

## Two Types of Light Verbs and v-Stranding VP Ellipsis in Chinese<sup>1</sup>

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The same with Farsi (Toosarvandani 2009), Chinese as a light-verb productive language also allows a kind of v-stranding VPE, in which part of the complex predicate is stranded on the v-head when it undergoes VP ellipsis. Therefore, these alternates help us observe the domain of deletion around VP, as well as the nature of the phrasal empty category. With extraction (V-to-v movement), and some other tests, VPE is shown to derive in PF<sup>2</sup>.

### 0. Introduction

The aim of this chapter is to show that [i] VPE is derived by PF operation in Chinese since it allows extraction (head mvt) out of the deletion domain. [ii] light-verb-stranding VP ellipsis is testified in Chinese, a well-known light-verb productive language. Empirical evidences are from two types of light-verb in Chinese (Tsai 2009 & Lin 2001), which is suggested to be in line with Farsi (Torsavanbani 2009). [ii] Two types of light verb, modals, and other VPE maps out a domain for deletion between the topography between IP and VP.

The analysis is based on two assumptions: [i] Minimalist T-model –grammar is constructed by two interfaces of SM<sup>3</sup>, CI, and also the derivation component (what is called “core syntax”). Empty phrasal constituents, therefore, must be operated in one of the three components -- either in SM, CI, or Merger. [ii] Cartography-- the assumption which based on the analytic nature of Chinese is realized on syntactic structure (Tsai 2007; 2009) (Huang 2009). It may end up reflecting on the different domain of ellipsis (cf. also the ΣP and VP distinction of Soh (2007)), or the nature of functional heads on the structure height.

Around the VP domain, there are various elements to be examined: [1] the high/low dichotomy of light verb. Following Lin (2001) and Tsai (2009 (24)), light verbs could be subdivided into at least two types. For Lin (2001), higher and lower light verbs introduces

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<sup>2</sup> Also the Sensor-Motor System in the later development of the theory.

<sup>3</sup> SM is the abbreviation of Sensor-Motor system; CI is the abbreviation of Conceptual-Intellectual system, while the derivation is mainly about the merge operation.

subject and object arguments respectively. This is mainly the reason of the unselectiveness of arguments in Chinese. For Tsai (2009), on the other hand, the two types of light verbs are projections to different structure height.<sup>4</sup> [2]Modals –the epistemic and deontic distinction of modal has been much discussed in the literature (Iatridou 2009; Tsai & Portner 2009). It is generally assumed that epistemic modals are higher in the structure than deontic modals. And the licensing of VP Ellipsis differs in respect to the nature of the modals (Wu 2002). It is observed that deontic modals are licensors for VP Ellipsis while epistemic modals are not (cf. also Aelbrecht 2009). [3] Negation– Chinese negator *meiyou* could license VPE while *bu* could not.[4] Future modal ‘hui’.The status of the future *hui* is still unknown in Chinese.As a modal verb (Lin1995), it patterns with deontic modal in VP ellipsis data, which would be discussed in this chapter. [5] Focus marker –*shi*.This is the most typical type of VP Ellipsis noted in the literature (Wu 2002; Wei 2009).

In this chapter, we review the various data concerning VP-related ellipsis in Section 1. In Section 2, we analyze with some well-known diagnosis of PF operation in VP domain. Finally in Section3, we examine the domain/ constituency of ellipsis on VP domain.

## 1. Literature Review

### 1.1. Two Types of Light Verbs and VPE

First of all, Tsai (2009) distinguishes two types of light verbs(1)(3), in which we also demonstrates the raising of the light verb in (1)(3)b and c. Lexical verbs are raised to the higher functional head if the head is vacate. Their alternant are given in (2) and (4). (2)realize the higher light verb *ran*‘let’ introducing the CAUSEE<sup>5</sup>; while (4) realize the lower light verb *yong*‘use’ introducing the theta role of TOOL.

