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外國文學與語言學研究所

碩士論文

結局與結果：中文的兩種動詞後結果貌成份研究

Eventuality and Consequence -

Two Types of Resultative Verbal Particles in Mandarin

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Abstract

This research of resultative semantics has drawn attentions from linguists for decades. In Mandarin, it is generally accepted that a V-V construction with the second verb indicating the resultative state of the event can be seen as a VR compound. In addition to this, one particular trait on the VR compounds is the potential mode, in which a potentiality-*dé* (得) is inserted to form a V-*dé*-X construction such as "*chī-dé-wán*" (吃得完) which distinguishes the VR compounds from other verbal compounds in Mandarin. However, as there are still some VR constructions can not tolerate potentiality-*dé* insertion (e.g., *chī-guāng* vs. **chī-dé-guāng*), there is no explanation to this gap.

By adopting the idea proposed in Kratzer (2004), this thesis proposes that Mandarin has two types of resultative semantics as German and English do, instead of the unitary one type of resultative semantics found in the literature. This paper will inspect the semantic environment that licenses the appearance of two resultative markers (e.g., *dé* and *dào*) in Mandarin and compare their linguistic behavior with the two types of resultative semantics suggested by Kratzer in English to support to the proposal that Mandarin has two types of resultative semantics as well. At the end, this paper suggests that those V-particle constructions with potentiality-*dé* (i.e., V-*wán*) are of the resultative semantics of eventual resultative but those V-particle constructions without potentiality-*dé* insertion belong to the resultative semantics of consequential resultative.

中文摘要

結局與結果：中文的兩種動詞後結果貌成份研究

結果貌語意的研究在過去數十年間已經引起語言學家廣泛的注意。一般語言學家皆能接受在中文的雙動詞複合結構 (V-V compounds) 中，當第二個動詞表示的是該事件的結果貌時，則該複合結構應被視為「動結式」。此外，動結式另一個較為明顯的特性為其能加插表可能性的中綴「得」來形成該動結式之「可能性模式」(potential mode)。這個特色，讓是讓「動結式」和其他動詞複合結構有所區分的地方。然而，即使許多文獻已經提及有部份的動結式結構並無法適用「可能性模式」，明確的機制以及理由並未受到相對的注意和研究。

本文藉由 Kratzer (2004) 所提出的對於德文及英文結果貌語意研究的概念，提出一個和傳統的一元化結果貌語意不同的看法。本文認為，中文的結果貌語意應和德文、英文一樣，皆是具有兩種不同的結果貌事件結構。為了論証以上的觀察，本文首先釐清中文的兩種結果貌成份 - 「得」和「到」 - 出現的時機和條件，然後將這些條件和 Kratzer 所提出的兩種結果貌相對比，以得出兩種不同的結果貌語意。再用這兩種不同的結果貌語意來驗證中文動結式的事件結構內涵。最後，本文總結提出在中文的動結式結構中，具有「可能性模式」的動結式，屬於「結局型動結式」。在這型動結式中，動作階段和結果階段為兩個獨立的事件。而不具有「可能性模式」的動結式，則屬於「結果型動結式」。在這型動結式中，動作階段和結果階段為同一事件內不可分割的兩面。

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Chapter 1

INTRODUCTION

1.1 Preliminary

Over the past few decades, the study of resultative semantics in Mandarin has aroused much attention and has resulted in varying viewpoints on the subject. It is observed that two elements in a "VR" pattern series, in which V is a verb and R can be another verb, an adjective or a particle, express the semantics of resultatives in Mandarin¹. However, there is not much agreement on how the semantics of these elements can be interpreted. Though various authors have adopted different approaches to analyze this issue (for example, lexical approach (Li 1990a), syntactic analysis (Cheng & Huang 1994, Huang 1992 and among others), syntax-morphology interface treatment (Cheng 1997) and many other studies of

1 With the V in the term indicates the activity of the event, many linguistics beginners may mistake the R as simply referring to the result of the activity. As a matter of fact, this opinion is only half correct. Every telic event will come to a result, but it is not every result that can be the R in VR construction. The term, VR construction, is given in the way that the V is an activity verb and the R is the eventual state the relative participant in the activity ends up with. Therefore, sentences below should not be considered as having VR construction, even though some of them have identical resultative particles as real VR constructions do.

- a. Ābǐ kàn-wán diànshì jiù yào shuì le
Abi watch-finish TV then want sleep Asp.
'Abi will go to bed after finish watching TV.'
- b. Ābǐ zuótiān-wǎnshàng xiào-gòu le
Abi yesterday-night laugh-enough Asp.
'Abi laughed enough last night.'
- c. Ābǐ jīntiān-zǎoshàng qǐ-wǎn le
Abi today-morning get_up-late Asp.
'Abi got up late this morning.'

In (a), either the subject or the object of the activity verb (i.e. watch) has nothing to do with the complementary particle *-wán*(finish) here. Similar situation can also be found in (b) and (c). Only the activity verb itself is attributed by the complementary particles. In short, the what links the parts in a VR construction is the causal relation. A VX construction without a causal relation between the V and the X can not be considered as a VR construction.

lexical semantics (Pu 2000, Guan 2003, Chen 2003, Shen 2004 and among others)), there is a gap which has not yet been satisfactorily accounted for across the various research mentioned. That is, some VR constructions allow *-dě-* or *-bù-* insertion to form a *V-dě/bù-X* construction whereas others do not. In order to attempt to fill this gap, this thesis will investigate the sub-group of the VR construction, which takes resultative verbal particles as the R, to account for this gap.

With a similar pattern, which takes an activity verb with a resultative verbal particle (RVP for short), the V-particle construction (V-part. construction for short) is considered as a sub-group of the VR construction by Chao (1979). Under this particular field, investigations on Mandarin V-part. constructions can be traced back to as early as Thompson (1973c). Since then, various theories have been proposed to account for the phenomena that occur within these particular constructions. The approaches have either followed Thompson's assumption that categorizes the V-part. construction as a *lexical entry*, or have gone against his proposal by giving a *syntactic analysis* on the VR constructions, which can also include the V-part. construction (Cheng & Huang 1994, Huang 1992 and among others). What is agreed between both approaches is that most of the V-part. constructions have potential mode². In other words, V-part. constructions can be inserted with the infixes of "potentiality-*dě-*"(may) and/or the "potentiality-*bù-*"(not) into the parts of the structure. The former represents the possibility (see also Wu (2004)) of the resultative state realization indicated by the particle. The latter means the impossibility of the realization of the resultative state. For example:

2 The potential mode is recognized to have the semantics of modality. Though the contexts of the potential mode is covered in this research, this thesis is not intended to discuss the semantics of the potentiality. This potentiality issue is left open for further studies.

(1) a. Ābǐ hē-**dé**-wán nà bēi shuǐ

Abi drink-may-finish that-CI water

'It is possible for Abi to drink up the glass of water.'

b. Ābǐ hē-**bù**-wán nà bēi shuǐ

Abi drink-not-finish that-CI water

'It is impossible for Abi to drink up the glass of water.'

In (1a), with the infix-*dé*- inserted (i.e., the potential mode), the sentence expresses the possibility that, or ability of, Abi's drinking would then lead to the resultative state of the water in the glass as indicated by the RVP (i.e., *wán*, 'finish') in that there would be no more water left in the glass. As for (1b), the sentence expresses the impossibility that, or inability of, Abi's drinking would come to the resultative state indicated by the RVP.

Though the potential mode is a particular feature of V-part. constructions that distinguishes them from other compounds or short phrases (Thompson 1973c), it is generally accepted that not every V-part. construction has potential mode. When most researchers who have investigated the related issues of V-part. construction have noticed that there is a small set of V-part. constructions that do not have potential mode, no solid (or in my opinion, satisfactory) explanations on the difference have been offered so far (Thompson 1973, Chao 1979, Lü 1980, Li & Thompson 1982, and among others). The set of V-part. constructions, which do not have potential mode, are simply considered as a minority in quantity and can be

ignored or taken as exceptions to the generalization rules of VR construction. This phenomenon of lacking of potential mode has been reported in Mandarin RVPs such as *-guāng*(empty), *-hóng*(red), *-kōng*(vacuous) or *-hǎo*(well) which are used as adjectives independently (Chao 1979 and among others)³.

In addition, what distinguishes RVPs into two types is not only the potential mode diversity but also their ability to maintain a resultative state interpretation with a bare noun phrase (BNP) as the object. This can be illustrated in the contrast between (2) and (3) below:

(2) a. Ābǐ **chī-wán** nà-kuài dànɡāo le

Abi eat-finish that-Cl cake Asp.

'Abi ate up the piece of cake'

(Implication: There is no more cake left.)



b. Ābǐ **chī-guāng** nà-kuài dànɡāo le

Abi eat-empty that-Cl cake Asp.

'Abi ate up that piece of cake'

(Implication: There is no more cake left.)

In (2), sentences with *-wán* in (2a) and *-guāng* in (2b) share the same truth condition. In both cases, there is no more cake left. However, the parallel shifts when the object is changed from a quantized noun phrase (QNP) to a bare noun phrase (BNP):

³ Chao (1979) also mentions the categorization of the V-part. constructions with and/or without potential mode can be vary from dialect to dialect. But it is for certain that there is such a distinction across dialects of Mandarin. This will be discussed in more detail in chapter 5.

(3) a. Ābǐ **chī-wán** dàngāo le

Abi eat-finish cake Asp.

'Abi finished eating cakes.'

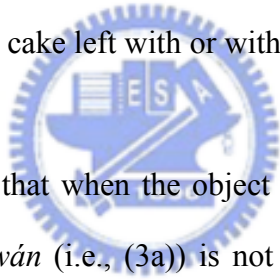
(Implication: It's uncertain if there is any cake left without the context.)

b. Ābǐ **chī-guāng** dàngāo le

Abi eat-empty cake Asp.

'Abi had the cakes eaten up.'

(Implication: There is no more cake left with or without the context.)



From the sentences above, we find that when the object is a BNP, the interpretation of the resultative state of the cake with *-wán* (i.e., (3a)) is not as steady as it is when used with *-guāng* in (3b). It takes contextual knowledge to determine whether the *-wán* in (3a) should mean the total consumption of the cake(s) or if Abi has simply completed the cake-eating action. For the second interpretation of (3a), it is very possible for some remnant cake left on the plate.

As the two types of RVPs distinguished by the contrast of sentences in (2) with (3) (i.e., the resultative state interpretation shift or not) are parallel with the two types of RVPs categorized by potential mode variation, it is reasonable to suspect that this is not a coincidence. The V-part. constructions without potential mode should therefore not be taken as exceptions but an independent category of resultative expressions. The main issue that

needs investigating then, is what is the motivation that drives all these differences?

1.2 Objectives and Hypothesis

As briefly highlighted above, there appears to be a gap in the categorizations of V part constructions that do not hold potential mode, and it is the objective of this study to investigate this anomaly further. By following Kratzer's (2004) proposal, this study will analyze the issue in terms of how the different event structures in Mandarin resultatives cause the variation between the RVPs. To put it more precisely, this research suggests that resultative states expressed by RVPs like *-wán* are nothing more than a **possible** consequence that may result from the activity verb. Yet, other RVPs such as *-guāng*, which makes the event embedded with an endpoint, indicates the **inevitable** consequence of the activity. In Kratzer's proposal, she assumes that there is a [+telic] feature attached to the adjectival particles in German. The feature would then **guarantee** the cause-result relation to be held in any case. In order to testify the proposal in Mandarin, the goal of this paper is to prove that there are two types of resultative semantics in Mandarin with the study of resultative verbal particles.

Furthermore the hypothesis for this study is as follows: It will be suggested that there are two types of resultative semantics in Mandarin instead of the unitary opinion in the traditional viewpoint. The difference in meaning of these two types of resultative semantics can be perceived via observing their compatibility with the infixes, *-dé-* and *-bù-*. Those which are

compatible with the infixes are of one type of the resultative semantics while those which are incompatible are of another type. As most Romance languages have the same phenomenon, it is proposed that Mandarin resultative semantics are more like that of English or German instead of French or Spanish.

To fulfill the goal and investigate fully the issues mentioned above, this thesis will be arranged as follows: a more detailed background knowledge about the distributions of Mandarin RVPs and related issues of resultative expressions will be provided in chapter 2. This will help us to know more about the properties of the V-part. construction. Next, previous analyses on the Mandarin RVPs and Kratzer's proposal of two types of resultatives will be reviewed in chapter 3. Then, in chapter 4, the two resultative elements, resultative-*dé*(to reach) and resultative-*dào*(till) will be examined. Via the examination, a unified analysis which can cover the interpretation of resultative-*dé*, potentiality-*dé*-/*bù*- and resultative-*dào* will be additionally proposed. The proposed hypothesis in chapter 4 on -*dé*- testifying how the potential mode act within the framework of Kratzer's proposal will be adopted. The proposed hypothesis along with Kratzer's idea to explain the diversity of resultative interpretation shift between the two types of RVPs along with their infix insertion differences will then be combined in chapter 5. Finally, Chapter 6 will offer conclusions to the study and mention any possible further research that could be carried out to further this topic.

Chapter 2

V-PARTICLE CONSTRUCTIONS IN MANDARIN

2.1 Background

In Mandarin, almost all activity verbs can take the form of the V in V-part. constructions (Chao 1979). As for the particle part of these particular constructions, lexicons from four major categories are perceived respectively. The particle can be a directional preposition, a locative, a verb or an adjective in Mandarin. Among these categories, particles of the first two are limited in a number of a finite set, while those from the latter two categories are in the majority of the particles in the V-part. constructions. In this thesis, the discussion is focused on the V-part. constructions with the particles from the latter two categories.

