# 國立交通大學

## 外國語文學系外國文學與語言學碩士班

## 碩士論文

構式與詞彙語意之互動:

以框架理論為本之漢語多義詞「帶」的研究

A Frame-based Lexical Constructional Study of the Polysemic Verb *Dài* in Mandarin Chinese

研究生:胡韵庭

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中華民國一百零三年六月

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摘要

本研究以框架語意學為本,試圖從構式以及詞彙語意之互動探討漢語多義動 詞「帶」其多種語意內涵之關聯。據觀察,漢語「帶」涵蓋九種語意內涵,藉由 結合框架語意之理論與構式語法,本文欲探索「帶」所隱含之多個詞意在其相對 應之語法呈現上其語意與語法互動連結關係。本研究提出「帶」的原型事件,即 核心語意為表達一個致使移動事件(caused-motion event)。以此原型事件 (prototype)為語意概念基模(semantic base),本文提出藉由不同的語意側重 (semantic profile)成分輔以框架語意及構詞語法之互動呈現,他動動詞「帶」可 投射出不同之語意內涵。本研究指出「帶」的原型語意為表達一個共移(co-motion) 事件,即主事者和受事者於事件中皆共同移動至某個空間處所並執行某目的性事 件(如:學生帶錢到學校繳註冊費)。透過認知轉換,本文分析「帶」所表之共移 語意亦可側重於主事者與受試者之共行(co-action)事件,亦即主事者帶受事者共 同執行某個活動,表一帶領事件。(如:我帶他環遊世界)。此外,共移事件亦可 侧重於表達主事者與受試者之共存狀態(co-existence),視為共移事件的結果,表 一個攜帶事件(如:她身上帶著護照)。以致使移動事件及其所隱含之「帶領」及 「攜帶」的語意面向出發,本文提出「帶」將藉由不同語意框架下參與者角色之 語意延伸或語意面向之側重延展至多個非核心語意,其中包含「帶」(to bring to) 延伸至「接」(to pick up)、「照顧」(to take care of)、「帶動」、(to activate)「佩帶」 (to wear) 、「帶有」(to be with) 、「呈現」 (to appear with)之語意內涵。本研究 著眼於詞彙之框架語意與構式之互動並佐以語料之證明,為漢語多義詞「帶」所 展現之多個語意面向提出一套有系統性的框架語意分類及語意連結分析,並且於 語言學上語意及語法之互動呈現、詞彙與構式之關聯甚至於認知與語言之互動關 係提供一良好的案例證明。

關鍵詞:漢語「帶」字,框架語意學,詞彙語意學,多義詞,漢語攜帶類動詞,語意投射

## A Frame-based Lexical Constructional Study of the Polysemic Verb *Dài* in Mandarin Chinese

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#### **Abstract**

The present study probes into the polysemic nature of the verb dài 帶 'bring' in Mandarin, in which dài 帶 'bring' is found to bear at least nine meaning imports. Integrating Frame Semantic (Fillmore and Atkins 1992) and Construction Grammar (Goldberg 1995, 2010), this study aims to explore the semantic-to-syntactic correlations between the different senses underlining the syntactic realizations of dài 帶 'bring'. It is argued that dài 带 'bring' may profile different semantic scopes from the semantic base: dài 帶 'bring' as a caused-motion verb, with distinct frame-specific roles and morphosyntactic realizations. The basic sense of the caused-motion dài 帶 'bring' depicts a co-motion event in which an agent Mover takes a Co-Movee to undergo a locational change (e.g., xuésheng dài qián dào xuéxiào jiǎo zhùcèfèi 學生帶錢到學校繳註冊費 'Students bring the money to the school to pay for the registration fee.'). Nevertheless, due to conceptual transfers, dài 帶 'bring' may be used to profile a dynamic **co-action** event in leading and initiating an activity (e.g., wŏ dài tā huán yóu shìjiè 我帶他環遊世界 'I took him to travel around the world.') and further extended to profile the stative **co-existence** relation without movement (e.g.,  $t\bar{a}$ shēnshàng dài zhe hùzhào 她身上帶著護照 'He brought the passport with him.'). Based on these three semantic domains, it is postulated that other non-central senses of dài 帶 'bring' are derived either when the prototypical cases of semantic roles are mapped unto different semantic relations or when the event highlights a specific semantic attribute. The analysis proposed in this study is substantiated with a detailed corpus analysis of colloconstructional variations. It follows the frame-based lexical constructional approach in delimiting semantically salient features pertaining to lexical frames with a constructional account that captures the form-meaning mapping correlations. The study provides a clear case study that demonstrates the close interaction between semantics and syntax, lexicon and construction and ultimately, cognition and language.

Key words: Mandarin dài 帶, Frame Semantics, Lexical Semantics, polysemic verb, 'bring' verb in Mandarin, semantic profiling

時光飛逝,轉眼間研究所生涯已進入尾聲。在這執筆寫下誌謝文的一刻,內心依舊是激動不已,已不知研究所的一切點點滴滴該從何開始訴說,卻也滿心期待著人生的下一個旅途的來臨。猶想二年半前對於研究所的一切還懵懵懂懂的我,對於即將踏進陌生的環境並且面對無數未知的挑戰,是如此徬徨,然而今日,我卻已經是一位能夠獨當一面、成熟穩重,即將邁入社會的新鮮人。在這研究所求學的階段,我珍惜我所經歷的一切,我也感謝每一位我遇見的人!

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#### Chapter 1

#### Introduction

#### 1.1 Background

Studies of verbal semantics have long been a widely discussed issue in linguistic research. A number of studies on lexicalization, semantic categorization, and semantic-to-syntactic correlation based on verbal meanings have been substantially investigated and proposed (Levin 1992, Fillmore 1982, Fillmore and Atkins 1995, Goldberg 1995, 2010, Liu 2002). With the view that the meaning of a verb may crucially determine its syntactic behavior, Levin (1992) classifies English verbs based on their shared meanings and a wide range of syntactic patterns and alternations. Fillmore and Atkins (1992) propose Frame Semantics noting that the meaning of a verb cannot be understood without the essential knowledge of the real world; that is, "meaning is relativized to frames." Goldberg (1995) offers a constructional account of the argument structures of verbs, in which the verb meaning is related to the constructional meaning. Liu (2002) investigates the verbal semantics of Mandarin near-synonyms with a corpus-based approach and proposes that verbal semantics is correlated and realized in a verb's syntactic behavior. These previous studies have set a solid foundation for the study of verbal semantics. However, verbs with multiple meanings; that is, cross-categorical polysemous verbs in Mandarin, have not yet been widely discussed within the above frameworks. As an attempt to further explore the verbal semantics of Mandarin verbs, this study aims at exploring the polysemous verb dài 帶 'bring' in Mandarin in the views of Frame Semantics (Fillmore and Atkins 1992) and Construction Grammar (Goldberg 1995).