- (1) a. na-ba dao     qie-de wo     zhi             maohan.  
           that-CL knife cut-Res I     continuously sweat  
           'That knife made me cut such that I sweated continuously.'  
           那把刀切得我直冒汗。
- b. na-ba dao     CAUSE             wo     qie-de zhi             maohan.  
           that-CL knife                     I     cut-Res continuously sweat  
           'That knife made me cut such that I sweated continuously.'
- c. na-ba dao     [qie-de]<sub>k</sub>+CAUSE     wo     t<sub>k</sub>             zhi             maohan.  
           that-CL knife cut-Res                     I                     continuously sweat  
           'That knife made me cut such that I sweated continuously.'

<sup>4</sup> Different light verbs in different height of the structure display different syntactic properties as well as semantic interpretations. As mentioned in Tsai (2009), ...

<sup>5</sup> The capitalized word is used to indicate theta role.

- (2) na-ba dao rang wo qie-de zhi maohan.  
 that-CL knife cause I cut-Res continuously sweat  
 'That knife made me cut such that I sweated continuously.'  
 那把刀讓我切得直冒汗。
- (3) a. ni qie na-ba dao, wo qie zhe-ba dao.  
 you cut that-CL knife wo cut this-CL knife  
 'You (will) cut with that knife, and I (will) cut with this knife.'  
 你切那把刀，我切這把刀。
- b. ni USE na-ba dao qie, wo USE zhe-ba dao qie.  
 You that-CL knife cut wo this-CL knife cut.
- c. ni qie<sub>i</sub>+USE na-ba dao t<sub>i</sub>, wo qie<sub>k</sub>+USE zhe-ba dao t<sub>k</sub>.  
 you cut that-CL knife wo cut this-CL knife
- (4) ni yong na-ba dao qie, wo yong zhe-ba dao qie.<sup>6</sup>  
 you use that-CL knife cut, wo use this-CL knife cut  
 'You (will) cut with that knife, and I (will) cut with this knife.'  
 你用那把刀切，我用這把刀切。

Among them, we find that only the lower type of light verb license VP ellipsis(5)(6), but not the higher alternates(7)(8). The elliptical data suggest that two types of light verbs are distinct.<sup>7</sup>

- (5) ni qie zhe-ba dao, wo ye qie ~~zhe-ba dao~~  
 you cut this-CL knife, I also cut this-CL knife  
 你切這把刀，我也切這把刀
- (6) ni yong zhe-ba dao qie, wo ye yong ~~zhe-ba dao qie~~  
 you use this-CL knife cut, I also use this-CL knife cut  
 你用這把刀切，我也用這把刀切
- (7) \*Na-ba dao qie-de wo zhimaohan, zhe-ba dao ye qie-de ~~wo zhimaohan~~  
 That-CL knife cut-DE I sweat this-CL knife also cut-DE  
 \*那把刀切得我直冒汗，這把刀也切得我直冒汗

<sup>6</sup> The two alternations are distinguished by their ability to take thematic object, clausal complement, verb copy as rescue, as well as some semantic context such as focus interpretation.

<sup>7</sup> For Tsai (2009), the inner and outer light verbs are distinguished by their syntactic behavior, such as the ability to take another object (raising to the outer light verb is capable of licensing another THEME object),

- (8) \* na-ba dao ran wo qie-de zhimaohan, zhe-ba dao ye ran ~~wo qie-de zhimaohan~~.  
 That-CL knife let I cut-DE sweat this-CL knife also let  
 \*那把刀讓我切得直冒汗，這把刀也讓我切得直冒汗

### 1.2. Four Types of VPE (Wu 2002).

Secondly, we should also review four types of ellipsis mentioned in Wu (2002). Four types of VP ellipsis mentioned are: Modal(9)(10), negation(11), shi-type(12), and verbal type (13) respectively. She also noted the asymmetry of deontic/epistemic modals on licensing modal complement ellipsis(9)(10) in Chinese. However, the solution to the asymmetry is not conclusive in Chinese, since (non-)finiteness is not observable from Chinese verbal element, since Chinese has no inflection (Aelbrecht 2009).