One generalization that needs to be noted here is that a verbal or adjectival particle is no longer interpreted as a verb or adjective in V-part. construction. Its semantic interpretation has changed from an independent verb/adjective to a RVP. In fact, most RVPs have lost their ability to be used as an independent word in modern Mandarin. For example:

(4) a. Ābǐ chī-**wán** nà-kuài dàngāo le

Abi eat-finish that-Cl cake Asp.

'Abi ate up the piece of cake.'

a'. *Nà-kuài dàngāo **wán**-le

that-Cl cake finish-Asp.

b. Ābǐ chī-**guāng** nà-kuài dàngāo le

Abi eat-empty that-Cl cake Asp.

'Abi ate up that piece of cake.'

b'. *Nà-kuài dàngāo **guāng** le

that-cl cake empty Asp.

c. Ābǐ chī-**diào** nà-kuài dàngāo le

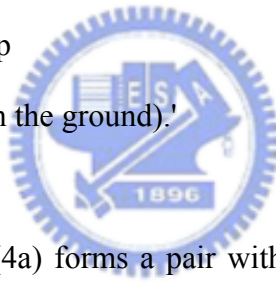
Abi eat-drop that-Cl cake Asp.

'Abi ate off the piece of cake.'

c'. Nà-kuài dàngāo **diào**(-dìshàng) le

that-Cl cake drop(-Loc.) Asp

That piece of cake dropped (on the ground).'



As we can see from (4), in which (4a) forms a pair with (4a'), as does (4b) with (4b') and similarly in (4c) with (4c'), most RVPs cannot be used as a full verb (i.e., (4a')) or a full adjective (i.e., (4b')) in modern Mandarin⁴. Even though the independent use of some particles is perceived as in (4c'), its meaning has changed when used as a particle as in (4c).

4 Some readers might take the RVP *-hǎo*(done) as an exception. As Lü (1980, p257) points out, it is acceptable to have *-hǎo* in a conversation such as:

Abi: Wǔfàn zuò-hǎo-le ma ?
lunch make-done-Asp. Q
'Is lunch ready yet?'
Amei: Wǔfàn hǎo le
lunch done-Asp
'Lunch is ready.'

In Amei's response, *-hǎo* seems to be used as a full verb and interpreted the same as the RVP in the question given by Abi. However, *-hǎo* does not violate the generalization that RVP's cannot be used independently as a matter of fact. First, though the RVP *-hǎo* can be used independently as shown in Amei's response, its meaning is different from the one used as a full adjective, namely "good." Secondly, as Lü (1980) notes, the surface form we have seen in Amei's response is an elided form of the V-part. construction. Therefore, though RVP *-hǎo* seems can be used independently, it is not an exception to the generalization.

That is to say, in (4c), the piece of cake does not drop on the ground as it does in (4c'). This distinguishes V-part. construction from other VR constructions as shown in (5).

(5) a. *Ābǐ wán-lèi zhè-gè yóuxì le*

Abi play-tired this-Cl game Asp.

'Abi got tired playing this game.'

a' *Ābǐ lèi le*

Abi tired Asp.

'Abi is tired.'

The sentences in (5) reveal that *-lèi* (to be tired) is not a RVP, but rather a full adjective playing as a descriptive result of the verb in forming a VR construction. The distinction can be seen by noting that the meaning of the adjective is kept in VR construction, but it is not in a V-part. construction. Therefore, either the *-lèi* in (5a) or that in (5a'), both mean 'to be tired.' In this paper, the verbal and adjectival RVPs in V-part. constructions but not the result description element in VR constructions will be focused on.

2.2 Potential Mode of V-part. Construction

As mentioned in chapter 1, it is a generally accepted idea that the potential mode (i.e., with potentiality-*dé-/-bù-* inserted in a V-part. construction) of the RVPs distinguishes them from other verbal compounds in Mandarin (Thompson 1973). It is also noted that the potential

mode is **not** a common feature shared by all V-part. constructions (cf. Thompson 1973, Chao 1979 and among others). For example, some adjectives like *-guāng*(empty) or *-hǎo*(well) do not have potential mode.

Although the RVPs listed here are all perceived as adjectival by themselves from the aspect of etymology, the distinction between verbal or adjectival origins could not be the reason that drives potential mode diversity. In some cases, we can find that there are adjectival RVPs such as *-qīng*(clear), *-dà*(big), *-dìng*(fixed), ...etc capable with potential mode. For instance:

(6) a. Ābǐ lǐ-**dé**-qīng zhè-gè wèntí
Abi make-**de**-clear this-Cl problem

'Abi can clarify this problem.'

b. Zhè-kē jiǎ-shù zhǎng-**bú**-dà
this-Cl fake tree grow-**bu**-big

'This tree will not grow old.'

c. Ābǐ gǎo-**dé**-dìng zhè-jiàn shì
Abi get-**de**-fixed this-Cl matter

'Abi can get the matter fixed.'



Since etymological differences among RVPs cannot explain the potential mode diversity, this factor of the RVPs will be ignored in this study. On the other hand, we will investigate other properties of the V-part. construction to seek an explanation.

2.3 Resultative Expressions of V-part. Constructions

Except for the potential mode of the V-part. construction, another property shared by all RVPs is the ability to express resultative semantics. As it is perceived that the two resultative markers – resultative-*dé* and resultative-*dào* – are interchangeable in most cases without affecting the interpretation of the expression, it is interesting to find that the compatibility of the RVPs with these two markers can be divided into two types in parallel with the categorization made with potential mode. That is to say, on one hand, it is comprehensible why RVPs which have potential mode cannot co-occur with either the resultative-*dé* or resultative-*dào*, since these RVPs are inseparable lexical entries (i.e., full lexicons); on the other hand, it is surprising to observe that RVPs which do not have potential mode can co-occur with resultative-*dào* – though they are still incompatible with resultative-*dé*. The table below illustrates the asymmetric compatibility:

(7)

V-part. construction	Potential mode	Resultative-<i>dé</i>	Resultative-<i>dào</i>
V- <i>wán</i>	Yes	Incompatible	Incompatible
V- <i>guāng</i>	No	Incompatible	Compatible

The contrast in (8) and (9) below shows this difference:

(8) a. Ābǐ chī-**dé-wán** zhè-kuài dàngāo

Abi eat-de-finish this-Cl cake

'Abi can eat up this piece of cake.'

b. *Ābǐ chī **dé** [_{RP} zhè-kuài dàngāo dōu **wán-le**]

c. *Ābǐ yīzhí huā **dào** [_{RP} shēn-shàng-de-qián dōu **wán-le**], cái huíjiā

The examples above shows that RVPs with potential mode (i.e., *-wán* in (8)) are incompatible either with resultative-*dé* as in (8b) or resultative-*dào* as in (8c). However, the situation is a little bit different with those RVPs occurring without potential mode as can be seen below:

(9) a. *Ābǐ chī-**dé-guāng** zhè-kuài dàngāo

b. *Ābǐ chī **dé** [_{RP} zhè-kuài dàngāo dōu **guāng le**]

c. Ābǐ yīzhí shū **dào** [_{RP} kǒudài-lǐ-de-qián dōu **guāng le**], cái fāxiàn shàngdāng le

Abi keeps lose **dào** pocket-Loc.-RC-money all **empty**-Asp., then find_out fooled Asp.

'Abi did not realize that he was fooled until the money in his pocket was all lost.'

As it is indicated in (9), a RVP without potential mode (i.e., *-guāng* in (9a)) is incompatible with resultative-*dé* as in (9b), yet it is compatible with resultative-*dào* as in (9c).

The contrast found in (8b, c) with (9b, c) is very interesting. We do not know why resultative-*dé* and resultative-*dào* have different compatibility with the two types of RVPs, though in most cases, they are interchangeable with each other without causing any obvious shift in meaning. For example:

(10) a. Ābǐ bǎ zhè-piān wénzhāng shān **dé** shèng liǎng-yè le

Abi BA this-Cl article delete **dé** leave two-Cl(page) Asp.

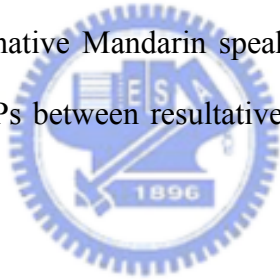
'Abi cut down the content of the article to two pages.'

b. Ābǐ bǎ zhè-piān wénzhāng shān **dào** shèng liǎng-yè le

Abi BA this-Cl article revise **dào** leave two-Cl(page) Asp.

'Abi cut down the content of the article to two pages.'

In the two sentences listed above, the interpretational differences between (10a) and (10b) are by far too subtle for almost every native Mandarin speaker. This makes the compatibility variation with the two types of RVPs between resultative-*dé* and resultative-*dào* even more interesting.



Under the general assumption that a language is assumed to be economic in modern linguistics field, no two lexicons shall be designed completely identical within such a system. The differences between resultative-*dé* and resultative-*dào* can be captured easily by every native Mandarin speaker in the following contrast in support of this assumption:

(11) a. *Zǒngbiānjí yào Ābǐ bǎ zhè-piān wénzhāng shān **dé** shèng liǎng-yè

b. Zǒngbiānjí yào Ābǐ bǎ zhè-piān wénzhāng shān **dào** shèng liǎng-yè

Chief_editor want Abi BA this-Cl article cut_down dao remain two-Cl(page)

'The chief editor wanted Abi to cut down the content of the article to two pages.'

Sentences in (11) show that when the subordinate clause, which brings out the sub-event as *Abi's cutting down the article to two pages*, is embedded within the clause led by a verb with imperative force (i.e., *yào*(want) in (11)), the sentence with resultative-*dé* is inaccessible. Yet, sentences with resultative-*dào* can survive in such an environment. The contrast between (11a) and (11b) indicates that the semantics of resultative-*dé* and resultative-*dào* must be different in some way(s). Their unitary interpretation in (10), thus, should be assumed to be an implication of other factors. That is to say, it should be investigated whether in certain conditions, the semantics of resultative-*dé* will imply the semantics of resultative-*dào* and/or the other way around.



2.4 Summary

In this chapter, we have restricted the research domain of the paper and clarified the V-part constructions from other VR constructions. Besides, we have seen the differences of potential mode and resultative expression between two types of RVPs. It has been stated that the difference is not derived from any etymological variations (i.e., verbal or adjectival); however, the contrast between resultative-*dé* and resultative-*dào* can shed a light upon this inconsistent situation. Since there must be something different between resultative-*dé* and resultative-*dào*, attention needs to be paid to them. If the semantic requirements of resultative-*dé* and resultative-*dào* can be explained, we will be able to highlight the difference generalized in the table listed in (7) (i.e., the sentences listed in (8) and (9)). Then, by giving explanations to the diversity listed in (7), the fundamental difference between the RVPs with

potential mode and those without potential mode will additionally be revealed. To begin with, a review of previous studies on the potential mode with RVPs will be carried out in chapter 3, and the resultative expressions with *resultative-dé* and *resultative-dào* will be examined in chapter 4 before building up the main analysis of this study in chapter 5.



Chapter 3

PREVIOUS STUDIES ON MANDARIN RVPS AND RESULTATIVE EXPRESSIONS

3.1 Preface

Different linguists use different terms for the construction that consists of a certain activity and the result of this activity. In this paper, for the convenience of discussion, these constructions will be all termed as VR constructions. Generally speaking, previous studies on this particular construction can be sorted into two perspectives in which one is the lexical approach and the other is the syntactic approach. The former takes the words with VR constructions as compounds. Thompson (1973) and Chao (1979) are two major pioneers who have adopted this strategy. Researchers following them are mostly investigating the interpretation of independent lexical semantics (see also Li & Thompson 1982, Zhu 1982, Li 1990a, Lü 1980, Pu 2000, Guan 2003, Chen 2003, Wu 2004). The other approach, which assumes the underline form of the VR construction as some kind of syntactic projection (Cheng & Huang 1994, Huang 1992), is based on the VR constructions of Verb-Verb or Verb-Adjectival but not V-part. construction. Hence, the syntactic approach will not be discussed in great detail for it is beyond the scope of the RVPs research in this paper⁵.

In this chapter, therefore, the lexical approaches pioneered by Thompson (1973) and Chao

5 Huang's series of works on resultatives since the late 1980's has been significant (see also Huang 1988, Chen & Huang 1994) In addition, there are also some recent studies taking a historical investigation (Mei 1994, Shi 2004 and among others) or syntax-semantics interface analysis (Shen 2004) in explaining the VR construction. Issues on this field will be left for an extended study of this research in the future.

(1979) will be reviewed. Then, Kratzer's (2004) proposal on the two types of resultatives will be introduced at the end of this chapter, for her theory will be adopted and assumed to be valid in the proposal of this research.

3.2 V-part. Construction as A Compound Word.

Although the details vary, both Thompson (1973) and Chao (1979) take the lexical approach and take all VR-constructions as an outcome of some kind of compounding. Under this framework, any V-part. constructions are considered as a sub-type of the VR-construction with an activity Verb which indicates the progressing stage of the event and a Resultative verbal particle that expresses the resultative state of the event. In this section, the exact mechanism and the varieties between the two pioneer researches will be reviewed and discussed.