#### 1.2 Issue: The Polysemy of dài 帶 'bring'

Mandarin verb *dài* 帶 'bring' is a typical transitive and caused-motion verb that manifests multiple meaning facets. According to the online lexical database Chinese WordNet<sup>1</sup>, *dài* 带 'bring' as a transitive verb is identified with 24 senses which are represented by precise expressions of senses and sense relations, as listed below:

Sense	Definition	Synonym	Variation
1	將物品繫掛在身上。	guà 掛	dài 戴
2	將物品放在能發揮物品功能的人的身體特		dài 戴
	定部位。		
3	比喻承受特定罪名。		dài 戴
4	比喻過度稱讚特定對象以提高其地位。常與	40.	dài 戴
	「高帽」連用。		
5	比喻特定男子的配偶與他人交往。常與「綠		
	帽」連用。	JY E	
6	有支配權的人使所支配的特定對象跟著自	xī 攜、dàiyǒu 帶有	
	己移動。	K ° /E	
7	使特定對象跟著有支配權的人移動。	xī攜	
8	使特定對象到達特定地點進行特定事件。		
9	以法律或其他強制力量將後述對象押到後		
	述地點。	100	
10	前述物體移動時的力量影響後述物體使其	xī 攜	
	跟著前述物體移動。		
11	購買並將貨品帶回。		
12	經過時順便把門或窗戶關上。		
13	走在前面,引導前進方向。	dàilǐng 帶領、lǐng 領	
14	上級帶領下級做後述事件。	lǐng 領、 shuài 率、shuàilǐng	
		率領、bù 部、 shuài 帥	
15	發揮個人領袖特質帶領後述對象,通常用於		

<sup>&</sup>lt;sup>1</sup> Chinese WordNet is conducted by Academia Sinica to serve as a large-scale semantic lexical database for Chinese which embodies a precise expression of sense and sense relations (Huang et al., 2008b). The information of the lexical entry analyzed in this database contain Part of Speech, sense definition, example sentences, corresponding English synset(s) from PrincetonWordNet, lexical semantic relations and so on that are theoretically based on lexical semantics.

	正面。	
16	比喻將人帶領到特定狀態。	
17	比喻領導事件進行或發展的方向。	lǐng 領
18	負責主持或推動事件的進行。	dàilǐng 帶領、lǐng 領
19	前述對象本身有後述成分存在。	yùnhán 蘊含、hán 含、hán
		yǒu 含有、dàiyǒu 帶有、
		bāohán 包含
20	前述對象有後述疾病病原或抗體。	dàiyǒu 帶有
21	具有後述意義或情感。	yùnhán 蘊含、hán 含、dàiyǒu
		帶有、bāohán 包含、cān 掺、
		hányǒu 含有
22	在主要物品中,另外搭配後述次要物品或配	fù 附、dàiyǒu 帶有
	件。	
23	負責嬰幼兒或兒童主要的照顧和教養工作。	
24	接回後述對象。	jiē 接

Table 1. Senses of dài 帶 'bring' in Chinese WordNet

Based on the sense descriptions and synonym pairs, the various senses of *dài* 帶 'bring' can be further simplified and grouped into six lexical meanings:

- 1) To wear (guà 掛, dài 戴), as in (1~5)
- 2) To bring to (somewhere) ( $x\bar{\imath}$  攜, dài 帶), as in (6~12)
- 3) To lead (dàiling 帶領, shuài ling 率領), as in (13~18)
- 4) To be with (something) (yùnhán 蘊含, dàiyǒu 帶有, bāohán 包含), as in (19~22)
- 5) To take care of/bring up (zhàogù 照顧、fǔyang 撫養), as in (23)
- 6) To pick up (jiē 接), as in (24)

In addition to the senses identified in Chinese WordNet, three other senses of *dài* 帶 'bring' are also observed with a further look at the corpus data, as listed below:

7) To bring with (something) (xīdài 攜帶):

他身上帶著護照。

tā shēnshàng dài zhe hùzhào

he body-on bring ASP passport

'He brought the passports with him.'

8) To activate (dàidòng 帶動):

正妹啦啦隊場邊帶氣氛

zhèng.mèi-lālāduì chăng-biān dài qìfēn

pretty.girl-cheerleader spot-side bring atmosphere

'The pretty cheerleaders were activating the atmosphere on the side of the court.'

9) To appear/show with (chéngxiàn 呈現):

每個人的臉上都帶著笑容,

Měi.ge.rén de liăn-shàng dōu dài zhe xiàoróng

Everyone DE face-on all bring ASP smile

'Everybody shows smiles on the face.'

Other from the multiple uses, the corpus data also show that the identification and determination of the lexical meaning of  $d\hat{a}i \stackrel{\text{\tiny theorem and}}{=}$  'bring' is at first sight associated with its grammatical behaviors. Three syntactic patterns are found to be frequently associated with three specific lexical meanings, as listed below:

(1) To Bring to: [他]<sub>NP1</sub>帶[小英]<sub>NP2</sub>[到]<sub>Coverb</sub>[醫院]<sub>NP3</sub> [看醫生]<sub>VP</sub>

tā dài Xiǎo Yīng dào yīyuàn kàn yīsheng

he bring Xiǎo-yīng arrive hospital see doctor

'He brought Xiao-ying to the hospital to see the doctor.'