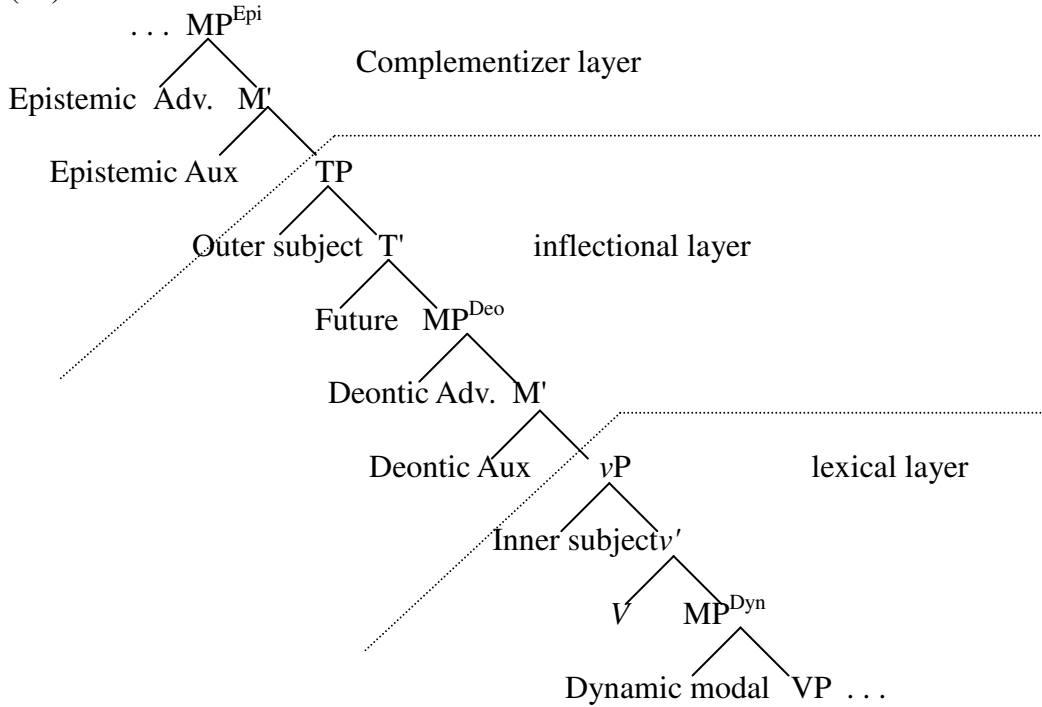
- (9) Zhangsan hui/keyi shuo fayu, Lisi ye hui/keyi. (deontic)  
 Zhangsan can speak French Lisi too can  
 ‘Zhangsan can speak French and Lisi can too.’  
 張三會/可以說法語，李四也會/可以
- (10) \*Zhangsan keneng/yinggai qu-le faguo, Lisi ye keneng/yinggai. (epistemic)  
 Zhangsan likely/possible went France Lisi too likely/possible  
 ‘Zhangsan might have gone to France, and Lisi might too.’  
 \*張三可能/應該去了法國，李四也可能/應該
- (11) Zhangsan kanjian-le tade mama, Lisi \*(meiyou).  
 Zhangsan saw his mother Lisi not  
 ‘Zhangsan saw his mother, but Lisi did not.’  
 張三看見了他的媽媽，李四\*(沒有)
- (12) Zhangsan kanjian-le tade mama, Lisi ye shi.  
 Zhangsan see-Asp his mother Lisi also FOC  
 ‘Zhangsan saw his mother, and did, too’  
 張三看見了他的媽媽，李四也是
- (13) Zhangsan kanjian tade mama, Lisi ye kanjian le.  
 Zhangsan see his mother Lisi also see Asp  
 ‘Zhangsan saw his mother, and Lisi did, too.’  
 張三看見了他的媽媽，李四也看見了

### 1.3. Modal and VPE

Tsai (2009) proposes a modality spectrum indicates a hierarchy as following: Epistemic Adverbial (知識副詞) > Epistemic Auxiliary (知識助動詞) > Deontic Adverbial (義務副詞) > Deontic Auxiliary (義務助動詞) > Dynamic Auxiliary (能願助動詞). This

approach is in line with a cartographic analysis to Mandarin Chinese.