3.2.1 Thompson (1973)

Thompson assumes that all verbal compounds come from a lexicon derivational rule which will naturally keep those VR constructions from allowing *-dé-/-bù-* insertion and in consequence prevent them from having potential mode. Her rule is shown as below:

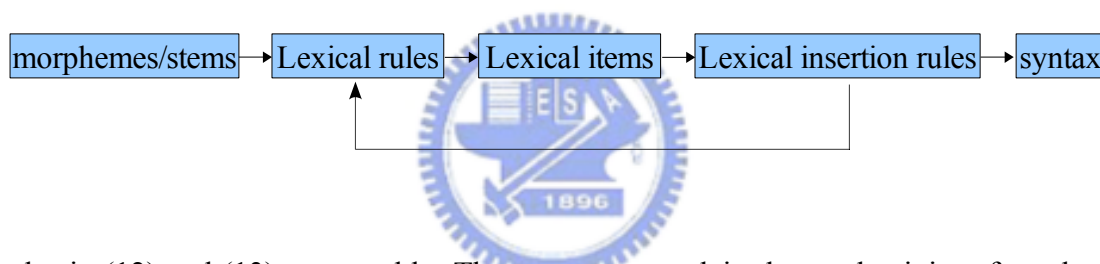
(12) Lexical Potentializing Rule for RV (Resultative Verbal compounds):

$$[V-V]_{RV} \rightarrow [V-d\acute{e}/-b\grave{u}-V]_{RV}$$

(obligatory if -V is *-qǐ*(raise), *-guò*(pass))

Along with the rule illustrated in (12), Thompson also suggests a recyclable loop flowchart that can ensure that the derivation is retained at the morphology level. The flowchart is illustrated in (13):

(13)



The rules in (12) and (13) proposed by Thompson can explain the productivity of resultative verbal compounds observed by Zhou (1958). Thus, verbal compounds like *hē-wán*(to finish drinking) or *chī-bǎo*(to eat till repletion) would involve the process shown in (14):

(14) Stems → Lexical Rules → Lexical Items → Lexical Insertion Rules → Lexical Items

a. [*hē*], [*wán*] → [*hē*]+[*wán*] → [*hē-wán*] → [*hē-wán*]+[*-dē/-bù-*] → [*hē-dē/-bù-wán*]

b. [*chī*], [*bǎo*] → [*chī*]+[*bǎo*] → [*chī-bǎo*] → [*chī-bǎo*]+[*-dē/-bù-*] → [*chī-dē/-bù-bǎo*]

Though this explanation can cover the generalization of potential mode of some RVPs, it fails in two aspects. First, the flowchart cannot derive resultative expressions like "*chī dé tài bǎo*"(to be too replete with the eating) which apparently is a syntactic structure with the

degree modifier "*tài*"(too) in it. In other words, if "*chī-dé-bǎo*" is already a lexicon when entering the syntactic domain, the degree modifier should not be inserted into it. Secondly, the explanation, in fact, cannot cover why there are certain verbal compounds that do not have potential mode while others do. At best, Thompson's approach can only assume that those V-part constructions do not lexically contain potential mode, and thus cannot be applied to the infix-insertion rule.

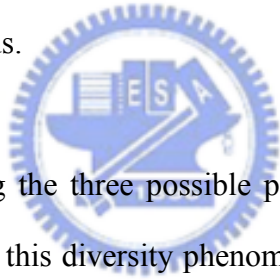
3.2.2 Chao (1979)

Chao (1979) uses the term VR-compound in referring to the VR construction to be discussed in this paper. In addition, he takes all V-part. constructions as a sub-type of VR compounds. As for the potential mode diversity, Chao categorizes the VR compounds into three different types as below to account for it.

(15) Chao's categorization of V-part. construction

- I. **Fixed VR compounds** refer to those V-part. constructions which disallow infix *-dé-/-bù-* insertion or any other kinds of expansion of the construction.
- II. **Infixes-insertable VR compounds** are those V-part. constructions that allow and only allow infix *-dé-/-bù-* insertion.
- III. **Expandable VR compounds** can be expanded with not only *-de-* insertion but also other elements such as "*chī dé bú tài bǎo*"(eat-de not_too replete, 'to be eating yet turns out not that replete') (Chao 1979, p.205)

According to this categorization, the potential mode differences of *-dé-/-bù-* insertion results from the lexicon category variation. That is to say, since RVPs of both types are mostly bound morphemes, those which have potential mode (i.e., allowing *-dé-/-bù-* insertion) should be of a type different from those which do not have potential mode. As for the expandable VR compounds, Chao claims that the expandable VR compounds are no longer compounds after expansion, but are seen as phrases instead. Following Chao's definition then, we can find that some RVPs such as *V-wán* are infixes-insertable VR compounds and that some RVPs like *V-guāng* are defined as fixed VR compounds. In addition, those resultative expressions that can be expanded into an independent syntactic projection can be termed as expandable VR compounds.



Chao's definition helps in clarifying the three possible patterns with V and R; however, it does not provide any motivation for this diversity phenomenon. What is more, among those V-part. constructions which are classified as fixed VR compounds by Chao, it is not entirely impossible to insert elements into the parts of them. The comparison between expressions in (16) and (17) illustrate this:

- (16) a. **Ābǐ hē-dé-guāng zhè-píng jiǔ*
 Abi drink-de-empty this-Cl-wine
- b. **Ābǐ zuò-dé-hǎo zhè-xiàng gōngzuò*
 Abi do-de-complete this-Cl work

The unacceptability of sentences in (16), according to Chao's definition, shows that both V-

guāng and *V-hǎo* belong to fixed VR compounds which do not allow any infix insertion. However, sentences in (17) below point out another natural and widely perceived pattern for these fixed VR compounds to be inserted with resultative-*dào*(till) into the parts of them. For example:

(17) a. Ābǐ děi bǎ huǒchái **mài dào guāng** cái néng huí jiā

Abi must BA matches sell till empty then can back.home.

'Abi must sell out the matches, then he can go home.'

b. Zhè-yí-dà-zhuō-cài **chī dào guāng**, kěyào huā bú-shǎo shíjiān

this-one-big-CI-dish eat till empty, may_need spend not-less time

'Eating up the food on such a big table may take a lot of time.'

c. Zhè sān-fú-huà **huà dào hǎo**, Ābǐ jiù huì líkāi

This three-CI-painting draw till complete, Abi then will leave

'Abi will leave when the three paintings are completed.'

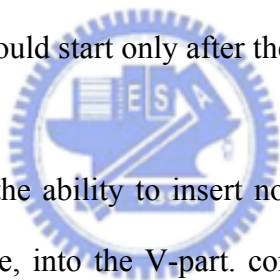
d. Ābǐ de hùzhào, jīpiào, qiānzhèng **bàn dào hǎo** zhī huā-le tā sān-tiān

Abi POS passport, air-line ticket, visa handle till done only spend-Asp. him three-day

'It only took him three days to work out his passport, air-line ticket and visa.'

The sentences listed in (17) provide a different idea from Chao's definitions on the fixed VR compounds. According to (17), we find that fixed VR compounds are actually **not fixed**. A resultative-**dào**, somehow, can be inserted between the parts of a "fixed" V-part. construction. What is more, according to the example given in (9c), which is re-listed here with other sentences in (18) below, they are even **not compounds**.

- (18) a. Ābǐ yīzhí **shū dào** kǒudài-lǐ-de-qián dōu **guāng** le, cái fāxiàn shàngdāng le
 Abi keeps lose dào pocket-Loc.RC-money all empty-Asp., then find_out fooled Asp.
 'Abi did not realize that he was fooled until the money in his pocket was all lost.'
- b. Ābǐ yīzhí **hē dào** píngzǐ kōng-le, cái tíng-xiàlái chuǎn-kǒu qì
 Abi all-along drink dào bottle vacant-Asp., just stop-down gasp-Cl breath
 'Not until the bottle was empty did Abi stop to catch his breath.'
- c. Ābǐ jiānchí yào **zhǔ dào** zuihòu yī-dào-cài **hǎo** le, cáinéng kāifàn
 Abi insist want cook dào the_last one-Cl-dish complete-Asp, so start_meal
 'Abi insisted that the meal would start only after the last dish was ready.'



The sentences in (18) above show the ability to insert not only the resultative-*dào* but also other elements, marked by underline, into the V-part. constructions. In the cases above, it would be inappropriate to consider a verb with *-kōng*, *-hǎo*, and *-guāng* as compounds. That is to say, what is termed as fixed compounds by Chao are in fact neither fixed, nor compounds.


On the other hand, the V-part. constructions with potential mode that are called infixes-insertable VR compounds are incapable of containing an expansion of this kind as shown in (8c), which is listed again here as (19a), and other sentence below:

- (19) a. *Ābǐ yīzhí huā **dào** shēn-shàng-de-qián dōu **wán**-le, cái huíjiā
 b. *Ābǐ tuō **dào/dé** lián shàngyī dōu **diào**-le, háishì zhǎo-bú-dào nà-zhāng-chēpiào

c. *Ābǐ jiānchí yào zhǔ **dào/dé** zuihòu yī-dào-cài wán-le, cáinéng kāifàn

Since it is shown in (19) that nothing – except for the potentiality infixes *-dé-/-bù-* – can be inserted between the parts of V-part. constructions of this type, it is understandable why Chao would claim that infixes-insertable VR compounds are compound words.

The last type - expandable compounds - as suggested by Chao, are compounds before expansion and phrases after expansion. To demonstrate his idea, Chao gives examples as below:

- 
- (20) a. chī bǎo (eat-replete, 'to be replete by eating')
b. chī dé bǎo (eat-de-full, 'to be able to be replete by eating')
c. chī dé tài bǎo (eat de too_replete, 'to eat too replete')

According to Chao's idea, the expressions in (20) should be sorted into a series of derivations. To put it more clearly, (20a) is a VR compound which is composed in the morphological domain. Then, by applying the infix insertion rule, (20a) is transformed into (20b), which still gets its semantic interpretation within the domain of morphology. Then, when (20b) is further expanded into (20c) with a degree adverb, *tài* (too), the sentence turns into a syntactic projection.

The derivation process from (20b) to (20c) violates the assumptions of lexical integrity that lexical entries are composed under a morphological domain and can only be applied to

morphological rules. The violation comes from Chao's assumption that (20c) (i.e., a syntactic projection) is derived from (20b) (i.e., a lexical item). In fact, a closer look will tell us that the *-dé-* in (20b) and (20c) are somewhat different. The *-dé-* in (20b) is an infix of potentiality, while the *-dé-* in (20c) is the head of the resultative projection. Maybe there are some semantics shared in their underline form, but at least on the surface form, we have to treat them differently. Besides, we also find that the R in these expandable VR constructions are not particles but adjectives. All these factors force us to exclude the expandable VR constructions from the study of this paper.

Many assumptions in modern linguistics have been changed since Chao. Therefore, please be acknowledged that the basic assumptions between Chao and this thesis is quite different. In light of the discussion above, Chao's categorization can be revised by taking the new data given below into consideration:

(21). Revised categorization of V-part. construction:

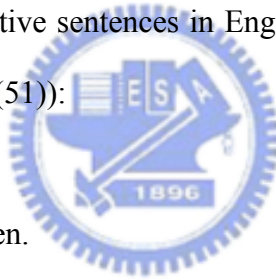
- I. **Fixed VR compounds** are not compounds. These V-part. constructions should be treated as syntactic projections. By following the lexical integrity principle, a morphological rule cannot be applied to a syntactic projection. Therefore, potentiality-*dé-*/*bù-* infixes cannot be inserted into the V-part. constructions without potential mode. In addition, it is assumed in this research that what forbids them from resultative-*dé* insertion as well is due to its semantics, as will be discussed in chapter 4.
- II. **Infixes-insertable VR compounds** are compounds. The infix expresses the

potentiality relation between the activity verb and the resultative particle.

III. **Expandable VR compounds** are not compounds. The inserted *-dé* here is a resultative-*dé* but not the potentiality-*dé*.

3.3 Kratzer's (2004) proposal on Resultatives State Semantics

Kratzer has developed an analysis based on German to argue that the causal relation in resultatives is carried out by an unpronounced affix attached to the adjectives. This idea can be illustrated by showing the respective sentences in English (the sentences in (22) and (23) are adopted from Kratzer's (48) and (51)):



- (22) a. The police broke the door open.
b. The police broke open the door.
c. The police broke open and removed the door.
- (23) a. They painted the barn green.
b. ? They painted green the barn.
c. ? They painted green and sold the barn.
d. ? They bought and painted green the barn.

In order to account for this contrast between sentences in (22) with those in (23), Kratzer suggests that there are two ways for a result of some event to be realized. They are the events

that causes other events which perceived in (22), and the events of causing other events as indicated in (23).

The differences between these two ways of composing the semantics of result can be highlighted from the definitions given by Kratzer in (24):

(24) a. **Events of causing other events**

An event c is an event of causing an event e iff c is the sum of all the member of some causal chain with maximal element e .

b. **Events that causes other events**

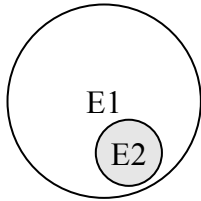
An event c is an event that causes an event e iff c is the minimal element of some causal chain with maximal element e .