(2) To lead: [他]<sub>NP1</sub> 帶[大家]<sub>NP2</sub>[唱歌]<sub>VP</sub>

tā dài dà- jiā chàng.gē

he bring every-body sing.song

'He leads everybody to sing.'

(3) To bring with: [他身上]NP1 帶著[護照]NP2

tā shēnshàng dài zhe hùzhào

'He carried the passports with him.'

In (1), dài 帶 'bring' in the use of *bring to* occurs in the construction realized as [NP<sub>1</sub><帶 <NP<sub>2</sub><Coverb+NP<sub>3</sub><(VP)] where the Coverb usually specifies the Path of motion<sup>2</sup>. With this construction, dài 帶 'bring' depicts a motional event in which a person or an entity undergoes a locational change. As for (2), dài 帶 'bring' depicts a leading event where the Agent leads and initiates an activity in the sense of *lead*. Without the encoding of the motional event, leading dài 帶 'bring' is thus found to be associated with the structure of serial verb construction [NP<sub>1</sub><帶 <NP<sub>2</sub><VP] where no path is lexically specified. As for (3), dài 帶 'bring' can also highlight the co-existence relation between the Agent and the Theme without specifying motion or activity in the transitive form [NP<sub>1</sub> 帶 NP<sub>2</sub>], which pertains to the meaning of *bring with* (xīdài 攜帶).

<sup>&</sup>lt;sup>2</sup> In this study, the coverb refers to the path verbs that are mentioned in Liu et al (2013) including dào/zhìxiàng/wǎng/shàng/xià/jìn/chū/huí到/至/向/往/上/下/进/出/回 and the deictic verbs lái/qù 來/去. According to Liu et al (2013), the path of motion is redefined into Route, Direction and Endpoint, and these verbs are claimed to encode different semantic components. Dào/zhì到/至 'arrive, to' are the Endpoint marking verbs which always take a Loc-NP to denote the endpoint and allow no intervening elements; xiàng/wǎng 向/往 'face' belongs to the direction markers that require an immediately following directional reference, the Direction-NP; shàng/xià/jìn/chū 上/下/进/出 encode Direction and Route; and húi 回 'return (to)' encodes three components: Route, Direction, and Endpoint. As for lái/qù 來/去 'come/go', they are used to mark the speaker-oriented deictic center and usually serve as the path delimiters.

Given the multi-faceted meanings mentioned above, the senses of *dài* 帶 'bring' in general fall into two domains: motion vs. non-motion, in which the motional use of *dài* 帶 'bring' normally depicts a caused-motion event that is further involved with the agentive cause. In addition, there seems to be a form-meaning correspondence between the meanings and their grammatical patterns. In view that various senses of a polysemous word may have a shared, central origin, and the links between these senses form a network (Fillmore and Atkins 2000), it is interesting to note how these manifold meanings are originated and semantically related to each other. In order to distinguish each meaning and clarify their interrelations, this study aims to examine the corpus data to find out significant distributional and collocational patterns that might shed light on the distinct lexical meanings. With the defined semantic criteria, this study aims to provide a principled and systematic way to account for the semantic-to-syntactic correlations among different uses of *dài* क 'bring'.

#### 1.3 Scope and Goal

The study aims at investigating the concept of caused-motion verb in Mandarin with the focus on the verb dài 帶 'bring'. From the corpus data, dài 帶 'bring' differs from other caused-motion verbs such as tuī 推 'push', lā 拉 'pull' and tóu 投, zhí 擲, diū 丟, rēng 扔 'throw' in terms of the causative manner of motion; that is, dài 帶 'bring' behaves as a neutral verb that does not encode force exertion in manner. Moreover, an even more distinct property about dài 帶 'bring' lies in the multiple lexical meanings it manifests, which may be closely related to its neutral status with a non-specified manner. With the focus on the multi-faceted nature of dài 帶 'bring', this study attempts to identify and clarify the various meanings and their semantic-to-syntactic correlations under the conceptual domain of caused-motion event.

To define and categorize different meanings of *dài* 帶 'bring', this study investigates the distributional frequency, collocational patterns, and semantic attributes and distinctions manifested in different uses of *dài* 带 'bring' with a corpus-based approach. The goal of this study aims to explore the following questions:

- 1) How can we distinguish and thus categorize the different uses of dài 帶 'bring' based on observations of its corpus distribution? That is, what are the specific grammatical and distributional patterns pertaining to the different uses of dài 帶 'bring'?
- Based on the grammatical distribution, what kind of semantic distinctions can be postulated to differentiate the various senses of dài 帶 'bring'? That is, what are the semantic criteria underlying each use?
- What are the interrelations between the semantic distinctions? And what is the process of semantic extensions giving rise to the various meanings of dài 帶 'bring'?

In aim of answering the above questions, the study starts with a close investigation on the detailed syntactic and collocational behaviors of different uses of dài 帶 'bring'. The ultimate goal of the present study attempts to postulate a principled and systematic way to account for the multi-faceted meanings of dài 帶 'bring' that is underlying the domain of caused motion, which is one of the fundamental domains in human cognition.

#### 1.4 Organization of the Thesis

This study is organized as follows. Chapter one is the general introduction of this study with the background knowledge of the issue. Chapter two reviews previous works on caused-motion events and the corresponded English verbs *bring* and *carry*.

Chapter three introduces the database, theoretical frameworks and the applied methodology. Chapter four presents the findings of data that motivate this study. Section five proposes semantic-to-syntactic accounts for the various meanings of *dài* 带 'bring' and also their semantic interrelations. Chapter six concludes the study noting the significance of this thesis and related issues for future studies.



#### Chapter 2

#### **Literature Review**

Motion event has been a widely discussed issue concerned by linguists for recent decades. Caused motion, as the causative counterpart of self-initiated motion events is thus another important issue of discussion under such a concern. Mandarin verb dài ### 'bring', which literally corresponds to the English verb bring or carry, can be described as a 'verb of continuous causation of accompanied motion in a deictically-specified direction' (Gropen et al 1989). However, contrary to English bring, the meaning and uses of dài #### 'bring' are beyond the semantic domain of caused-motion. In this section, the traditional notions of caused-motion events and previous studies on the English verbs bring and carry will be reviewed. Section 2.1 reviews the previous works on caused-motion events in both English and Mandarin and Section 2.2 introduces two different approaches in viewing English verbs bring and carry.