(14)



In this spectrum, modals in the lexical layer and inflectional layer licenses modal type VP ellipsis while those in the complementizer layer licenses no modal complement ellipsis. This pattern is the same with the data shown in (9)(10).

#### 1.4. VPE or NOC-like Construction

Finally, one famous alternate of VPE are noted(16) in the literature. We would like to compare it with another construe in (15). While (15) is the canonical VPE, the NOC-like (or named as V-stranding VPE) construction(16) is much discussed in the literature (Hoji, Otani & Whitman 1991, Huang 1988; 1991 ect.). The point here is that there is no possibility for (15) to be any kind of v-stranding VPE, since *shi* 'be', as a focus marker, is merged high on the structure. If these contexts help us differentiate these two types of VPE, we can manipulate light-verb-stranding VPE in these context, and its nature could be observed.

- (15) Zhangsan xihuan Mali, Lisi ye shi (canonical VPE)  
 ZS likes Mary LS also SHI  
 'Zhangsan likes Mary, and Lisi does, too'  
 張三喜歡瑪莉，李四也是[e]

- (16) Zhangsan xihuan taziji de mama, Lisi ye xihuan (V-stranding VPE)  
 ZS likes himself DE mother, LS also like  
 Zhansan likes his mother and Lisi does, too.  
 張三喜歡他自己的媽媽，李四也喜歡[e]

(16) is accounted for as empty pronominal (Xu 2003) or VP deletion (Huang 1991). Actually, it is possible to distinguish these two types of VP related empty elements into different categories of empty phrasal categories. Here, three empirical contexts in which they behave differently are provided. If these contexts and judgments are testified, a plausible account would need to account for their distribution.

Context 1 subordination

- (17) Zhangsan da-le Lisi zhihou, Xiaomei ye da-le.  
 Zhangsan hit-Asp Lisi after Xiaomei also hit-Asp  
 ‘After Zhangsan hit Lisi, Xiaomei did, too.’  
 張三打了李四之後，小美也打(了)

- (18) \*Zhangsan da-le Lisi zhihou, Xiaomei ye shi.  
 Zhangsan hit-Asp Lisi after Xiaomei also FOC  
 \*張三打了李四之後，小美也是

Context 2 Neg-que

- (19) Zhangsan mei-kanjian ziji de mama, Lisi que kanjian-le  
 Zhangsan not-see self DE mother Lisi however see-Asp  
 ‘Zhangsan didn’t see his mother, but Lisi did.’  
 張三沒看見自己的媽媽，李四卻看見了

- (20) \*Zhangsan mei-kanjian ziji-de mama, Lisi que shi  
 Zhangsan not-see self-DE mother Lisi however FOC  
 \*張三沒看見自己的媽媽，李四卻是

In (17)(18), the antecedent clause is subordinate to the main clause in the second conjunct. In (19)(20), on the other hand, the antecedent clause is a negative sentence while the second conjunct shows a meaning of transition. As demonstrated above, canonical VPE is not compatible with subordination construction (18) and Neg-que construction (20), but verb-stranding VP ellipsis is compatible with both of them (17)(19).

As for light-verb stranding VP ellipsis, (21)(22) shows that they pattern together with the V-stranding alternates in (17) and (19). This shows that the head in IP domain (such as the *shi*-case) behaves quite different from its lower domain.