For the convenience of discussion, the result with the semantics of (24a) will be termed as **Consequential Resultative** ('CR' for short) and the result that derives from the process of (24b) will be termed as **Eventual Resultative** ('ER' for short) for the remainder of this study. To make it easier to capture the difference between consequential and/or eventual resultatives, we can assume that there is a causal relation held between two events, E1 and E2, so the definitions in (24) can be translated into a set-theory based diagram as below:

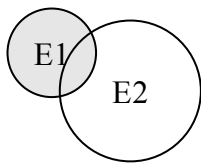
(25)

a. Consequential Resultatives (CR):



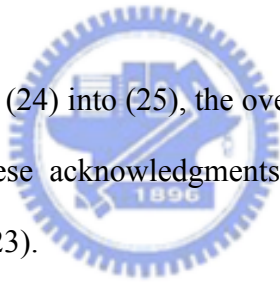
E1 is an activity, it does not always have an endpoint. However, as long as the resultative state indicated by E2 is realized, it must be the consequential endpoint of the activity referred to by E1. For instance, in a sentence, "The gardener flattened the flowers", the result of the flowers being flattened is always the consequential result of some activity performed by the gardener.

b. Eventual Resultatives (ER):



E1 is an activity, it does not always have an endpoint. In fact, even though E2 is an eventual state of some activity, there is no guarantee that the realization of the E2 entails the truth value of E1. For example, in a sentence, "The gardener watered the flower flat", the result of the flower being flat is merely the eventual result of the flower, but not necessarily has to be the direct result of the watering-activity.

By translating Kratzer's definition in (24) into (25), the overlapped area between E1 and E2 is thus the causal relation. With these acknowledgments, attention can now turn back to explaining the contrast in (22) and (23).



Apparently, we can find that the sentence listed in (22) with the phrasal verb "broke open" is consistent with the **Eventual Resultatives** semantics demonstrated in (25b). That is to say, the opening of the door in (22) does not necessarily have to be the direct result of the policeman's door-breaking. Even though in most of the case it seems to be so, the interpretation comes more from pragmatics than the semantics of the construction. There is also possibility that when the policeman breaks the door, the door is still closed but with a big hole on it. On the contrary, the sentence in (23a) belongs to the **Consequential Resultatives** semantics described in (25a). The "painting activity" (i.e., E1) in (23a) has a direct result realized as "the house being green" (i.e., E2). What links E1 and E2 here is a guaranteed

causal relation. It is not possible that the "painting" with green paint would fail in making the house "green" in normal situations. In fact, this is a consequential relation between the painting event and the resultative state of "the house being green". The house being green implies some painting activity has been done to it.

3.4 Summary

In this chapter, we have traced back to the source of the approaches that take VR constructions as compounds. By giving some more data to testify the reliability of the approaches, we find that Thompson's approach is rather descriptive, while Chao's classification may need some adjustment. With the refined definition of Chao's classification on VR-compounds, Kratzer's proposal on building resultatives was reviewed as well. In the following chapters, these ideas will be adopted to explain the resultative interpretation shift and the potential mode diversity between two types of RVPs found in the previous chapters.

Chapter 4

A HYPOTHESIS ON THE SEMANTICS OF *-dé* AND *-dào*

In this chapter, a hypothesis to account for the semantic diversity among the problems of potentiality-*dé*-/*bù*-, resultative-*dé* and resultative-*dào* will be proposed. Then, the hypothesis will be taken along with the compatibility differences of *-dé*- and *-dào* among RVPs to explain and support the proposal of this paper – Mandarin has two types of RVPs in expressing two types of resultative semantics.

After telling apart the difference between the resultative-*dé* and resultative-*dào*, this chapter will be shown that Kratzer's (2004) proposal is a suitable model in explaining the differences between RVPs such as *-wán* and *-guāng*. In short, it is suggested that the difference between *-dé*- and *-dào* can be revealed via highlighting the former as representing the relation of "*being at least as good as between two degrees*" and the latter as indicating the relation of "*being exactly equivalent between two degrees.*" For now, the most important issue is explaining what these degrees are.

4.1 Preliminary

To capture the degrees for *-dé*- and *-dào*, at least two assumptions are needed to find the properties shared by these two elements. First, by following von Stechow (2006), it is assumed that various measure functions can map an event *e* onto a scale as some degree *d*.

Besides, adverbs are taken to have the same setting as degree adjectives via combining Heim's (2000) semantics of degree adjectives and Cresswell's (1977) proposal on adjectives as below⁶:

(26) **P** is some property and f_{Adv} is a measure function denoted by the adverb.

$$\llbracket \mathbf{Adv.-\alpha}_s \rrbracket^g = \lambda d: d \in g(S) \ \& \ g(S) \subseteq S_{Adv} \ \lambda x \in D_e \ \lambda f. \ \& \ P(x) \ \& \ f_{Adv}(P(x)) \geq d$$

In the assumption given in (26), **g** is a variable assignment that specifies the value of **S**, which ranges over a set of degrees of the gradable adverb **α** in certain context. That is to say, in the **context-g**, the value of **S** is identified as a set of degrees such as **d**, **d'**, **d''** ... etc. As these degrees are members of a gradable scale **S** which belongs to the scale indicated by the adverb, there would be an individual **x** and a measure function **f** such that the individual has the property of **P** and the measure function **f** would map the degree of the individual's possessing of the property onto the scale of **S** as some value at least as much as a degree **d**. Therefore, an gradable adverb such as "quickly" means that for a context determined scale **S**, there is a degree **d** such that some individual with a certain property is mapped onto the scale **S** as some degree point that is at least as much as the contextually determined degree of being

6 There is one thing to note between Heim's (2000) semantics for degree adjectives and the version proposed by Kennedy & McNally (1999). For Heim, a degree adjective **A** is a relation between the pair (**x**, **d**) such that (**x**) is the argument and (**d**) is the degree on the relevant scale. When **A**(**x**, **d**) is true, it will also be true for every (**x**, **d'**) where **d'** < **d**. On the other hand, for Kennedy and McNally, an adjective is represented as $\llbracket \mathbf{Adj} \rrbracket = \lambda x \exists d_s. f(x) \geq d_s$. The major difference is that every degree (**d**) in Heim's system is a cumulative value on the relevant scale determined by the context. But the degree (**d**) under Kennedy & McNally's system is not determined by the context. Therefore, if the fact that John runs as fast as 20km/h makes the relation between John and the degree (**d**) true (i.e., **FAST**(**J**, 20km/h) = 1), it is also true for him to be fast as 10km/h in holding the relation between John and the degree (**d'**). John will only be considered slow when the relation breaks. However, what matters to Kennedy & McNally is keeping the relation that every possible speed rate that John can reach, the degree (**d**), has to be higher than a contextually determined degree standard (**d_s**). Therefore, when the standard is set to be 15km/h on the scale of speed, John is fast. But John would be considered slow when his speed is 10km/h.

slowly. In this research, the semantics of gradable manner adverb will be considered as **assumption 1**.

In addition to assumption 1, it is also assumed that for two **events**⁷, **c** and **r**, with a causal relation **R**, there would be a homogeneous analogy relation between the event and the degree that maps **event r** onto a scale of some relevant extension by its predicate which is adjectival in most cases. As a result, **event r** is identified as some degree **d_x** on some scale and by the semantics of adjectival, the **d_x** of **event r** is larger or equivalent with a contextually determined standard degree **d_s**. This idea can be illustrated via a parallel comparison between the degree of the individual property and the degree of the eventuality property. Since the semantics of gradable adjectives such as "tall" in "John is tall" can map the property of the individual (i.e., John) onto the scale of tallness, so can a predicate map the property of some event property onto a certain scale. Likewise, the degree mapped by homogeneous analogy, **d_x**, must be at least as much as the referential degree **d_s**, then the whole sentence will be true.

To illustrate this assumption, if someone pushed a door till the door was fully opened, then the two eventualities, **door-pushing** and **door being open**, are eventualities with a causal relation. The homogeneous analogy will then map the degree of the resultative state of the door onto a scale indicated by predicate (i.e., open) as a degree point **d_x**. Apparently, the openness degree of the door **d_x** has to be at least as much as the contextual determined maximal degree **d_s**, and so the door would be considered as being fully opened. This assumption is used for expressions with causal relations in particular and will be termed as

⁷ In order to maintain the simplicity, bold face **event** is used to indicate both events and states under this assumption.

assumption 2 in the following discussion.

With these assumptions now clarified, attention needs to be turned to the five major constructions with potentiality-*dé*-⁸ and/or resultative-*dé* in sub-section 4.3.1 and their counterparts with resultative-*dào* in section 4.3.2.

4.2 The Mechanism

In order to simplify the discussion, it is further assumed that the scale in the **assumption 2** in section 4.1 is a closed scale of completeness (i.e., the openness of the door ranges from closed to fully opened). The maximal degree of the scale is seen to be the completion of some event, while the minimal degree is the incompleteness of the event. In this case, the scale ranges from incompleteness to full-completeness. As for what lies between these two extremes (i.e., the maximal one and the minimal one) is a set of possible degrees of completeness (i.e., slightly open, half open, widely open...etc). Potentiality reading should be considered as a set of the possible degrees between the two poles of extremes.

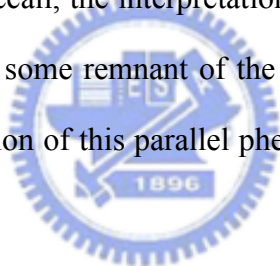
The three possible readings – completion, incompleteness and uncertainty – of resultatives can thus be put into an analogy with Kratzer's proposal on CR (consequential resultatives) and ER (eventual resultatives) in the chart below:

⁸ The semantics of potentiality-*bù*- shall be the same as that of potentiality-*dé*- with necessary yet minor adjustment. Therefore, this paper will not discuss the semantics of it in the following text.

(27) The scale of completeness:

Readings:	INCOMPLETE	UNCERTAIN	COMPLETE
Resultative types:	ER	ER	ER/CR
Interpretation:	Null point reading (e.g., infix- <i>bù</i> -)	Potentiality reading (e.g., infix- <i>dé</i> -/ <i>bù</i> -)	Resultative reading (e.g., resultative- <i>dé</i> - <i>dào</i>)

In the chart above, it can be seen that an endpoint given by ER semantics can be read in any type of resultative on the scale of completeness. On the other hand, the semantics of CR are only perceived at the very end (i.e., the result) of the activity marking its completion. Besides, the readings seem to draw a parallel analogy between the contrast shown in (3a) with (3b) in chapter 1 as well. To recall, the interpretations of expressions with V-*wán*-BNP (Bare NP) in respect of there being some remnant of the cake still on the plate, or the total consumption of the cake. Examination of this parallel phenomenon will be returned to in the next chapter.



4.3 Potentiality-*dé*-/*bù*-, Resultative-*dé* and Resultative-*dào*

It was mentioned in chapter 2 that there is a compatibility difference between *-dé*⁹ and *-dào* among various RVPs. Furthermore, it was noted that in most cases, resultative-*dé*- are almost identical with resultative-*dào*. This section will illustrate how the meaning of resultative-*dé*- can be interpreted equally to that of resultative-*dào* according to the assumptions raised in section 4.1. The idea is that, as long as we can clarify the difference between *-dé*- and *-dào*, we can explain the different behaviors among RVPs as being motivated from two types of

⁹ Since it is suggested that resultative-*dé* shares its core requirement of the semantics with potentiality-*dé*- and infix-*dé*-, the following text will simply use *-dé*- in referring to both of them.

resultatives as well. Before then, however, it is necessary to develop the hypothesis further.

4.3.1 On the semantics of *-dé-*

The study of *-dé-* has drawn much attention in recent years (Li 1990a, Huang 1988, Huang 2006, Liu 2006 and among others). The focus among these previous researches may be somewhat different from the issues that are under discussion here. It is reported that *-dé-*, whether it is playing as a resultative one or the potentiality one, can be used in sentences with different patterns such as those listed from (28) to (32). Among these sentences, the environment required by *-dé-* can be captured in regarding to **assumption 1** and **2** given at the beginning of this chapter (i.e. that various measure functions can map an event (e) onto a scale as some degree (d) in **assumption 1** in sentences (28) and (29); the required degrees from (30) to (32) will be captured by **assumption 2**.

(28) Subj. + **Adj-dé** + Adv.- α ¹⁰

Zhè-gè nǚhái měi **dé** hěn zìrán

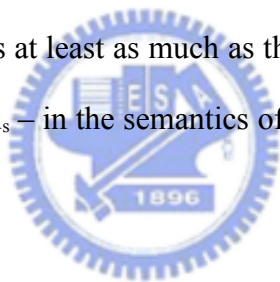
this-Cl girl beautiful **dé** very natural

'This girl is beautiful in the way of being natural.'

With an adverb modifying the adjective (i.e., *měi*, 'beautiful'), expressions with *-dé-* in this

10 This pattern is adopted from the MA thesis of Liu (2006). His original sentence is *Tā gāo dé kěyǐ mō-dào tiānhuābǎn* ('He is so tall that it is possible for him to touch the ceilings.' as epistemic reading or 'He is such tall that he touches the ceiling.' as epistemic reading.) However, as I am not intending to discuss the semantics of modality here, I adjust the sentence as having the same syntactic pattern yet without the modal *kěyǐ* ('can') to avoid unnecessary interference.

syntactic pattern can be explained with **assumption 1** adopted from Heim's (2004) semantics for gradable adjectives. By assuming **P** as some property and f_{Adv} as a measure function of the adverb applied to the property, sentence (28) can be interpreted as follows: There is a standard **degree** d_s on the scale of naturalness of being_beautiful (i.e., the property **P**) in some context embedded in the semantics of the adverb (i.e., *zìrán*, 'naturally'). Besides, there is a girl in the same context who possesses the property as being beautiful. As the adjective is modified by an adverb, a function f_{Adv} , applies to the property and maps the girl's possession of the property **P** onto the scale of naturalness of being_beautiful as d_x . When the value of d_x is at least as much as that of d_s , the sentence is deemed to be true. That is to say, the naturalness of this girl's beauty is at least as much as the general degree of natural beauty. The part – d_x is at least as much as d_s – in the semantics of the sentence provides the required environment of using *-dé*.