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#### 2.1 Previous Works on Caused-motion Events

## 2.1.1 The Lexicalization Patterns of Motion

Talmy (2000) proposes a cognitive semantics account on the lexicalization patterns of motion events. It suggests that a motion event contains four internal components: Figure, Move, Path, and Ground, in which the Figure is a movable object; the Ground is a reference object or frame; the Path is what followed or site occupied by the Figure object with respect to the Ground object; and the Move refers to the occurrence of translational motion. Thus, a typical motion event is depicted as 'an object (the Figure), under a motional act (Move), moving or located with respect to a location (the Ground) following a path or site at issue.' (Talmy 2000: 25) In addition, he also points out that motion events can be associated with two external co-event

components: Manner and Cause, as illustrated in (4) below:

(4) a. The pencil *rolled* off the table.

[Move+Manner]

b. I *pushed* the keg into the storeroom.

[Move+Cause]

(Talmy 2000, vol. II: 26, 4)

In (4a), the verb *rolled* expresses how the pencil moves and so expressed as Manner, whereas *pushed* in (4b) specifies an external force of *I* that causes the keg to move and so describes the cause of the event. In other words, Manner and Cause can conflate with

Move encoded in the motion verb so as to describe the way of the occurrence of motion.

Talmy (2000) further identifies the constructions underlying the co-event

conflation in order to account for the relations that the co-event bears to the main

Motion event. The patterns are indicated by the forms WITH-THE-MANNER-OF and

WITH-THE-CAUSE-OF that function semantically like the subordinating preposition

or conjunction of a complex sentence (Talmy 2000: 29). Therefore, the unconflated

paraphrases of the English motion expressions for (4) can be further illustrated as

below:

(5) a. The rock *rolled* down the hill

=[The rock MOVED down the hill] WITH-THE-MANNER-OF [the

rock rolled]

b. I *kicked* the keg into the storeroom

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=[I AMOVED<sup>3</sup> the keg into the storeroom] **WITH-THE-CAUSE-OF** [I kicked the keg].

(Talmy 2000 vol. II: 30)

Under the lexicalization patterns and the co-event conflations, it has revealed by Talmy (2000) that the translational motion event can usually be divided into two types: self-intiated motion event and caused-motion event.

#### 2.1.2 The Prototypical Caused-motion Event

Concerned with the notion of caused-motion, Li (2007) identifies and defines the conceptual prototype of a caused-motion event from the cognitive-based approach and Prototype Theory. According to Li (2007), the basic concept of the caused-motion event involves two causally-related entities or subevents, in which one entity causes the other to undergo a certain change of location. Thus, it is postulated that the typical caused-motion event involves with two required events: causing event and motion event, as represented below:

#### (6) **Typical Caused-motion Event**

 $\frac{\text{Causer} \rightarrow \text{Causing Action}}{\text{Causing event}} \rightarrow \frac{\text{Theme} \rightarrow \text{Motion}}{\text{Motion event}}$ 

(Li 2007: 23)

As to the internal elements conceptualized in the caused-motion event, it is

 $<sup>^3</sup>$  The subscript "A" is placed before a verb to indicate that a verb is agentive. (AMOVED= CAUSE to MOVE) (Talmy 2000)

suggested that the on-going event as a whole is perceived as consisting of five internal components: **Causer**, **Theme**, **Driving Force**, **Motion**, and **Path**, which come together form a gestalt of the conceptual structure of caused motion with the meaning: 'the Causer causes the Theme to move along a Path.' Thus, the schematic representation of a typical caused-motion concept can be represented as below:

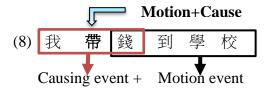
#### (7) **Typical Caused-motion concept**

Causer  $\rightarrow$  Driving Force  $\rightarrow$  Theme  $\rightarrow$  Motion  $\rightarrow$  Path

(Li 2007: 24)

In such a conceptual structure, the Causer is the source of the Driving force; the Theme is the energy goal entity who undergoes a change of location resulted by the impact of the Driving force exerted by the Causer; and the Driving force is the transmitted energy exerted by the Causer onto the Theme. Based on the above concepts, Li thus defines the prototypical caused-motion event as consisting of a human Causer volitionally exerts physical force acting upon a physical theme that immediately causes the theme to move along a Path to a physical space.

Incorporating the accounts of motion events proposed by Talmy (2000) and Li (2007), we can categorize  $d\hat{a}i$  帶 'bring' as a caused-motion verb for two reasons. For one,  $d\hat{a}i$  带 'bring' is a verb that lexicalizes the co-event component **Cause** requiring an agentive causer. For the other, the event denoted by  $d\hat{a}i$  带 'bring' usually requires two subevents: a causing event and a motion event. Take (8) as an example:



wǒ dài gián dào xuéxiào

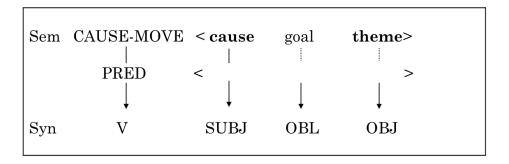
I bring money arrive school

'I brought the money to school.'

But it should be noted that in the motion event of *dài* 帶 'bring', there involves the concurrent movement of Agent and Theme, which can be ascribed to the inherent lexical meaning of *dài* 帶 'bring', which will be discussed in detail in Chapter 5. Thus in (8), the Agent 我 'I' and the Theme 錢 'money' both undergo the movement.

#### 2.1.3 Constructional Analysis of Caused Motion

In addition to the lexical and cognitive approaches to caused motion, there are constructional-based accounts for caused motion event encoded in English and Chinese. Under the framework of Construction Grammar, Goldberg (1995) defines English caused motion as structurally following the pattern: [SUB [V OBJ OBL] and such a form is associated with the meaning 'X CAUSES Y TO MOVE Z'; that is, the causer argument directly causes the theme argument to move along a path designated by the directional phrase. The form-meaning correspondence can be represented by the following figure:



**Figure 1. English Caused-motion Construction** 

With the mapping of the syntactic form and the constructional meaning, it is postulated that any lexical verb will be associated with the sense of caused motion under this construction whether or not it encodes the sense of motion. For instance, the verb *sneeze* in 'the napkin is sneezed off the table.'