Light-Verb stranding VPE in Context 1

- (21) a. Wang-mama qie zhe-ba dao zhihou, Li-mama ye qie  
 Wang-mother cut this-CL knife after Li-mother also cut  
 ‘After Mrs. Wnag cut something with this knife, Mrs. Li does so, too’  
 王媽媽切這把刀之後，李媽媽也切
- b. Zhangsan pao caochang zhihou, Lisi ye pao  
 Zhangsan run playground after Lisi also run  
 ‘After Zhangsan runs in the playground, Lisi does so, too’  
 張三跑操場之後，李四也跑

Light-Verb stranding VPE in Context 2

- (22) a. Wang-mama bu qie zhe-ba dao, Li-mama que qie  
 Mrs. Wang not cut this-CL knife Mrs. Li however cut  
 ‘Mrs. Wang does not use this knife, but Mrs. Li does’  
 王媽媽不切這把刀，李媽媽卻切
- b. Zhangsan bu pao caochang, Lisi que pao  
 Zhangsan not run playground Lisi however run  
 ‘Zhangsan does not run in the playground, but Lisi does’  
 張三不跑操場，李四卻跑

## 2. Diagnosis for Real SM Operations

In this section, we start test the VP elliptical constructions with the typical diagnosis for PF operation. As indicated in Merchant (2010). Extraction and pragmatic control are used as diagnosis for SM-operations.

### 2.1. The Extraction test

The reasoning for extraction as a diagnosis for PF operation is based on our idea about the generative grammar. Under the T-model of generative grammar, derivation is followed by two interfaces, namely PF and LF<sup>8</sup>. As far as we know, there are three types of extraction in the grammar of syntax—namely A, A-bar, and head movement. As shown in the following examples(23)(24), wh- and cleft extraction from elided VP is possible in English.

- (23) a. I know which book Max read, and which book Oscar didn’t.  
 b. This is the book of which Bill approves, and this is the one of which he doesn’t.(Fiengo & May 1994:229 quoted by Johnson)

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<sup>8</sup> Or what is known now as Sensor-Motor and Conceptual-Intellectual system.

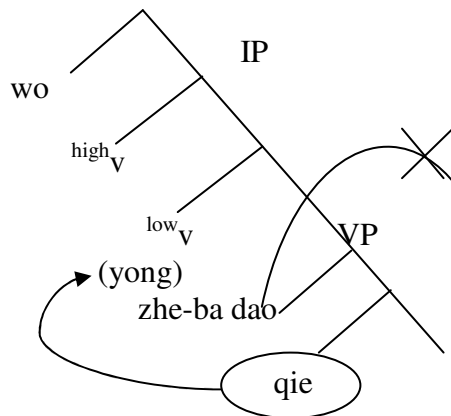




(27) ni qie zhe-ba dao, wo ye qie ~~zhe-ba dao~~  
 you cut this-CL knife, I also cut this-CL knife  
 你切這把刀，我也切這把刀

(28) ni yong zhe-ba dao qie, wo ye yong ~~zhe-ba dao~~ qie  
 you use this-CL knife cut, I also use this-CL knife cut  
 你用這把刀切，我也用這把刀切

(29)



Finally, (30) is the A-bar extraction out of an elliptical site in English. This kind of example also shows that structure exist before deletion of phonological form happens. The example of the A-bar Extraction in Chinese are exemplified as in (31)(32). (31) is the example of focus movement, in which a focused element is marked with the focus marker *shi*. According to Lin (2001), *zhe-ba dao* ‘this knife’ is a real object introduced by the lower light verb. The other example is topicalization in Chinese (32). Here we treat it as a case of extraction although the real nature of the gap in the object is still under debate.