The other structure that must be explained under the first assumption as well is somewhat alike with that in (28). The sentence in (29) has an adverb modifying the property of the individual:

(29) Subj. + V-**dé** + Adv.- α

Wǒ pǎo **dé** hěn kuài (Huang (1988), example (1))

I run **dé** very fast/early

'I can run fast.'

What differs (29) from (28) is the adverb here is modifying the degree of the verb instead of

an adjective. To interpret sentence (29), we can say that: The subject's running is taken as some property **P** possessed by the subject. In addition, there is a verbal adverb (i.e., fast) which introduces a function f_{ADV} to the **P**. As an adverbial function is embedded with a contextually determined standard degree d_s , the function f_{ADV} maps the property **P** onto a certain scale as the degree of d_x . When the value of d_x is at least as much as that of the standard degree d_s in the context, the sentence is deemed to be true. In this case, the scale is a scale of **speed**. Therefore, the speed that the subject reaches with the running must be at least as much as the general speed which is considered as "being fast." Similarly, the part – d_x is at least as much as d_s – in the semantics of the sentence provides the required environment of using *-dé*.



As for the other three structures with *-dé* listed below, though are explained with **assumption 2** instead of **assumption 1**, the spirit does not make too much difference. For example, in a case with embedded clause such as (30):

(30) Subj.₁ + **V-dé** + Subj.₂...

Ābǐ kū **dé** shǒupà dōu shī-le (Huang (2006), example (4))

Abi cry **dé** handkerchief all wet-Asp

'Abi cried (so much that) even the handkerchief got wet.'

In (30), there is no more adverb modifying the verb. Instead, there is an embedded clause after *-dé* playing as the predicative description of the main subject. With **assumption 2**, the sentence can be read as: There is a standard **degree** d_s on the scale of **humidity** which is used

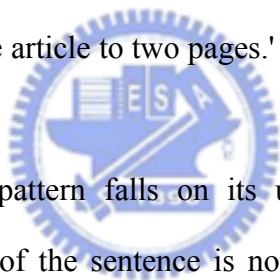
to judge whether it is true to describe some item as wet or not. As long as Abi did perform some activity (i.e., "crying" in this case) which makes the value of the **degree** d_x to be at least as much as the value of standard **degree** d_s via homogeneous analogy proposed in **assumption 2**, the sentence is deemed to be true. Again, the semantics as having d_x to be at least as much as the value of d_s licenses the use of *-dé*.

(31) Subj. + BA + Obj. + **V-dé** ...

Abǐ bǎ zhè-piān wénzhāng shān **dé** shèng liǎng-yè le (example (10a) in chapter 2)

Abi BA this-Cl article delete **dé** leave two-Cl(page) Asp.

'Abi cut down the content of the article to two pages.'



The uniqueness of this syntactic pattern falls on its use of the light verb *bǎ*('cause'). However, the semantic calculation of the sentence is not particular at all. With the same explanatory style as (30), sentence (31) should be read under **assumption 2** as well. Hence, the sentence is understood as follows: There is a closed scale of remnant_{pages}¹¹ with a

11 The scale of remnant after deletion is a particular one. It is nearly impossible to adjust sentence (31) into a one with potentiality reading. This is due to its property of two-way insurance closure. That is to say, the maximal deletion equals to the minimal remnant of the pages and the minimal deletion equals to the maximal remnant of the pages as well. Therefore, unlike the close scale we see with sentence (30), there is no maximal limitation for the degree of crying, but there is a maximal degree of humidity. Under this situation, two reasons that support the idea to consider resultative-*dé* as a derivation of potentiality-*dé* comes from the general assumption that language should be an economic system and that this two-way insurance closure property can be explained as an influence of the lexical semantics of the two verbs, namely *shān*(to delete) and *shèng*(to be of remnant). What is more, the causative marker, "BA", also takes a part in the influence of the interpretation. If we drop off one of these two verbs and the causative marker, then replace the fixed number of remnant pages with an uncertain one, the sentence will be read with potentiality interpretation. For example

- i. Zhè-piān wénzhāng shān dé chà-bù-duō le
This-Cl article delete dé differ-not-much Asp.
'It is almost done with deleting this article.' (potentiality reading)

As shown above, the sentence will be read with potentiality interpretation for we are not certain of the resultative state, such as the remnant pages after deletion, of the article.

contextually determined degree \mathbf{d}_s when it is specified that the \mathbf{d}_s in sentence (31) is 2_pages. The sentence will be true as long as Abi did perform an activity (i.e., deleting the texts) and by homogeneous analogy which maps the degree \mathbf{d}_x where the value of \mathbf{d}_x is at least as much as the value of \mathbf{d}_s . Though the specified remnant number limits few parts, we still can claim the licensing environment of *-dé* in this case is mostly the same as the others in a loose definition of the value of \mathbf{d}_x 's being at least as much as that of \mathbf{d}_s .

(32) Subj. + V-**dé**-part.¹² ...

Ābǐ chī **dé** wán zhè-kuài dàngāo

Abi eat **dé** finish this-CI cake

'Abi can eat up this piece of cake.'



Finally, the infix-*dé*-, which is considered as belonging to the morphological domain but not the syntactic domain, is in fact interpreted in the same way as sentences (30) and (31) do. By assuming that there is an upper open scale of the quantity_of_cake, sentence (32) can be interpreted as follows: The context is set up and the quantity of the piece of cake in the context is identified on the scale of quantify_of_cake as a specific degree \mathbf{d}_s by the determiner. Sentence (32) is true when Abi's cake eating is mapped onto the scale of quantity_of_cake as a degree \mathbf{d}_x by homogeneous analogy. With *-dé*-, the value of \mathbf{d}_x is at least as much as the value of \mathbf{d}_s which is a determined size of the cake in the context. That is

¹² In fact, it is still not clear how the \mathbf{d}_x in this sentence is derived. One solution is to assume that activity verbs will introduce a quantity argument (see also Lin 2007a) and so the maximal quantity of Abi's eating would be the maximal capacity of Abi's stomach. However, a more general mechanism remains vague when attempting to apply the quantity argument assumption to other structures with *-dé*-. Hence, for now, I would put this aside and leave this question open for further discussion.

to say, the amount of the cake(s) in Abi's stomach (i.e., \mathbf{d}_x) is at least as much as the amount of a certain size determined piece of cake in the context (i.e., \mathbf{d}_s).

At first sight, it seems that every *-dé-* in the above sentences is unique, since each one of them has a unique syntactic pattern. However, the above interpretations show that resultative-*dé*, the potentiality-*dé* and even the infix-*dé-* are in fact sharing an identical requirement with their semantics, which expresses the relationship of having the value of one degree \mathbf{d}_x to be at least as much as the value of another referential degree \mathbf{d}_s .

To sum up, in cases where the value of \mathbf{d}_s is found within an upper open scale of some degree adverb, the sentences can take the form of a descriptive reading as found in (28) and (29). On the other hand, when the value of \mathbf{d}_s is found within an upper bound scale, the sentence will be interpreted either as the resultative reading or the potentiality reading depending on the argument structure. The resultative reading of *-dé-* is found in sentences in which two eventualities bare a causal relation as shown in (30) and (31). In (30), Abi's crying directly causes the handkerchief to be wet. As for (31), Abi's deleting action causes the remnant number of the pages. On the contrary, if the causal relation does not exist, the sentence will express the potentiality reading as (32) does. In (32), the relation between Abi's cake eating and the piece of cake in the context should be considered as participants of one event where the piece of cake is nothing but a patient.

4.3.2 On the semantics of *-dào*

There are comparatively fewer expressions with resultative-*dào* than there are those with *-dé*. Though it should be mentioned that, in most cases, a sentence with resultative-*dé* can be paraphrased into a new one with resultative-*dào*, the limitation of the interchangeability remains unclear. In the discussion below, this restriction will be investigated.

By replacing the *-dé-* in the five major structures discussed in the last subsection with *-dào*, the acceptability varies as shown in (33) below:

(33) a. *zhè-gè nǚhái měi **dào** hěn zìrán

b. *wǒ pǎo **dào** hěn kuài

c. Ābǐ kū **dào** shǒupà dōu shī-le

Abi cry **dào** handkerchief all wet-Asp

'Abi cried (so much that) even the handkerchief got wet.'

d. Ābǐ bǎ zhè-piān wénzhāng shān **dào** shèng liǎng-yè le (example (10b) in chapter 2)

Abi BA this-Cl article delete **dào** leave two-Cl(page) Asp.

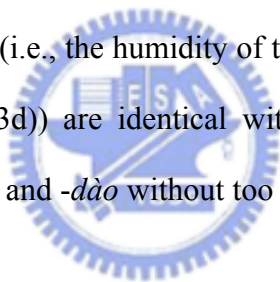
'Abi cut down the content of the article to two pages.'

e. *Ābǐ chī **dào** wán zhè-kuài dàngāo



By comparing the sentences listed in (33a) to (33e) with the sentences discussed from (28) to (32), it is easy to understand why (33e) is incompatible with *-dào*. When V-*wán* is classified as a compound word by Chao's (1979) definition which only allows infixation, *-dào* cannot be an infix and should not be compatible with a compound like V-*wán*. What is significant to the research here is the acceptabilities of sentences from (33a) to (33d).

The semantics of (33a) and (33b) both possess an open scale which makes it possible for the degree \mathbf{d}_x (i.e., the naturalness of the girl's beauty in (33a) and the speed of the subject in (35b)) to exceed the referential degree \mathbf{d}_s . In this case, the sentences are not compatible with *-dào*. On the other hand, from sentences in (33c) and (33d), we can find that when the referential degree \mathbf{d}_s is somehow restricted on a closed scale which makes it impossible for a \mathbf{d}_x to be higher than the degree \mathbf{d}_s , the expressions are licensed to use *-dào*. That is to say, as long as the maximal value of the referential degree is specified or restricted (i.e., *dōu shī-le* 'being all wet' on the scale of humidity in (33c) and/or '...2_pages' on the scale of remnant_pages in (33d)), and the \mathbf{d}_x (i.e., the humidity of the handkerchief in (33c) and/or the remnant pages after deletion in (33d)) are identical with the referential degree, then the sentence is compatible with both *-dé* and *-dào* without too much semantic variation.



This distinction can be further illustrated with the contrast between (34) and (35) below:

(34) a. Yuè'nàshān néng fēi **dé** hé lǎoyīng yīyàng kuài

Jonathan can fly **dé** as eagle identical high

"Jonathan can fly as high as an eagle."

b. Yuè'nàshān néng fēi **dé** bǐ lǎoyīng gāo

Jonathan can fly **dé** compare eagle high

"Jonathan can fly higher than an eagle."

In (34a), every possible height that an eagle can ever reach, so can Jonathan; in sentence

(34b), the sentence means that Jonathan can fly higher than any possible height that an eagle can reach. As both sentences can be acceptably formed with *-dé-*, sentence (34) supports the hypothesis that *-dé-* requires a degree *d* to be at least equal to another referential degree *d'* on the same scale (i.e., flight altitude in this case). On the other hand, the situations with *-dào* are shown as below:

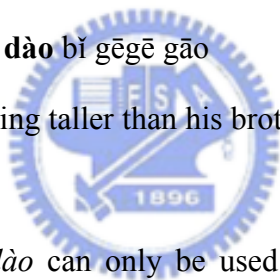
(35) a. Zhè háizǐ jiāng lái huì zhǎng **dào** hé gēgē yīyàng gāo

this child future will grow **dào** as brother identical tall

'This child will grow as tall as his brother in the future.'

b. *Zhè háizǐ jiāng lái huì zhǎng **dào** bǐ gēgē gāo

'This child will grow up as being taller than his brother.'(intended reading)



The examples in (35) show that *-dào* can only be used in an environment when the two degrees in the sentence (i.e., the child's tallness and his brother's tallness) can only be equal to each other as shown in (35a), but never in reverse.

In summary, the relation between two degrees required by *-dé-* and *-dào* can be sketched as below:

(36) a. For expressions with *-dé-*, the relation between two degrees has to be: $\mathbf{d_x \geq d_s}$.

b. For expressions with *-dào*, the relation between two degrees has to be: $\mathbf{d_x = d_s}$.

With this hypothesis at hand, we explain the accessibility difference between (11a) and (11b)

before moving on to deal with the resultative verbal particles. The two sentences are re-listed in (37) below:

(37) a. *Zǒngbiānjí yào Ābǐ bǎ zhè-piān wénzhāng shān **dé** shèng liǎng-yè

b. Zǒngbiānjí yào Ābǐ bǎ zhè-piān wénzhāng shān **dào** shèng liǎng-yè

Chief_editor want Abi BA this-CI article cut_down dao remain two-CI(page)

'The chief editor wanted Abi to cut down the article to two pages.'

The accessibility differences between (37a) and (37b) shall remain unexplained, if we solely depend on the hypothesis established above. By the hypothesis, it can be predicted that both sentences should be acceptable since the d_x in these two sentences are identical with the d_s as having 2 pages as remnants. In addition, we should further consider the lexical semantics of the main verb, *yào* ('to want'), in these sentences.