As for Mandarin Chinese, Pan and Chang (2005) make a comparison of English and Chinese caused-motion constructions and conclude with some characteristics for the Chinese case. It has pointed out that Chinese caused-motion event can be expressed by the V-Direction Structure, as in tā bǎ mùtong tí shànglái le 他把木桶提上來了 'He has lifted the buckets up.' or the V-Preposition Structure, as in tā bǎ chē kāi dào nánjīng le 他把車開到南京了 'He has driven the car to Nanjing.' In addition, Chinese commonly use causative markers, such as bǎ 把, shǐ 使, or rang 讓 to express causative motion. As for English, the caused-motion notion in English can only be expressed by a single pattern: the caused-motion construction (i.e., [NP1 V NP2 PP]) and there exist no causative markers in English. On the other hand, Chinese shows more various ways in expressing the Path of motion. In Chinese, the path can be encoded by a preposition or non-predicate verb following a main verb to indicate the direction, such as V在, V到, V向, V往, V上來, V下來, V進來, V出來, V回來, whereas the path of motion in English can only be marked by preposition. The contrast can be shown in (9) and (10):

#### (9) Chinese caused-motion pattern:

- a. 他把車開**到**南京了。 *tā bǎ chē kāi dào nánjīng le*he BA car drive arrive Nanjing le

  'He drove the car to Nanjing.'
- b. 他把球扔**向**了我。 *tā bă qiú rēng xiàng le wŏ*

he BA ball throw face le me

'He threw the ball to me.'

c. 我們把羊群放出去了。

wŏmen bă yang.qún fàng chū.qù le

we BA goats.group release out.go le

'We had let go of the goats out.'

#### (10) **English caused-motion pattern:**

- a. He threw the stone *into* the river.
- b. Jane sewed a button *onto* the jacket.

Accordingly, a typical Chinese caused-motion construction may show various patterns in encoding a caused-motion event, either with a transitive V-O sequence plus a locational or directional prepositional phrase, or with an overt causative alternation marked by a causative marker, as will be clear in the use of *dài* 帶 'bring'.

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#### 2.1.4 Proto-Motion Event in Mandarin Chinese

Concerning motion event in Mandarin Chinese, Liu et al (2013) on the conceptual basis identify and propose the proto-motion sequences in Mandarin. It is identified that Mandarin motion event contains five salient semantic components: Manner, Route, Direction, Endpoint, and Deictic, in which Route, Direction, and Endpoint are the redefined morphemes of the traditional notion of Path. With these components, a Deictic-Incorporated Proto-Motion Event Schema is proposed (Figure 2), which observes the natural motion progression following the left-to-right linear sequence: from Manner to Route to Direction and to Endpoint. The proto-motion event schema thus demonstrates an iconic representation of Mandarin motion event.

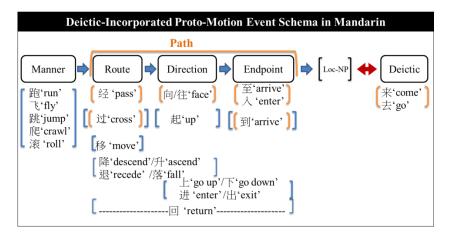


Figure 2. The Deictic-incorporated Proto-Motion Event Schema

Following the schema, it is observed that motion verbs may lexicalize one or more of the semantic components in the sequence, such as in the following example:

(11) 球 [滾]<sub>Manner</sub>[落]<sub>Route</sub>[進]<sub>Direction</sub>[到]<sub>Endpoint</sub>[洞裡]<sub>Loc-NP</sub>[來]<sub>Deictic</sub>

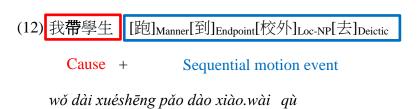
qiú gǔn- luò- jìn- dào dònglǐ lai

ball roll fall enter arrive hole-inside come

'The ball rolled and fell down into the hole.'

In (11), the leftmost verb  $V_1$  gǔn 滾 'roll' lexically encodes Manner;  $V_2$  luò 落 'fall' encodes both Route and Direction;  $V_3$  jìn 進 'enter' lexicalizes Direction and Endpoint, and the rightmost  $V_4$  specifies Endpoint.

Based on Liu et al (2013), we can observe that Mandarin *dài* 帶 'bring' depicts a serial motion event that is further involved with a Cause or Causing event, as can be seen from the following example:



I bring students run arrive campus.outside go

'I brought the students to run to the outside of the campus.'

#### 2.2 Previous Works on English Verbs *Bring* and *Carry*

Since the polysemic verb *dài* 帶 'bring' in Mandarin literally corresponds to the English verb *bring* or *carry*, it is assumed that this verb may share some similarities and differences to its English equivalents. In this section, two previous works on English verbs *bring* and *carry* will be reviewed from two different approaches. Section 2.2.1 reviews Levin's (1993) alternation-based approach on the classification of *bring* and *carry* verbs and Section 2.2.2 introduces the frame-based approach on *bring* and *carry* in FrameNet.

#### 2.2.1 Levin (1993): Verbs of Sending and Carrying

Levin (1993) assumes that verbal behaviors, particularly with respect to the expression and interpretation of its arguments, provide key evidence to investigate the lexical meaning of verbs. Under this assumption, Levin (1993) sets a pioneering work on the classification of English verb based on the alternative syntactic verbal behaviors. According to Levin (1993), English verb *bring* and *carry* are classified under the Verbs of Sending and Carrying, in which *bring* and *carry* are associated with two subclasses. Table 2 presents the classification of the two verbs:

Verb Class	Verbs of Sending and Carrying	
Subclass	Bring and take	Carry Verbs
Class	bring, take(only)	carry, drag, haul, heave, heft, hoist,
members		kick, lug, pull, push, schlep, shove,
		tote, tow, tug

<b>Examples</b> a. Nora brought the book to		a. Amanda carried the package (to
	the meeting.	New York)
	b. Nora brought the book	b. *Amanda carried at the
	from home	package (to New York)
		(cf. Nora pushed at/against the chair.)