(30) Jason will eat shrimp, but squid, I know he won't [eat < squid >]

(31) Shi zhe-ba dao<sub>i</sub>, wo ye qie le t<sub>i</sub>  
 SHI this-CL knife I also cut Asp  
 ‘It is this knife that I also cut with it’  
 是這把刀<sub>i</sub>，我也切了 t<sub>i</sub>

(32) zhe-ba dao a, wo ye qie le  
 this-CL knife TOP I also cut Asp  
 ‘This knife, I also cut with it’  
 這把刀啊，我也切了

Here we have to note that there might not be an A-Extraction case in Chinese for the test. The cognate of passive construction –*bei*-construction is traditionally analyzed as operator-variable binding (Huang 1984).

## 2.2. Pragmatic Control

It is generally assumed that a PF operation would need a phonological antecedent, a pragmatic antecedent is not sufficient to license a true PF ellipsis. The following example (39) is from Hankamer & Sag (1976:414), which distinguishes a true PF ellipsis from an anaphora.

(33) [Observing Hankamer attempting to stuff 12” ball through 6” hoop]

Sag:

- |                                      |                            |
|--------------------------------------|----------------------------|
| a. #I don't see why you even try to. | [VPE]                      |
| b. I don't see why you even try.     | [Null complement anaphora] |
|                                      | (Hankamer & Sag 1976:414)  |

Parallel Chinese example can be found in (34). Here, the light-verb-stranding alternate (34)a is wired in the context because it lacks a phonological antecedent.

(34) [observing the sales demonstrating the use of a very nice-brand knife]

Zhangsan:

- |  |  |
|--|--|
| a. # wo mama ye qie                                |  |
| I mother also cut                                  |  |
| ‘My mother also cut something with the same knife’ |  |
| 我媽媽也切  |  |
| b. Wo mama ye you                                  |  |
| I mother also have                                 |  |
| ‘My mother also has one’                           |  |
| 我媽媽也有  |  |

Null arguments can exhibit two interpretations, one pragmatic and the other linguistic antecedent, while null complement selected by light verb cannot. (Toosavandani 2009 (28) (29-30)). As shown in (35), this sentence could only be interpreted as the (35)a reading rather than the b reading. In other words, the deleted element could be like the case in (36)a but not (36)b.

- (35) Zhangsan qie zhe-ba dao, Lisi ye qie [e]  
 ZS cut this-CL knife LS also cut  
 張三切這把刀，李四也切 [e]  
 a. Zhangsan use this knife to cut something, Lisi also use this knife to cut something  
 b. \*Zhangsan use this knife to cut something, Lisi also cut the bread

- (36)  
 a. Zhangsan qie zhe-ba-dao, Lisi ye qie [~~zhe-ba-dao~~]  
 張三切這把刀，李四也切~~這把刀~~  
 b. #Zhangsan qie zhe-ba-dao, Lisi ye qie [~~mianbao~~]  
 張三切這把刀，李四也切~~麵包~~

### 3. On Domain (or constituency)

#### 3.1. Head licensing / “Isidore’s diagnostic”

Starting from Chao (1987) and Lobeck (1995), linguists notice one of the ways to formalize a proper ellipsis in language. She defines it as proper licensing of functional head, by which functional heads are proper licensors of deletion of their complement. Recently, Merchant (2010)’s term “Isidore’s diagnostic” indicates similar concept, in narrow ellipsis studies, the elements D (determiner), C (complementizer), and T (tense) are taken to obligatorily select for NP, TP, and VP complements, respectively. When these complements are missing, we have an instance of what Chao 1987 called ‘headed’ (H+) ellipses. If we adapt their idea, the *v*-Stranding VPE is also a case of complement of functional head – light verb.

Another argument in favor of PF operation in VP domain is that the nonverbal element of a complex predicate can be an adjective, as shown in Farsi (Toorsavanbani 2009 (27)). It is not argument selected by the light verb. Therefore, it should not be *pro*.

- (37) rostam piran-esh-o xoshk kard vali sohr\_ab  
 Rostam shirt-his-obj dry do.past.3sg but Sohrab  
 [AP piran-esh-o xoshk] na-kard.  
 shirt-his-obj dry neg-do.past.3sg  
 “Rostam dried his shirt, but Sohrab didn’t.”