The use of the main verb, *yào* ('to want'), in (37a) has excluded any other possible degrees on the scale of remnant pages but the specified *liǎng-yè* ('2_pages') as the result. That is to say, the degree d_x in the chief editor's every possible expectation of resultative worlds after deletion is always fixed at "*liǎng-yè* ('2_pages')" and therefore conflicts with the requirement of the semantics of *-dé*. To fix this, we can either use verbs with wider tolerance such as *xīwàng* ('to wish') or *fāxiàn* ('to find') to make both expressions acceptable as shown below:

(38) a. Zǒngbiānjí xīwàng/fāxiàn Ābǐ bǎ zhè-piān wénzhāng shān **dé** shèng liǎng-yè

Chief_editor want Abi BA this-CI article cut_down dao remain two-CI(page)

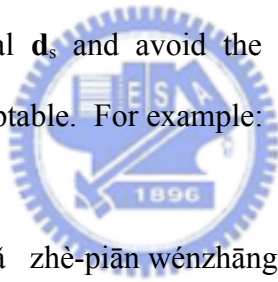
'The chief editor wanted Abi to cut down the article to two pages.'

b. Zǒngbiānjí xīwàng/fāxiàn Ābǐ bǎ zhè-piān wénzhāng shān **dào** shèng liǎng-yè

Chief_editor want Abi BA this-CI article cut_down dao remain two-CI(page)

'The chief editor wanted Abi to cut down the article to two pages.'

Or, we can use a more 'fuzzy' **d_s** such as *yī-xiǎo-duàn* ('a small paragraph') or *jǐyè* ('few pages') to replace the specified 2_pages. This will allow the degree **d_x** to have a chance to be valued as more than the referential **d_s** and avoid the conflict perceived in (37a). The expressions can also shift to be acceptable. For example:



(39) a. Zǒngbiānjí yào Ābǐ bǎ zhè-piān wénzhāng shān **dé** shèng yī-xiǎo-duàn/jǐyè

chief_editor want Abi BA this-CI article cut_down **dé** remain a-small-paragraph/few_pages.

'The chief editor wanted Abi to cut down the article to a small paragraph/few pages'

b. Zǒngbiānjí yào Ābǐ bǎ zhè-piān wénzhāng shān **dào** shèng yī-xiǎo-duàn/jǐyè

chief_editor want Abi BA this-CI article cut_down **dào** remain a-small-paragraph/few_pages

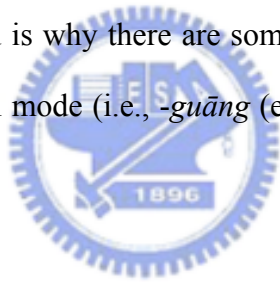
'The chief editor wanted Abi to cut down the article to a small paragraph/few pages.'

So far, by taking the expressions in (37) as a test, we can find that the hypothesis appears to be acceptable.

4.4 Summary

In this chapter, the core semantics of *-dé-* and *-dào* have been investigated. In summary, they both express a relation between a certain degree \mathbf{d}_x and a referential degree \mathbf{d}_s . As the semantics of *-dé-* requires the relation to be $\mathbf{d}_x \geq \mathbf{d}_s$, the semantics of *-dào* only needs the relationship to be an equivalent one, which is $\mathbf{d}_x = \mathbf{d}_s$.

The remaining issue to be explained is why there are some RVPs that are incompatible with potentiality-*dé-* to form the potential mode (i.e., *-guāng* ('empty'), *-kōng* ('vacuous'), and *-hǎo* ('done')).



Chapter 5

TWO TYPES OF RESULTATIVE VERBAL PARTICLES

It was summarized in chapter 1 that there are two major distinctions that class the RVPs into different types. The first distinction is the resultative interpretation shift. This is shown with the examples that were given in (2) and (3). The second one is the potential mode difference which is realized as the restriction of infix-*dé*- insertion.

Furthermore, a hypothesis on the core semantics of *-dé-* and *-dào* was established in chapter 4. According to this hypothesis, the essential meaning of *-dé-* is to have the value of a degree \mathbf{d}_x to take at least as much value as the referential degree \mathbf{d}_s . With the assumption that the two types of RVPs in Mandarin represents Kratzer's (2004) two types of resultatives, the hypothesis will be assessed in order to ascertain whether it supports this assumption or not in this chapter.

In section 5.1, Kratzer's proposal will be reviewed and followed by an establishment of assumptions to testify its compatibility with the raised hypothesis. Then, section 5.2 will demonstrate how the two types of resultatives behave in English and how the proposed hypothesis relates to Mandarin RVPs under Kratzer's proposal with potentiality. The next section, 5.3, will achieve the main goal of this paper by proposing an analysis to explain the problem of resultative state interpretation differences between the two types of RVPs. Then, in order to further support this analysis, some apparent counter-examples to the proposal will

be offered in section 5.4. It will be shown in this section, however, that these counter-examples are in fact covered within the proposed analysis. Taking the analysis a step further, other evidence from some Mandarin dialects to support the distinction of two types of RVPs in Mandarin will be highlighted in section 5.5.

5.1 Potentiality in the Causal Relation

The two types of resultative semantics were illustrated in chapter 3 with sentences (22) and (23), which are adopted from examples (48) and (51) in Kratzer (2004). In order to make the intuition in Mandarin as clear as that in English, the sentences have been slightly adjusted to capture the two types of resultatives (i.e., the Eventual Resultatives as ER and the Consequential Resultatives as CR) as below:

(40) Eventual Resultatives (ER):

- a. The policeman pushed the door open.
- b. The policeman pushed open the door.
- c. The policeman pushed open and removed the door.

As is illustrated in Kratzer (2004), the sentences in (40) show that the object of the pushing (i.e., the door) can be separated from its causing activity (i.e., the push) as shown in (42b); or the activity verb along with the state verb can still be considered as a phrasal verb (or an event) as we can see in (40c) which parallels "to push open" with "to remove". On the other

hand, consequential resultatives (CR) do not have these variations.

(41) Consequential Resultatives (CR):

- a. The policeman painted the door yellow.
- b. ? The policeman painted yellow the door.
- c. ? The policeman painted yellow and removed the door.

In (41b), it can be seen that a consequential resultative does not allow the separation between the parts of it (i.e., the painting of the door and the state of the door being yellow cannot be separated from each other). Moreover, the minimal part of the event indicated by it must be overtly object-contained. That is to say, the "door" in (41c) cannot be elided from the causing VP. This implies that the "painted" here cannot be a full verb without the object and the result (i.e, to be yellow) in the right position.

In addition to the differences illustrated above, there is another distinction which tells the ER and CR apart. In short, the potentiality of the result realization are also different between the ER and CR. This is highlighted in the conditional clauses as below:

- (42) a. If the policeman pushed harder, it is possible for the door to be open eventually.
- b. Though the policeman pushed so hard, it is possible for the door to be not open eventually.

In (42), we find that the expressions of ER can have potential mode with their result part

realized as conditional clauses. Regardless of whether it is a positive potentiality or a negative one, the realization of the cause (i.e., the policeman's pushing) cannot guarantee the result (i.e., the opening of the door).

On the other hand, the expressions of CR cannot have potential mode as shown below:

(43) a. ? If the policeman painted harder, it is possible for the door to be yellow at the end.

b. ? Though the policeman painted so hard, it is possible for the door to be not yellow at the end.

The contexts that can make sentences in (43) true propositions are unique and bizarre one way or another (e.g, a particular philosophical definition of the door being yellow, a color-blind policeman and/or a special paint that changes its color with the degree of the painter's effort ... etc.). In fact, the oddness of the sentences in (43) comes from the big question that most native speakers may want to ask when hearing utterances like (43): "Does the door being yellow have anything to do with the painter's efforts?" Apparently, the answer would be, "No". Once the painter does the painting over the door, the door is yellow. It is very difficult to set up a scenario when the painter used the yellow paint to paint the door and the door was not guaranteed to be yellow regardless of whether the painter did it hard or not. The cause and the result for the CR are inseparable as if they belonged to the same side of a coin. In other words, besides the syntactic restriction differences shown in (40) and (41) that support Kratzer's proposal of two types of resultatives, we also find that there is a distinction in the potentiality between these two types of resultatives.

It is found in English that potential mode is allowed to link the relation between a cause and its result as long as it is a result of ER, and that the potential mode cannot be acceptably realized with results of CR. How this potential mode restriction between ER and CR works in Mandarin will be examined in the next section.

5.2 Potential Mode in Mandarin VR Construction

In section 5.1, we have seen the potentiality restriction diversity between expressions of ER and CR in English. It was mentioned in chapter 1 that the infixes *-dé-*/*-bú-* in Mandarin are used to express potential mode of the VR constructions. As we have suggested that the core semantics of *-dé-* requires the value of one degree \mathbf{d}_x to be at least as much as a referential degree \mathbf{d}_s , the semantics of *-bú-* is obviously the other way around (i.e., the value of \mathbf{d}_x to be smaller than the referential \mathbf{d}_s). Combining this hypothesis with the understanding of potential mode that was developed in section 5.1, we can investigate Mandarin VR constructions from a new perspective.

In section 5.1, it was shown that only results of ER can have potential mode. Therefore, the VR constructions with potential mode apparently consist of a causing event and a resulting event without guaranteed causal relation. That is to say, resultative expressions that can be inserted with infix *-dé-*/*-bú-* are eventual resultatives (ER). What is more, we can even assume that every expression with *-dé-* is an event of ER. For example:

(44) a. Tā wèi **dé** bǎo zhè sān-zhī xiǎo-zhū

he feed **dé** full this three-Cl little-pig.

'He can make these three little pigs replete by feeding them.'

b. Zhè wèizǐ zuò **bú** xià liǎng-gè rén

this seat sit **bú** down two-Cl people

'This seat cannot be seated by two people.'

Therefore, according to the combined version of the hypothesis, sentence (44a) will be interpreted as follows: On the scale of being_full_with_eating, the degree d_x (i.e., the degree that he feeds the three little pigs to) is at least as much as the degree d_s (i.e., the degree that is considered as being full in some context); and sentence (44b) will be read as: On the scale of seat_capacity, the degree d_x (i.e., the space of the seat with the people's size who are trying to sit in some context) is lower than the degree d_s (i.e., the result of comparing the numbers of people who are trying to sit in the seat in the same context).

Besides, the expressions in (44) can be found as having identical linguistic intuition with the sentences in (42). It is possible for the man to feed the pigs, yet the three little pigs or the hearers do not feel that they are having enough food. Similarly, it is also possible for the seat to be seated with more than one person in some contexts. To put it another way, there is no guaranteed causal relation between two events when we put the expressions in (44) in some real world or situation. In summary, we can say that VR constructions which allow potential mode consist of the relation between a causing event and a resulting event, which should be

seen as the eventual resultative of the causing event.

On the other hand, there are VR constructions which do not have potential mode, such as:

(45) a. zhè-zhěng-zhāng zhǐ dōu fā (*dè) huáng le

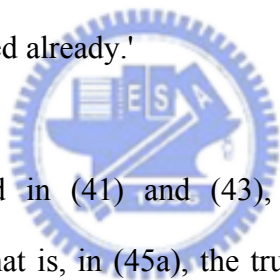
this-whole-piece paper all turn (*dè) yellow Asp.

'The whole piece of paper is turning yellow.'

b. zhè-jīān fángzǐ yǐjīng fān (*dè) xīn guò le

this-CI house already turn_over (*dè) new GUO Asp.

'This house has been renovated already.'



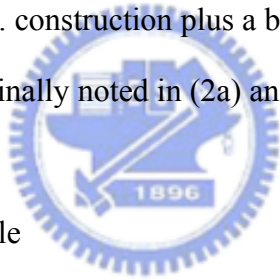
Following the idea just suggested in (41) and (43), the results in (45) must be of consequential resultatives (CR). That is, in (45a), the truth condition that makes it true for the color of the paper to change its color will be exactly the same as the truth condition in which the piece of paper is identified as a yellow one; in (45b), the moment when the renovation starts, the house is considered as renovated. Even though it may take few days for the construction, the relation between the causing part and the resulting part of the renovation event is solid and inseparable. In these cases, it is better to consider them as one event with its own cause and result which fits the definition of CR.

So far, we have seen that Mandarin does have two types of resultatives in semantics in the VR constructions. As V-part. constructions are a sub-field of the VR constructions, it is comprehensible to assume that the ER/CR distinctions can be perceived among V-part.

constructions. With this acknowledgment, an analysis is thus proposed to solve the main objective of this paper – the resultative interpretation shift with some V-part.+BNP constructions and the infix tolerance variations among RVPs.

5.3 The Analysis

Given the environment which licenses the use of *-dé-* and *-dào* in the previous chapter, we are now able to answer the two main issues in this paper fully. The first issue is the interpretation shift with some V-part. construction plus a bare noun phrase as the object of the verb. This is illustrated in (46) (originally noted in (2a) and (3a) in chapter 1):



(46) a. Ābǐ **chī-wán** nà-kuài dāngāo le

Abi eat-finish that-CI cake Asp.

'Abi ate up the piece of cake'

(Implication: There is no more cake left.)

b. Ābǐ **chī-wán** dāngāo le

Abi eat-finish cake Asp.

'Abi finished eating cakes.'

(Implication: It's **unknown** if there is any cake left in the context.)

As illustrated above, the interpretation of the RVP *-wán* shifts from the the one in (46a) as expressing the total consumption of the piece of cake to the one in (46b) where *-wán* is more

likely used to indicate the termination of the activity. Whether there is cake left on the plate is unclear in this case.

The explanation of this resultative interpretation shift is rather simple. With the hypothesis of *-dé-*, we can use *-dé-* insertion as a test to figure out what is actually occurring with these two sentences:

(47) a. Ābǐ chī-**dé**-wán nà-kuài dàngāo

Abi eat-**dé**-finish that-CI cake.