Table 2. Verbs of Sending and Carrying in Levin (1993)

The verbs *bring* and *take* as a subclass has been described as the causative counterparts of *come* and *go*. In addition, they are set apart from other verbs by the presence of the deictic component of meaning and the lack of a meaning component that specifies the manner in which the motion is brought out. Moreover, these verbs can also be used as verbs of change of possession brought about by a change of position, as shown by their ability to occur in dative alternation.

### (13) Dative Alternation:

- a. Nora brought the book to Pamela.
- b. Nora brought Pamela the book.

(Levin 1993:134)

As for *carry*, which is under the subclass of *Carry* Verbs, has been described as relating to the causation of accompanied motion which must be overtly specified in a prepositional phrase. But differ from other class members that are cross-listed as verbs of exerting force such as *push* and *pull*, *carry* is a verb that does not encode sense of force exertion, as can be seen from the evidence that verbs of exerting force allow conative *at* phrase while verbs of causation of accompanied motion does not. (e.g. Nora *pushed* at/against the chair vs. \*Amanda *carried* at the package (to New York))

To sum up the above descriptions, *bring* and *carry* have the following shared and distinct characteristics: 1) both are verbs of causative motion that must be specified

overtly by the deictic component in the prepositional phrase, 2) *bring* does not specify Manner; *carry* does not encode force exertion. As to the contrast between them, *bring* can be used as a verb of change of possession brought about by a change of position, while *carry* seems not, as shown by their contrast in the dative alternation in (14ab) and (14cd):

#### (14) Dative alternation: bring vs. carry

- a. Nora brought the book to Pamela
- b. Nora brought Pamela the book
- c. Amanda carried the package to Pamela.
- d. ?Amanda carried Pamela the package

#### 2.2.2 Fillmore and Atkins (1992): FrameNet

FrameNet (https://framenet.icsi.berkeley.edu/), created by Charles J. Fillmore and his colleagues in University of California Berkeley, is an online lexical database for English lexicon devised on the basis of frame semantics. It is built up based on the semantic frames of English lexicon, each of which is clearly defined by the core and non-core frame elements together with the support of syntactic evidence extracted from actual texts. In FrameNet, different verbs that share the same frame elements can be in the same semantic frame. Thus, one frame may contain several lemmas of verbs that share similar semantic attributes. Futhermore, FrameNet also shows the associations of different frames by graphing the hierarchical and interrelated structures that demonstrate the frame-to-frame relationships.

According to FrameNet, English verb *bring* and *carry* are classified under the *Bringing* Frame. This frame is defined as follows with an example:

"This frame concerns the movement of a Theme and an Agent and/or Carrier."

The Agent, a person or other sentient entity, controls the shared Path by moving the Theme during the motion. The Carrier may be a separate entity, or it may be the Agent's body."

e.g. Karl CARRIED the books across campus to the library by truck.

The core frame elements involved in this frame are **Agent, Theme, Carrier, Goal, Path, Source,** and **Area.** The lexical units included in this frame are: *bring.v, carry.v, bear.v, convey.v, drive.v, ferry.v, get.v, haul.v, motor.v, portable.a, take.v, transport.v,* and etc. According to the FrameGraphers<sup>4</sup>, *Bringing* Frame is under the *Motion* and *Cause\_motion* Frame in 'Using' relationship<sup>5</sup> as they share the same
background frame information of the elements: Area, Goal, Path, and Source
pertaining to these frames.

Other from English verbs *bring* and *carry*, due to the polysemic nature of *dài* 帶 'bring', the English equivalent lexical units of different meanings of *dài* 帶 'bring' (noted in Section 1.2) can also be associated with multiple frames in FrameNet, which is summarized in Table 3.

Eng	glish Lexical	Semantic Frames	<b>Core Frame Elements</b>
Un	its		
1	bring.v	Bringing/Causation	Agent, Theme, Carrier, Goal,
			Path, Source, Area/Actor
			(Causer), Affected (Effected)
2	carry.v	Bringing/Carry_goods	Agent, Theme, Carrier, Goal,
			Path, Source, Area/Distributor,
			Goods

<sup>5</sup> In FrameGraper, 'Using' relationship refers to a frame that uses part of background information (some core frame elements) of another frame.

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<sup>&</sup>lt;sup>4</sup> FrameGrapers in the FrameNet shows the connections of several frames, demonstrating the frame-to-frame relationships by different arrows representing respectively the relationships of Inheritance, Using, Precedes, Perspective\_on, Inchoative\_of, Causative\_of, and See\_also.

3	lead_(to).v	Leadership/Causation	Leader, Governed, Activity,
	leader. n	/Cotheme	Role/Actor (Causer), Affected
			(Effected)/Area, Direction, Path,
			Source, Goal, Theme, Cotheme
4	wear.v	Wearing/Clothing	Wearer, Garment/Body_part,
	have on.v		Clothing,
	have got on.v		
5	have.v	Have_assoicated,	Topical_Entity, Entity/Owner,
	have got.v	Possession, Presence	Possession/Entity, Location

Table 3. English Equivalent Lexical Units of dài 帶 'bring' in FrameNet

Table 3 shows that the use of dài 帶 'bring' may correspond to different verbs in English, which in turn proves that dài 帶 'bring' indeed manifests the cross-frame nature of lexical meanings. Each lexical meaning, under FrameNet, is categorized in different or shared semantic frames with distinct frame-specific elements. For examples, except for *Bringing* Frame, English verbs *bring* and *carry* are also respectively belong to *Causation* and *Carry\_goods* Frame. *Causation* Frame describes a background idea where some event is responsible for the occurrence of another event (or state); that is, a **Cause** or **Actor** causes an **Effect** or **Affected**. As for *Carry\_goods* Frame, it describes a situation where a **Distributor** sells, lends, or otherwise distributes a class of **Goods**. And it is noted that the Distributor may carry some particular goods, but may not have it on hand at that exact moment.