In Chinese, Lin (2001) also observed that: object in a Mandarin Chinese sentence can be selected by a light verb, an effect that is called the “unselectiveness of object in MC”. Those objects are also called the “adverbial object”.

- (38) Zhangsan qie (USE) zhe-ba-dao  
 ZS cut this-CL-knife  
 張三切(USE)這把刀

- (39) Ku (FOR) kuopojiawang  
 cry the broken country and home  
 哭(FOR)國破家亡

### 3.2. Outer Tests for Deletion Domain

#### Again test

Johnson (2008 (24)) test the size with *again* ambiguity. Von Stechow (1996) and Rapp and von Stechow (1999) demonstrate that the repetitive reading results when *again* modifies the entire vP since it denotes an action event resulting in the door being in a closed state. When *again* modifies only the VP, it give rise to the restitutive reading since the VP just denotes the resulting state of the door being closed.

- (40) Zhangsan you kai men le  
 Zhangsan again open door Asp  
 張三又開門了  
 a. Zhangsan opened the door, and somebody had opened it before.  
 b. Zhangsan opened the door, and it had been in that state before.

To use the test on the light-verb-stranding ellipsis, we can manipulate the following examples (41)(42).The only restitutive readings of these examples indicate that the empty phrasal category is in the domain of VP.

- (41) Wo qie-le zhe-ba dao, ta you qie-~~{zhe-ba-dao}~~  
 I cut-Asp this-CL knife he again cut this-CL-knife  
 我切了這把刀，他又切~~這把刀~~  
 a. He uses the knife to cut something, and somebody had used it before.  
 b. #He uses the knife to cut something, and it had been in that state before.

- (42) Wo pao-guo caochang, ta you pao ~~{caochang}~~  
 I run-Asp playground he again run playground  
 我跑過操場，他又跑~~操場~~  
 a. He repeatedly runs in the playground again.  
 b. #someone runs in the playground, and he run in the playground again.

#### With adverbials

Adverbial element is known as adjunction to VP, vP, or IP domain. In Chinese, *manman-de* 'slowly' is an adjunction to vP or VP. The contrast between (43)(44) shows that *manman-de* 'slowly' can only precede the light verb *qie* 'cut'. Assuming light verb *qie* 'cut' indeed raises to the light verb head, this adverbial is modifying vP, but not VP.

(43) Lisi [<sub>VP</sub>manman-de[<sub>v</sub> qie[<sub>v</sub> t<sub>i</sub> zhe-ba-dao]]]  
 LL slowly-DE cut this CL knife  
 ‘Lisi slowly use this knife’  
 李四 [<sub>VP</sub>慢慢得 [<sub>v</sub> 切<sub>i</sub> [<sub>v</sub> t<sub>i</sub> 這把刀]]]

(44) \*Lisi [<sub>VP</sub> [<sub>v</sub>qie [<sub>VP</sub>manman-de[<sub>v</sub> t<sub>i</sub>zhe-ba dao]]]]]  
 LL cut slowly-DE this-CL knife  
 \*李四 [<sub>VP</sub> [<sub>v</sub>切 [<sub>VP</sub>慢慢得[<sub>v</sub> t<sub>i</sub>這把刀]]]]]

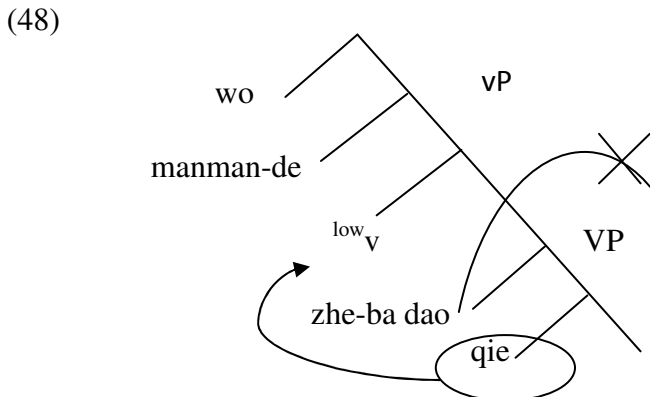
In the ellipsis context, on the other hand, (45) further proves that the domain of deletion is VP. When we delete higher to the light verb head (46), or delete the adverb separately (47), sentences are not grammatical.

