shown in (31)

- (31) ${}_{VP1}[V_1 \text{ IP}[I \text{ } {}_{VP2}[\text{NP} \quad v[V_2 \quad \text{NP}]]]]$
 bèi zhūwù fàn zhī (被諸物犯之)
 get everything attack it
 ‘got attacked by everything.’

By Minimality Condition (Rizzi 1990), V_2 must first move to I, and then to V_1 , in order to form a complex [V_1+V_2] compound. However, such a movement results in what Li Yafei has called a sandwiched chain: [V, I, V], which is not allowed by Binding Condition C in the theory developed in Y. Li (1990). Therefore, the embedded verb in [*bei* IP] is not incorporable with *bei*. The situation, however, is completely different in the [*bei* VP] structure:

- (32) ${}_{VP1}[V_1 \text{ } {}_{VP2}[V_2 \quad \text{NP}]]$
 bèi qǔ dǎn (被取膽)
 get take gall

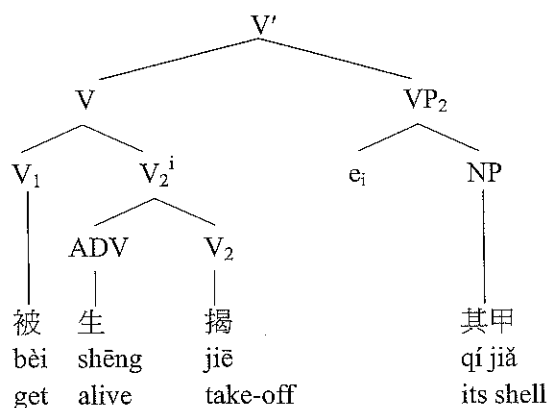
The V_2 can be minimally moved into V_1 forming a [V, V] chain, and no violation of any kind would be caused. Hence VI is permissible only in the [*bei* VP] structure, given the following surface structure:

- (33) $v[\quad v[V_1-V_{2i}] \text{ } {}_{VP2}[e_i \quad \text{NP}]]$
 bèi-qǔ_i t_i dǎn (被取膽)
 get-take gall

The advantages of the VI-analysis can also be seen from several aspects. First, morphology and modal verbs have been universally considered as triggers for Verb

Incorporation. The Verb Incorporation in [*bei* VP] may also be subject to a morphological factor: the monosyllabic *bei* cannot stand alone as an independent verb after the grammaticalization in the historical development of the *bei* passive construction. Huang (1999) distinguishes two stages of grammaticalization of *bei* in history: originally *bei* was a transitive verb with two arguments. Later it has weakened to the status of an intransitive and possibly even to the status of an auxiliary or a bound morpheme. The morphological status of being an auxiliary or a bound morpheme provides good reasons for *bei* to be considered as a trigger for the VI.¹⁰ If this is so, it follows that VI would not happen until *bei* was weakened. It is commonly agreed that *bei* was weakened after the establishment of the full passive [*bei* IP] (by the Eastern Han) and it is true that only after the appearance of the [*bei* IP] long form, could one find the [*bei* V NP] short forms, as seen in Table 1. This strongly favors a VI analysis for the [*bei* V NP] sentences. If *bei* needs support morphologically and if *bei* takes only a bare VP complement in [*bei* [V NP]_{VP}], VI is forced in this situation. That is, VI must also take place in [NP *bei* [ADV V NP]_{VP}], so that it first triggers a [ADV-V] compound and then the [ADV-V] is incorporated into *bei*, forming a [*bei*-ADV-V] complex, as shown in (34).

(34)



¹⁰ VI may also be triggered by the oldest [*bei*-V] compounds, in that *bei* always tends to form a compound with a monosyllabic verb and the tendency may finally become a general requirement when *bei* loses its lexical strength and is weakened to an auxiliary. Thus VI must take place in the environment where *bei* takes only a bare VP. This is possible for the following reasons: if there were no [*bei* V] compounds, there would have been no [*bei* Adv V] forms in Mandarin, given the fact that no short passives, except the *bei* forms, are allowed in Mandarin, or in other Chinese dialects, because other passive verbs, such as *ho* 與 (Taiwanese) or *ràng* 讓 (Mandarin), are not developed from a compound.

Second, the asymmetry between [*bei*-V NP] and [*bei*-V *pro] can also be captured along this line of reasoning. Since the object NP in [[*bei* V] NP] can still be assigned a case after Verb Incorporation (see Baker 1988, Y. Li 1992), [[*bei* V] NP] sentences are/were grammatical throughout Chinese history. An object pronoun is not allowed by VI, however, since incorporation changes government relations by allowing the (matrix) verb to govern something which it otherwise would not have governed (Baker 1988: 101). For example, in Kinyarwanda, P Incorporation changes government relations (taken from Baker 1988:496):

- (35) a. Abaana ba-ra-shyir-a ibitabo kuri bo.
 children SP-PRES-put-ASP books on them
 'The children are putting books on themselves.'
- b. Abaana ba-r-ii-shyir-a-ho ibitabo.
 children SP-PRES-REFL-put-ASP-on books
 'The children are putting books on themselves.'