FrameNet indeed provides a useful overview of the semantic information regarding bringing verbs in English. Nevertheless, due to the fact that the semantic frames defined in FrameNet are based on English lexicon, the definition and the defined frame elements may not be felicitous in defining the verbal semantics of Mandarin verbs. In addition, FrameNet did not concern the constructional pattern, so the subtle meaning distinction cannot be retrieved and recognized among the different

lexical units within the same frame. Therefore, to complement FrameNet with constructional criteria, this study will incorporate the constructional analysis in order to provide a more comprehensive and fine-grained account for the polysemic verb *dài* 带 'bring' in Mandarin.

#### 2.3 Summary

In this chapter, different approaches to the studies of motion events and *bringing* verbs in English have been reviewed. On the conceptual basis, Talmy (2000) explored the lexicalization patterns of the motion event, while Li (2007) identified the prototypical notion of caused motion with the Prototype Theory. Within a constructional framework, Goldberg (1995) proposed English caused-motion construction considering the form-meaning correspondence, while Pan and Chang (2005) claimed the various patterns for Chinese caused-motion constructions. Liu et al (2003) looked into the unique sequential order of motion verbs and postulated the prototypical linear sequence in Mandarin motion event. On the other hand, Levin (1993) and Fillmore and Atkins (1992) viewed and classified English *bring* and *carry* respectively from the alternation-based and frame-based approach.

Though numerous studies have focused on motion events, few studies have paid attention to the unique behaviors of Mandarin *dài* 帶 'bring' as a frequently occurring verb in the motion domain. With a corpus-based investigation, this study aims to go beyond the above studies by looking into the collocational patterns, and the semantic-to-syntactic attributes to account for the polysemic *dài* 帶 'bring' in Mandarin in light of the conceptual and grammatical structures of caused motion.

#### Chapter 3

#### Database, Theoretical Frameworks, and Methodology

#### 3.1 Database

The corpus data used in this study are selected from two sources: 1) Academic Sinica Balanced Corpus of Modern Chinese (http://db1x.sinica.edu.tw/kiwi/mkiwi/), which collects literary works on different topics and registers, and is now currently contains ten millions words; 2) the Chinese Word Sketch Engine (CWS) (http://wordsketch.ling.sinica.edu.tw/), which provides the functions of the query of keywords and collocation associations. Other sources used in this study also include: 1) the on-line resource Google search engines (http://www.google.com/) and FrameNet (https://framenet.icsi.berkeley.edu/).

Among all the databases, Sinica Corpus contains 3050 lexical entries of *dài* 帶 'bring' in total, while Gigawords in Chinese Word Sketch Engine contains 79064 entries of *dài* 帶 'bring' in total. Some of the data are selected and analyzed as the key data in the present study.

#### 3.2 Theoretical Frameworks

The present study aims to explore the polysemy of *dài* 帶 'bring' by adopting the frame-based lexical constructional approach, which integrates the framework of Frame Semantics (Fillmore and Atkins 1992) and Construction Grammar (Goldberg 1995, 2010). In addition, the theoretical foundations laid on the studies of polysemy, including Langacker's semantic profile and the prototypical theory, are also adopted to account for the manifold meaning relatedness of *dài* 帶 'bring'. The above mentioned theoretical frameworks will be briefly reviewed in this section.

#### 3.2.1 Frame-based Lexical Constructional Approach

The frame-based lexical constructional approach is a new framework proposed and adopted by this study which combines Frame Semantics and the constructional approach given by Fillmore and Atkins (1992) and Goldberg (1995). The core conception of the two approaches will be given in this section and followed by an overview of these two approaches.

Frame Semantics is the theory of linguistics proposed by Fillmore and Atkins (1992) that defines the meanings of a lexicon based on the conceptual background knowledge. That is, one cannot understand a word without accessing to the essential knowledge related to the word. Under this assumption, every lexicon is proposed to evoke one or more semantic frames which own a set of core frame elements that are defined by the participant roles involved in the event. Also, it is noted that the profile of different frame elements will lead to different syntactic realizations. Hence, verb meanings can be distinguished and identified through different frame elements and relevant syntactic behaviors that verbs are involved with.

As for the constructional approach proposed by Goldberg (1995), the theory of Construction Grammar takes constructions as basic units of language. The construction itself represents "form-meaning correspondences that exist independently of a particular verb." (Goldberg 1995:1) That is, the semantics of the construction is not compositionally derived from other constructions existing in the grammar. Moreover, CG recognizes the fact that the relations of verb and construction are interrelated but independent. The basic meaning of a construction relies on both verbs' profiled participant roles and the argument roles associated with the construction, as demonstrated by the difference between *rob* and *steal*:

# (15) rob < thief target goods> steal < thief target goods> (Goldberg 1995:45)

As an overview of the above two approaches, Frame Semantics indeed provides overall frame-relevant semantic information of the participant roles that a verb may involve with and offers a way to categorize different semantic frames for a wide range of lexical items. Nevertheless, it ignores a crucial fact about the construction that a verb may participate in and hence may sometimes fail to capture the constructional meaning that interacts with the lexical meaning of verbs. On the other hand, construction grammar provides a new way to analyze the composition of the arguments on the basis of form-meaning correspondences. However, this theory is somehow too powerful and overgeneralized, so that it may ignore the semantic-to-syntactic restrictions and variations manifested by lexical verbs that fall into the same semantic class.

In view of the above, this study incorporates the above two approaches to explore the interactions of lexical semantics and construction that underlie the syntactic realizations of the polysemic verb *dài* 带 'bring' in Mandarin Chinese. Together with a detailed bottom-up analysis of the corpus data, this study aims to ultimately offer a more fine-grained categorization and semantic anlaysis on the multi-faceted meanings of *dài* 带 'bring'.

#### 3.2.3 The Prototypical Category Theory and Semantic Profile

In addition to frame-based and constructional-based frameworks, the present study also adopts the frameworks of the Prototypical Category Theory and Semantic Profile to account for the semantic relation of the multiple meanings of *dài* 帶 'bring'. According to Rosch (1978:36), prototypes can be defined as the 'clearest cases of category membership defined operationally by people's judgments of goodness of

membership in the category'. A prototype of a category is thus viewed as a salient exemplar of the category. In other words, people categorize objects on the basis of the resemblance of the shared attributes between the prototypical members of the category and the objects. For examples, *sparrows*, *robins*, and etc are the prototypical instances of the category *birds*, but *chickens*, *ostriches*, and *penguins* are not the central members and thus are non-prototypical cases. Taylor (1995) further explicates two interpretations of prototype. One is that we can apply prototype to the central member or the cluster of central members of a category, but we can also understand prototype as a schematic representation of the conceptual core of a category (Taylor 1995:59).