(45) ? Lisi manman-de qie zhe-ba-dao, Wangwu ye manman-de qie [<sub>VP</sub>e]  
 LS slowly-DE cut this-CL-knife WW also slowly-DE cut  
 ‘Lisi cut slowly with this knife, Wangwu also cut slowly with this knife’  
 ?李四慢慢得切這把刀，王五也慢慢得切

(46) \* Lisi manman-de qie zhe-ba-dao, Wangwu ye manman-de [<sub>v</sub>{<sub>VP</sub>...}]  
 LS slowly-DE cut this-CL-knife WW also slowly-DE  
 ‘Lisi cut slowly with this knife, Wangwu also cut slowly with this knife’  
 \*李四慢慢得切這把刀，王五也慢慢得

(47) \*Lisi manman-de qie zhe-ba-dao, Wangwu ye ~~manman-de~~qie  
 LS slowly-DE cut this-CL-knife WW also slowly-DE cut  
 \*李四慢慢得切這把刀，王五也切

The data with adverbs show that the deletion domain around VP is like the diagram in the following:



Identity of v

It is noted in the literature (Goldberg 2005) that the verbal element (or light verb) stranding in the v/V-stranding VP ellipsis has identity requirement with the verb in the antecedent. We repeat Goldberg's principle in the following (49).

(49) the Verbal Identity Requirement:<sup>10</sup>

The antecedent-and target-clause main Vs of VPE must be identical, minimally, in their root and derivational morphology.

Chinese is a light-verb productive language. The following examples(50)-(53) show that the identity of the light-verb is strictly parallel between the first and the second conjunct.

(50) Zhangsan qie zhe-ba dao, Lisi ye \*yong/ qie  
 Zhangsan cut this-CL knife Lisi also use  
 張三切這把刀，李四也\*用/切。

(51) Zhangsan yong zhe-ba dao qie, Lisi ye \*qie/yong  
 Zhangsan use this-CL knife cut Lisi also cut  
 張三用這把刀切，李四也\*切/用<sup>11</sup>

(52) wang-mama qie zhe-ba dao, Li-mama \*duo/qie  
 Mrs. Wang cut this-CL knife Mrs. Li chop  
 王媽媽切這把刀，李媽媽\*剁/切

(53) Zhangsan pao caochang, Lisi ye \*zou / pao  
 Zhangsan run playground Lisi also walk  
 張三跑操場，李四也\*走/跑

The ungrammaticality of (54)(55), on the other hand, is due to the wrong “domain of deletion” rather than the identity of the verb.

(54) \*zhe-ba dao ran Zhangsan qie-de hen lei, na-ba dao ye \* shi-de/ \* daozhi/ \* ran  
 This-CL knife let Zhangsan cut-DE very tired that-CL knife also cause  
 Int. ‘This knife cause Zhangsan very tired by cutting something, and so does that one’  
 \*這把刀讓張三切得很累，那把刀也\*使得/ \*導致/ \*讓

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<sup>10</sup> With only the e-GIVENESS identity constraint, we don't expect the identity of the light verbs to matter for determining when ellipsis occurs.

- (55) \*zhe-ba dao qie de Zhangsan hen lei, na-ba dao ye qie-de  
 This-CL knife cut-DE Zhangsan very tired that-CL knife also cut-DE  
 Int. 'This knife cause Zhangsan very tired by cutting something, and so does that one'  
 \*這把刀切得張三很累，那把刀也切得

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