In (35a), the [NP, PP] is a lexical pronoun and may be coreferential with the matrix subject (the PP counts as 'Complete Functional Complex' and hence binding domains in Kinyarwanda). However, when the P is incorporated into the verb as in (35b), morphological reflexivization must apply. This is because, as argued by Baker (1988), the binding domain of the locative NP has been expanded by Incorporation. That is, the Incorporation causes the object of P to be externally governed by the matrix verb. Thus its binding domain must include that matrix verb and the matrix subject. What is important here is the fact that when the government relation is changed after the Incorporation process, the governing category for binding relations is also forced to extend to the entire matrix clause (see Baker 1988:101 for parallel cases of NI examples of possessor stranding).

Parallel to the P Incorporation in Kinyarwanda, when the embedded V is incorporated into the matrix verb *bei* in Chinese, an object pronoun is also disallowed to be coreferential with the subject. This is because the object position of the embedded verb is externally governed by the *bei* after the VI, thus the governing category for the embedded object pronoun is not the embedded VP, but the entire matrix clause.¹¹

¹¹ One may wonder how to account for the following ungrammatical sentence in a VI analysis:

(i) *教室被派約翰找人去掃乾淨了。

*Jiàoshì_i bèi pài Yuēhàn zhǎo rén qù sǎo-gānjìng _i le
 classroom BEI send John find men to sweep-clean__ ASP

Intended meaning: 'The classroom was sent John to find people to clean.'

Note that without the agent the embedded clause is a VP, rather than an IP. The [NP_i bèi [VP

Another argument in favor of the Verb Incorporation for [*bei* VP] is that this analysis now has the virtues of both the compound property (as discussed in §4) and the phrasal characteristics (as discussed in §5) of the [*bei* ADV V NP] short passives. It also has the virtues of both the non-lexical and non-phrasal properties of the forms. Recall that an important feature for morphological (verb) compound is the prosodic constraint of disyllabicity. This constraint is obviously not followed by the verb complex. Now the distinction between the lexical compounds and the complex verb compounds can be made clearly: lexical compounds are formed in (Prosodic) Morphology and must obey prosodic morphological rules, while complex verb compounds are derived in syntax via VI from natural phrases. No length constraint is required for syntactic phrases, hence complex verbs are not constrained by prosodic morphological rules. As a result, lexical compounds always coincide with PrWds, while complex verb compounds involve an utterance larger than a word in size. This is why in both Classical and Modern Chinese lexicon, there are no lexical [*bei*-V] compounds that are formed into a size longer than a PrWd.¹²

6. Summary

In this paper I have argued from both synchronic and diachronic perspectives that short passives in Chinese can be divided into two types of constructions: one is viewed as a lexical compound which supports Ting's analysis (1996); while the other is viewed as a complex verb, which accords with McCawley's argument (1992). Furthermore, if the chronology of emergence of the [*bei* VP] forms is taken into account, three types of operations ranging from morphology (the [*bei*-V] compound), to morphosyntax (the [[*bei* V] NP] generated by verb complex via Verb Incorporation) and to phrasal syntax (the [*bei* V ___] derived by NP-movement) can all be observed in history. The varieties of *bei* forms are not only distinguished chronologically but also structurally, and all of

pài ..**t*_i...] must be ruled out because VI, as seen above, requires a bare VP to be the complement of *bei*, hence there is neither [Spec, CP] nor [Spec, IP] in the embedded clause. However, the *t*_i in (i) is left by a long-distance movement; hence it must be an A'-trace. An A'-movement needs a position like [Spec, CP] or [Spec, IP] in order for the deeply embedded element to be moved out or to be coindexed with its antecedent. Since the bare VP in VI does not have a position of the sort, (i) must be ruled out.

¹² This holds without exception in Classical Chinese. In Modern Chinese, however, there seems to be an exception in *bèi-yāpò jiējí* 'be-oppressed class'. However, *bèi-yāpò* can occur in *bèi lǎobǎn yāpò* 'be oppressed by the boss', indicating that *bèi yāpò* is different from lexical compounds such as *bèi-pò* 'be forced' that cannot be separated at all. As a result, *bèi yāpò* is not a lexical compound.

them are kept in Modern Mandarin Chinese. It follows that a syntactic analysis must not only take care of the synchronic facts but also their histories. The Modern *bei* sentences are typical examples of this sort: all four structures, the [*bei-V*], the [*bei V*___], the [*bei V NP*] and the [*bei IP*] are handed down from Classical Chinese.

The implication of the present analysis is that while synchronic analyses should refer to historical facts, diachronic studies can equally well cast light on synchronic research. Clearly the syntactic structure of Classical long passives are captured by the A'-movement analysis developed from Mandarin Chinese (Feng 1990) and the [*bei-V*] compound analysis for Archaic Chinese is significant in understanding the synchronic behaviors of [*bei V*] short passives in Modern Chinese. From the synchronic analysis, we draw insights that allow us to account for long passives in Classical Chinese, and based on this diachronic study we were able to discover a variety of short passives in Modern Chinese.

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