'It is possible for Abi to eat up the piece of cake'

b. ?? Ābǐ chī-**dé**-wán dàngāo



When sentences in (47) are the adjusted version of the sentences in (46) with *-dé-* inserted, the distinction is clear. It has been acknowledged that the *V-wán* construction, which takes the RVP of allowing potential mode, can acceptably occur with *-dé-* as shown in (47a). The two degrees required by *-dé-* (i.e., **d_x** and **d_s**) can be provided in the expression. Precisely speaking, when the degree of Abi's stomach capacity for a piece of cake (i.e., **d_x**) is at least as much as the size of the specific piece of cake determined by the quantized NP (i.e., The size of **the** piece of cake is the **d_s**), the sentence saturates the requirement of using *-dé-*.

On the other hand, the inaccessibility of (47b) to be with *-dé-* comes from the uncertainty of the value of **d_s**. From the aspect of pragmatics, we cannot be sure that Abi's stomach capacity for a piece of cake by eating can be always as much as an uncertain size of an unspecified

piece of cake. The piece of the cake can be of many sizes. Therefore, when the size of the cake (i.e., d_s) surpasses Abi's stomach capacity for the piece of cake (i.e., d_x), the reading is incompatible with *-dé-*. Besides, the sentence will be interpreted as nothing but the termination of the action with cake left on the plate after Abi has finished his eating. Taking it from the other side, if the size of the unspecified piece of cake happens to be the same as or less than Abi's stomach capacity, (47b) would be compatible with *-dé-* and thus (46b) will be read as there being no cake left on the plate. This can be even further supported if we can adopt some strategies to clarify the size of the cake such as giving a context with fix-sized cakes or using grammatical manner to specify the piece of the cake as in the context as below:



(48) Abi's Father: Ābǐ **chī dé wán** zhèxiē dōngxī ma?

Abi eat **dé** finish these things Comp.

'Can Abi eat up all of these?'

Abi's mother: Zhìshǎo tā **chī dé wán** dàngāo ba

at _least he eat **dé** finish cake Comp.

'He can eat up the cake at least.'

In (48), with the given context, the utterance spoken by Abi's mother uses V-*wán* + BNP (i.e., the underlined "cake"), yet it still produces the reading of total consumption, which makes it compatible with *-dé-*. In addition to this, we also can adopt a grammatical method such as topicalization as below:

(49) dàngāo tā **chī dé wán**, zhèngcān jiù búyīdìng le

cake he eat **dé** finish, prandial_meal would hard_to_say Asp.

'Cakes! He always can eat them up. But it's hard to say for a regular meal.'

With topicalization, the specificity of the bare NP (i.e., underlined *dàngāo*) is raised and thus is considered as some unique one in the context with a definite size as \mathbf{d}_s . As the \mathbf{d}_s may be the same or smaller than the eating capacity of the subject here, the sentence is licensed to use *-dé-*.

To give a short summarized answer to the question, the interpretation shift can be explained as follows: In most cases, V-part. constructions with RVPs like *-wán* have two degree points. One is the \mathbf{d}_x , and the other is the referential \mathbf{d}_s . The reason that causes the interpretation shifts when the V-part. construction occurs with *-wán* and a bare NP is because the bare NP would make the degree of \mathbf{d}_s an uncertain one. Yet, the uncertainty can be recovered via contextual or grammatical methods to make a V-part. + Bare NP construction to have the same interpretation as those with a quantized NP object.

The second issue to be examined is the compatibility of potential mode. We have seen in many examples above, in which some V-part. constructions have potential mode when others do not. There are two major distinctive features between these two types of RVPs.

First of all, potentiality-*dé-* is an infix. It was shown in chapter 2 that some V-part.

constructions (i.e., *V-guāng*) should not be considered as compounds, and these non-compounding V-part. constructions would certainly be incompatible with the potentiality-*dé-*insertion. When this reason is rather descriptive than explanatory, the other motivation is solid.

By following the summary of section 5.2, we can find that events which are incompatible with potential mode should be categorized as CR. In this case, the event structure of V-part. constructions without potential mode would be different from that of V-part. constructions with potential mode. In other words, V-part. constructions that do not allow *-dé-/-bú-*insertion have their event structures as **one independent event** consisting of a causing phase and a resulting phase. This kind of event structure is similar to what was illustrated with 'to paint the door yellow' in English with (41a) and/or the Mandarin *fāhuáng* ('to turn yellow') in (45a).

On the other hand, V-part. constructions that have potential mode with *-dé-/-bú-* insertion consist of **two independent events** with a causal relation. These V-part. constructions are similar to what we have seen with VR constructions like 'to push the door open' in English (40a) and/or *wèibǎo* ('to feed someone till his repletion') in Mandarin (44a). As a result, it is comprehensible for these two kinds of resultatives to have different compatibility with potential mode in the surface structure, since these two kinds of resultative semantics have different event structures within their underline forms.

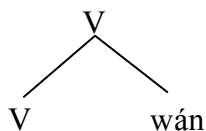
Finally, to summarize this section, a proposal has been offered which combines the

hypothesis of the semantics of *-dé-* and the resultative categorization suggested by Kratzer (2004) to explain the two questions involving Mandarin V-part. constructions. First, the interpretation shift phenomenon has been explained with the inference of the bare NP that omits the standard degree d_s for the d_x to reach. The second phenomenon has been explained via two considerations – the rule applying restriction (i.e., A morphological rule cannot be applied in the syntactic domain and vice versa.) and the event structure difference between V-part. constructions. Consequentially, this proposal not only explained the questions raised in this paper, but also suggests that Mandarin, like German and English, has two types of resultatives. One is the eventual resultatives (ER) which merely represent the eventual result of some activity. The other is the consequential resultatives (CR) that indicate the resulting phase of one activity in consequence. Since these two types of RVPs are of different event structure, it is understandable for them to have different syntactic behaviors. Their syntactic structure and semantics will be revealed in the next section.

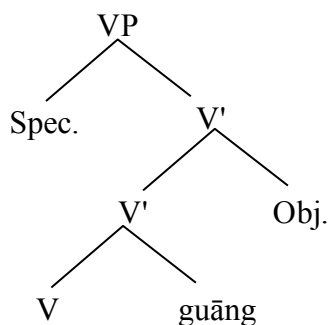
5.4 The Structure and Semantics of ER and CR

In chapter 3, it was suggested that V-part. constructions that allow potential mode are compounds, but that those V-part. constructions that disallow potential mode are syntactic projections. As the former uses RVPs with ER semantics and the later with CR semantics, we can use *V-wán* and *V-guāng* to illustrate their structure:

(50) a. Morphology Domain



b. Syntactic Domain



In the structures illustrated above, we can find that the semantic composition for V-part. constructions of ER are done under the morphological domain as in (50a). On the contrary, the semantics of V-part. constructions of CR are composed in the syntactic domain. According to Kratzer's theory, the real resultatives (i.e., the CR in this paper) with an adjectival element indicating the resultative state possesses a [+telic] feature with the adjective in German. Similarly, we can assume the same idea and claim that the feature in Mandarin is realized covertly as an affix attached to the RVPs of CR semantics. In this case, the RVP *-guāng* takes a [+telic] feature. With this setting, the semantics of CR semantics proposed by Kratzer in an expression like "to drink the teapot empty" would be as below:

(51) $\lambda e \exists s$ [empty (the teapot)(s) & drink(e) & CAUSE(s)(e)]

Similarly, a V-part. construction in Mandarin with RVPs of CR type, such as *chī-guāng* would have the same interpretation as below:

(52) $\llbracket \textit{chī-guāng}$ ('eat-empty') $\rrbracket = \lambda x \lambda e \exists s$ [empty(x)(s) \rightarrow eating(e) & CAUSE (s)(e)]

With the semantics illustrated in (52), we would be able to deal with the object *x* (i.e., a piece of cake), which is taken as the argument of a V-part. construction with RVPs of CR type. To put it shortly, the semantics would be read as follows: For an object *x* in the state of being empty, and a eating activity event *e*, where *x* is the theme of the event, there exists a resultative state *s* caused by the activity event *e* where the object *x* would end up as being in the resultative state *s* (i.e., being empty in this case).

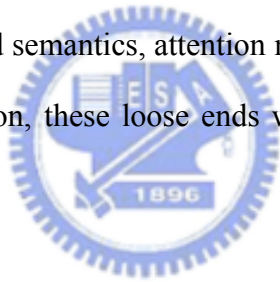
As for the semantics of a V-part. construction with RVPs of the ER type, since there is no necessary condition between the state *s* and the event *e*, its semantics can be illustrated with *chī-wán* below:

(53) $\llbracket \textit{chī-wán}$ ('eat-finish') $\rrbracket = \lambda x \lambda e \exists s$ [finish(s) & eating(x)(e) & CAUSE (s)(e)]

The formula in (53) with the semantics of V-part. constructions with a RVP of CR type, *chī-wán*, is read as: for an object *x*, an eating event *e*, where *x* is the theme of the event, there

exists a resultative state *s* such that the state is an resultative state and the *x* is the argument in the eating event *e*. Plus, there is a causal relation between the event and the state in the way that the *x*-eating event will be resulted to the state *s*. To illustrate this formula with the cake example: when the object *x* is a definite NP, then the expression will be read as "total consumption of the piece of cake in the context" for the eating event is performed over a quantized volume of the cake. On the other hand, if the object *x* is a bare NP, the quantity of the *x* will thus undefined and the expression will simply be read as "the ceasing of the cake eating."

Within the frame of the structure and semantics, attention needs to be drawn to some apparent counter-example. In the next section, these loose ends will be tightened up and discussed further in relation to the proposal.



5.5 Apparent Counter-examples

In chapter 2, it was observed that *V-guāng* does not allow infix-*dé* insertion, and that *V-wán* construction is incompatible with resultative-*dào*. However, the following expression, which seems to violate this prediction, is perfectly accepted by most native Mandarin speakers.

(54) Zhè-bēi shuǐ Ābǐ hē **dào wán** zhī yào liǎng fēnzhōng

this-CI water Abi drink **dào** finish only takes two minute

'Concerning the volume of this cup of water, it only takes Abi two minutes to drink it

up.'

Despite the judgment of (54) being clear and solid, it is not taken as a counter-example to the generalization given in chapter 2, but simply as an exception. The reason to reject (54) as a counter-example is mainly because of its uniqueness. To put it clearer, this apparent counter-example must take a topicalized definite NP (i.e., *zhè-bēi shuǐ*, 'this cup of water') and it can only be accepted to be with *-wán* but never the other RVPs with potential mode. For example:

(55) a ??? *Shuǐ, Ābǐ hē dào wán zhī yào liǎng fènzhōng*

water, Abi drink dào finish only needs two minute

'As for water, it only takes two minutes for Abi to drink it up.'

b. **Ābǐ hē dào zhè-bēi shuǐ wán zhī yào liǎng fènzhōng*

c. **Ābǐ hē dào shuǐ wán zhī yào liǎng fèn zhōng*

d. **Zhè-tiáo diànlǎn Ābǐ jiǎn dào diào zhī yào liǎng fènzhōng*

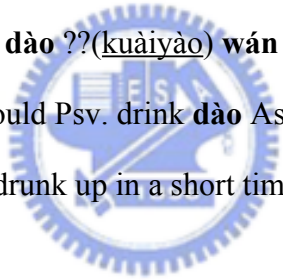
'It only would take two minutes for Abi to cut off the cable.' (intended reading)

In the sentences given in (55), we can find that when the topicalized NP is not a definite one, the sentence would be extremely odd (i.e., 55a); if it is a definite NP, but it is not topicalized, the sentence would crash (i.e., 55b); if it is a combination of an indefinite NP without topicalization, the sentence crashes (i.e., 55c); if we finally use a definite NP with topicalization, but the RVP is not *-wán* but another RVP which has potential mode as well,

the sentence still crashes (i.e., 55d). If it really is a counter-example, it is expected that there would be a lot of expressions with the same structure behaving in similar ways. While there is not many expressions with similar structure acting in this way, the counter-example in (54) should be taken as a unique exception only. As a result, since the hypothesis of the semantics of *-dé-* and *-dào-* in chapter 4 heavily depends on the reliability of the observation from chapter 2, it will not be affected by sentence (54) either.

Another apparent counter-example comes from a similar construction such as (56):

- (56) Zhè-píng píjiǔ yīxiǎzǐ jiù bèi hē **dào** ??(kuàiyào) **wán** le
 this-Cl beer in_a_short_time would Psv. drink **dào** Asp.
 'This bottle of beer was almost drunk up in a short time.'



The key for this exception is the modification (i.e., *kuàiyào*, 'almost') of the RVP. If the modification is removed, then the sentence would be more like a mixture of Taiwanese and Mandarin instead of Mandarin alone. Besides, this is not a common construction among RVPs of ER. If we use another RVP of the same type in the same sentence pattern, then even with a modification, the expression is unacceptable. For example:

- (57) *Zhè-tiáo diànlǎn yīxiǎzǐ jiù bèi jiǎn **dào** kuàiyào **diào** le
 this-Cl cable in_a_short_time would Psv. **dào** almost off Asp.
 'This cable was almost cut off in a short time.'(intended reading)

In (57), indicated by underline, we can combine a modification (i.e., *kuàiyào*, 'almost') with the RVP, *diào*, in order to create a context like that of (56). As a result, the sentence turns out to be an unacceptable one. Since (56) is a merely one of a kind, it is deemed to be an exception, but not a solid counter-example.

Finally, one last possible counter-example comes from the other sides of the RVPs. Some may claim that (58) is a perfectly acceptable expression to them, while others may have different ideas.

(58) ? Zhè yī-dà-bēi píjiǔ sānliǎngxià jiù bèi Ābǐ hē dé kuàiyào **guāng** le

this one-big-Cl beer easily would Psv. Abi drink **dé** almost empty Asp.

'This grand glass of beer was almost drunk up by Abi without too much effort.'

Though the expression is accepted by some speakers¹³, it is unlikely that it can be taken as a counter-example. Two reasons are given to support this opinion. First, this is a particular one which is judged as acceptable by a small group of native speakers. Yet, in a comparative test, informants of the same group also agree on the judgment of the sentences listed below:

(59) a. *Zhè-zhāng kǎojiàn yīxiàzǐ jiù bèi Ābǐ xiě **dé** kuàiyào **hǎo** le

a'. Zhè-zhāng kǎojiàn yīxiàzǐ jiù bèi Ābǐ xiě **dào** kuàiyào **hǎo** le

this-Cl test_sheet in_a_short_time would Psv. Abi write **dào** almost done Asp.

'This test sheet was almost done by Abi in a short time.'

13 There were three Mandarin native speakers who were asked about the sentence claiming this sentence is acceptable. Two of them report that the judgment is clear and sharp.

b. ??? Yínháng-lǐ de qián yīxiàzǐ jiù bèi Ābǐ huā **dé jǐhū kōng** le

bank-Loc. RC money in_a_short_time would Psv. Abi spend **dé** nerely empty Asp.

'The money in the bank was nearly spent by Abi in a short time.'(intended reading)

b'. Yínháng-lǐ de qián yīxiàzǐ jiù bèi Ābǐ huā **dào jǐhū kōng** le

bank-Loc. RC money in_a_short_time would Psv. Abi spend **dào** nerely empty Asp.

'The money in the bank was nearly spent by Abi in a short time.'

Though the sentences above contain a construction similar to that of (58) (i.e., a topicalized definite NP, a degree modifier before the RVP and the use of *-dé-*), it is reported that in a comparative test, (59a') and (59b') are more natural utterances than their counterparts in (59a) and (59b). Since the structure of (58) is identical with that of (59a) and (59b), it is suspected that there might be some interference with these native speakers' judgment on (58). After all, they all agree that it is less natural for sentences of this structure with *-dé-* in comparison with those with *-dào-*.

Secondly, the accessibility of sentence (58) is also likely to be a result of the bilingual backgrounds of the informants. This will be drawn upon in more detail at the end of the next section.

5.5 Evidences in Other Mandarin dialects

If we only focus on only one dialect of Mandarin, it might be the case that there would be two

different types of resultative semantics are coded into one surface form as V-part. construction. In fact, the two types of resultative semantics are widely seen in some dialects spoken in the southwest of mainland China. For example, according to the report given by Feng (2005), a dialect used by Shuǐ people has two types of surface forms which can be found corresponding to the two types of resultatives here.

(60) kuk⁷ ha:i¹ la:k⁸ti³ **sit⁷** **tiu⁵** liu⁴ (衣服讓孩子撕破了) (Shuǐ dialect)

cloth Psv. child tear broken Asp.

'The cloth is torn-out. by the child.'

As Feng reports, when the construction above with a V-R order is used to express a predicative result of some action, it is identical with the semantics of ER in Mandarin. Take, for example, the sentence illustrated in (60), which means that the child tore the cloth and eventually, the cloth is torn-out. In addition to this sequel V-R construction, the Shuǐ dialect has another construction in describing resultatives, as shown below:

(61) ju² ta³-ŋam⁵ qo³ ʔa:u¹ **ʔit⁸** man¹ tai¹ lje² ((老虎說) 我一口就要咬他死咧) (Shuǐ dialect)

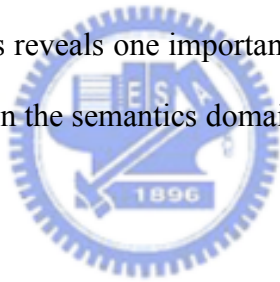
I one-Cl will want bite he die Comp.

'(...the tiger says,) I will make him dead with one bite.'

In (61), with the object, which is underlined, is inserted between the first verb (i.e., **ʔit⁸**, 'to bite') and the second verb (i.e., **tai¹**, 'to die'), the sentence means that the tiger wants to kill the

man in the way of biting him. In this case, the semantics are more like the consequential resultative (CR) which would guarantee the man's death to be caused by the tiger's bite and the tiger's bite will certainly cause the man's death.

One more thing to note about these two sentences in the Shuǐ dialect are the lexicons they choose. In Mandarin, both *sīpò* ('to tear-out') and *yǎosǐ* ('to bite to death') are compatible with the potentiality infix-*dé*-. That is to say, both *sīpò* ('to tear-out') and *yǎosǐ* ('to bite to death') in Mandarin are expressing the semantics of ER. This is different from the cases we have seen in the Shuǐ dialect in that one construction belongs to ER and the other one is of the type of CR. This diversity across dialects reveals one important thing: Though Mandarin dialects have these two types of resultatives in the semantics domain, different dialects select different lexicons to code the two types.



In fact, the lexical selection diversity can be found via a comparison between two major dialects spoken in Taiwan as well. As Mandarin and Taiwanese are two major dialects used in Taiwan, V-part. constructions with *-guāng*('empty'), or *-hǎo*('well done') are incompatible with the potentiality infix-*dé* in Mandarin. However, their counterparts *-liào*('empty') and *-hò* ('well done') in Taiwanese are compatible with the potentiality infix-*ē*. For example:

(62) a. *Adi tsiah e liau tsit-te kenngko* (阿弟吃得了這塊蛋糕) (Taiwanese)

Adi eat e empty this-Cl cake

'He can eat up this piece of cake.'

b. sang kang ingkai tsoh e ho (三天應該做得好(這件事))

three day should do e done

'Three days would be enough (to have this matter done).'

On the other hand, Taiwanese has another RVP, *-suah* ('to be finished'), which behaves exactly the way *-guāng* ('empty'), or *-hǎo* ('well done') in Mandarin behave. For instance:

(63) a. * Adi tsiah e suah tsit-te kenngko (阿弟食會束這塊雞蛋糕)

b. *Tsit-po tenngia jia teng, gua khuann **bue** suah (這部電影這麼長, 我看未束)

c. Tsi-po tenngia gua khuann **ka** suah tio be tsao a. (這部電影我看到束就要走了)

this-Cl movie I watch till end will want leave COMP.

'I will leave by the time when I watch this movie to its end.'

As indicated in (63), the Taiwanese RVP *-suah* is incompatible with a potentiality infix-*e/-bue* (i.e., (63a) and (63b)), but is acceptable with the Taiwanese resultative-*ka* ('till') (i.e., (63c)). In this sense, the use of resultative-*ka* is more like the resultative-*dào* in Mandarin.

By now, it would be comprehensible to find some informants that would report sentences in (54) and (58) as acceptable while others do not. It is inevitable for language users with bilingual backgrounds to mix up their grammatical knowledge, especially when the two grammatical systems are dialects of one language and are very similar with each other in many aspects.

5.6 Summary

In this chapter, an explanation has been proposed to account for the main issues of concern in this paper. Namely, the phenomenon of interpretation shift for some RVPs in V-part construction with a bare NP as the object is explained via the combined version of the hypothesis of potentiality. Now we know that the shift is caused by the lack of referential degree d_s in the expression itself. Therefore, the referential degree can be determined by the context. When the d_s is larger than the cake eater's capacity, for example, we get the interpretation that there is cake left on the plate after the eating action. On the other hand, when the d_s is smaller or equal to the cake eater's capacity, we get the interpretation that there is no cake left on the plate. In addition to this, the problems of infix insertion diversity between two types of V-part constructions are explained as having different event structures within their underline forms. With this, it is suggested that there are two types of resultatives in Mandarin, eventual resultatives and consequential resultatives, as there are the same resultative types in German and English. In order to confirm this conclusion, some apparent counter-examples were also discussed to demonstrate how the two types of resultative semantics are perceived across the dialects of Mandarin with lexical selection variations.

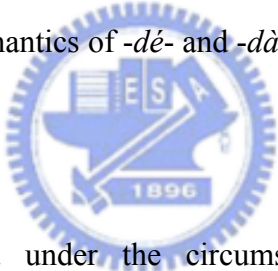
Chapter 6

FURTHER STUDIES AND CONCLUSION

6.1 Further Studies

The proposal of this paper has been based on the combination of Kratzer's theory of resultatives and the hypothesis of the semantics of *-dé-* and *-dào*. However, it cannot be denied that the hypothesis is built up from a short discussion in one chapter. There are still a number of crucial and interesting issues to discuss along the line of this research. To begin with, the core requirement of the semantics of *-dé-* and *-dào* can be shown as below:

(64)

- 
- a. **resultative-dé-** is licensed under the circumstance in which there are two eventualities linked with a causal relation where the predicate of the result plays as a measure function that maps the degree of the result onto on scale as \mathbf{d}_x by a homogeneous analogy. When the value of the \mathbf{d}_x is at least as much as the referential degree \mathbf{d}_s (i.e., $\mathbf{d}_x \geq \mathbf{d}_s$), the use of **resultative-dé-** is licensed.
 - b. **infix-dé-** is licensed under the condition where there are two eventualities in which one is an activity and the other is a state which is mapped onto the scale indicated by the meaning of the lexicon inserted as \mathbf{d}_x in the way that the value of the \mathbf{d}_x is at least as much as the referential degree \mathbf{d}_s (i.e., $\mathbf{d}_x \geq \mathbf{d}_s$), the use of **infix-dé-** is licensed.
 - c. **resultative-dào** is licensed under the circumstance in which there are two

eventualities linked with a causal relation where the predicate of the result plays as a measure function that maps the degree of the result onto on scale as \mathbf{d}_x by a homogeneous analogy. When the value of the \mathbf{d}_x is exactly as much as the referential degree \mathbf{d}_s (i.e., $\mathbf{d}_x = \mathbf{d}_s$), the use of **resultative-*dào***- is licensed.

Since the semantics for *-dé-* requires the value of \mathbf{d}_x to be at least as much as that of \mathbf{d}_s on the scale as indicated in (64a) and (64c) as highlighted with underline, and the licensing condition of *-dào-* merely needs the values of the two degrees to be equal to each other, it is understandable to expect every sentence that is compatible with *-dào* to be compatible with *-dé-* as well. However, the situation is not as simple as we would expect. For example:

(65) a. Tā chī **dào** disān-kuài dàngāo jiù bǎo le

he eat **dào** third-Cl cake would full Asp.

'He would be replete by the time he eats the third piece of cake.'

b. *Tā chī **dé** disān-kuài dàngāo jiù bǎo le

Assuming the cumulated size of the whole three pieces of cake would be the \mathbf{d}_s and the required capacity of cake for the eater to be full would be the \mathbf{d}_x . Then, when the required amount of cake for the eater to be full (\mathbf{d}_x) is equivalent to the cumulated size of the whole three pieces of cake (i.e., $\mathbf{d}_x = \mathbf{d}_s$), the sentence can be licensed to use *dào* as in (65a). However, when it is expected that the sentence with *dé* in (65b) should be acceptable as well under the same environment, it is not. Therefore, there must be some more subtle constraints unrevealed yet between the semantics of *-dé-* and *-dào*. On the other hand, since the

proposed hypothesis has generally been applicable to explain the differences between two types of RVPs and the subtle difference semantics of *-dé-* and *-dào* just pointed out, this anomaly is by no means causing any damage to the analysis of this study. Yet, this issue will be left for further study.

Secondly, the study of this paper has been restricted to the V-part. construction with a very rigid definition of particles. Though it was mentioned that V-part. constructions are a sub-type of the VR constructions, the issue was not discussed in great detail about the loosely defined VR constructions, which also can be grouped into two types by allowing or disallowing the infix *-dé-* and *-bú* insertion. That is, some VR constructions allow the infix insertion, but others do not. This seems to be a parallel phenomenon with the V-part. constructions. The reason why the issue should be left for further study comes from the richness of the lexicons within this construction. As mentioned by Chao (1979), almost all verbs can be put together to form a VR construction. If the issue was included in this paper, the point to showing how Mandarin has two types of resultatives in semantics, which is the main goal of this paper, would be lost.

Due to the indirect relevancy of these issues, this paper skips them and leave them for the sequel studies of this paper. It does not mean that they are not important, but that there is no direct effect which would influence the analysis of this paper.

6.2 Conclusion

In this paper, with the observation of resultative interpretation shift with some RVPs in the V-part. constructions plus a bare NP as its object and that of the diversity between two types of RVPs in their accessibility with infix *-dé-* and *-bú* insertion, it has been suggested that there might be two types of resultative semantics in Mandarin as there are in German and English. Then, by reviewing the former studies and providing some expressions to enrich the data, it has been found that the traditional VR compounding viewpoints may need some adjustment to incorporate the new data. Next, a hypothesis of *-dé-* and *-dào* was established and combined with Kratzer's proposal to see how the potential mode behaves with the two types of resultatives in chapter 4. Within the same chapter, the combined version of the hypothesis was used to testify the potential mode of the V-part. constructions and find that their linguistic behavior in Mandarin is identical with the two types of resultatives in English. Finally, the study took advantage of this sameness across languages to explain the two problems observed in chapter 1 and 2. As the problems were solved, it was also proven that there are two types of resultatives in Mandarin and thus the proposal sustains. At the end, some cross dialects evidences were provided to further support the proposal and raise some unsolved issues in the end of the paper.

In conclusion, this paper proposed that there are two types of resultatives, which are the eventual resultatives (ER) and the consequential resultatives (CR), in Mandarin as in English and German. The resultative of the ER illustrates the final state of some activity as a result. The resultative of the CR indicates to the result of the affectee of the activity along with an attributive activity before the particle.

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