As for the concept of semantic profile proposed by Langacker (1987), it concerns the conception of the distinction between the scope of a predication and the entity designated by it, which is called as **base** and **profile**. The **profile** is defined as a kind of focal point, suggesting the special prominence of the designated element, while the **base** is the encyclopedic knowledge that the concept presupposes. As noted by him, 'the semantic value of an expression derives from the designation of a specific entity identified by its position within a larger configuration.' (Langacker 1987:183) Moreover, a single base forms a domain when it supports a number of different profiles. For instance, *Circle* is the base domain for the concept of *arc, center*, and *circumstance* since they are the concepts profiled by the configuration of *Circle*.

With the above theoretical concepts, this study aims to deal with the semantic relatedness of the polysemous *dài* 帶 'bring' by applying the concept of prototypicality and the semantic base and profile in an aim to clarify the interrelationships among them.

#### 3.3 Methodology

In order to capture and futher analyze the semantics-to-syntactic interactions of

dài 帶 'bring', this study adopts a corpus-based method to substantiate the findings and analysis for this research. The procedure for the present research includes the following five steps:

#### **Step 1**: Collecting the corpus data

As a corpus-based study, the beginning step for this study is to collect as much as data of *dài* 帶 'bring' from the selected databases. In this study, the main data come from the Sinica Corpus and Word Sketch Engine. Parts of the data are extracted from Google Search Engine.

#### Step 2: Observing and examining the data

With the collected data, the second step begins to observe any possible linguistic phenomenon revealed in the data, including both semantic and syntactic information such as argument structures, participant roles, collocations or lexicalization patterns of the verb.

#### Step 3: Sorting out the semantic meanings of dài 帶 'bring'

In order to account for the multi-faceted meanings of *dài* 帶 'bring', with the preliminary observation of the data, the third step comes to sorting out the possible meanings manifested in *dài* 帶 'bring'.

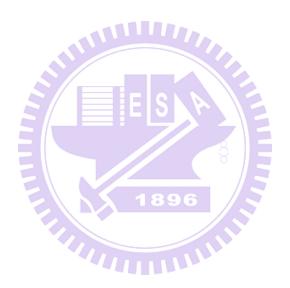
#### Step 4: Categorizing the syntactic realizations of different meanings

The fourth step is to classify and categorize all the syntactic patterns of the data with regards to their associations with the meanings of *dài* 帶 'bring'.

#### Step 5: Analyzing the semantic and syntactic correlations of the data

Finally, the above classifications of the semantic-to-syntactic relationships of  $d\hat{a}i \stackrel{\text{\tiny diff}}{=}$  'bring' will be analyzed on the basis of the theoretical frameworks introduced in Section 3.2.

Following these steps, interesting findings of the corpus data will be first presented in the next chapter, and a detailed semantic analysis of the data will be provided in Chapter 5.



## Chapter 4

## **Findings**

This chapter aims to show some important findings obtained from corpus observations. These findings illustrate the basic semantic and syntactic phenomena manifested in Mandarin dài 帶 'bring', which serve as crucial clues for the identification of different uses of dài 帶 'bring'. Section 4.1 presents the distributional frequency of dài 帶 'bring' regarding the syntactic patterns and the semantic meanings, Section 4.2 shows the findings of the semantic distinction of the predominant motional and non-motional uses of dài 帶 'bring' in terms of their defining patterns, participant roles and semantic attributes, Section 4.3 gives the collocation patterns of both motional and non-motional use with respect to their collocated morphemes and collocational restrictions. With these findings, the clues for the classification and definition of the multiple meanings of dài 帶 'bring' will be established and the detailed analysis of the semantic relatedness and a framed-based analysis will be given in Chapter 5.

## 4.1 Distributional Frequency of Multi-Faceted dài 帶 'bring'

As indicated in the previous chapters, *dài* 帶 'bring' is a verb that is found to bear multiple meanings. As suggested by Chinese WordNet and with the addition of corpus observation, *dài* 带 'bring' is found to exhibit at least nine meaning imports, repeated here as below:

1) To wear (pèidài 佩帶)

布希總統胸腔上**帶**著電子心臟監聽器,

Bù.Xī-zŏngtong xiōngqiāng-shàng dài zhe diànzi-xīnzàng-jiāntīng.qì

Bush-president chest-on wearASP electric-heart-audio.monitor 'President Bush wears a cardiac audiomonitor on his chest.'

2) To bring to (dài 帶)

他帶小英去醫院看醫生

tā dài XiǎoYīng qù yīyuàn kàn yīsheng

he bring Xiǎo-Yīng go hospital see doctor

'He brought Xiao Ying to the hospital to see the doctor.'

3) To lead (dài ling 帶領)

他帶大家唱歌

tā dài dàjiā chàng.gē

he bring every-body sing.song

'He leads everybody to sing.'

4) To be with (dài yǒu 帶有)

這位女性並不帶男性特徵,

zhè-wèi nữxìng bìng bú dài nánxìng tèzhēng

this-CL female Adv Neg bring male characteristic

'This woman does not possess any masculine feature.'

5) To take care of/bring up (zhào gù 照顧、fǔ yang 撫養) 我在家**帶**兩歲多的女兒,

wǒ zài.jiā dài liăng-suì.duō de nǚér

I at-home bring two-year.more DE daughter

'I was taking care of my two-year-old daughter at home.'

6) To pick up (jiē 接)

民宿的老闆娘還會到車站帶我。

Mínxiŭ de lăobănniáng hái.huì dào chēzhàn dài wǒ

Hostel DE hostess still.would arrive station bring me

'The hostel hostess would come to the station to pick me up.'

7) To bring with (xīdài 攜帶)

他身上帶著護照。

tā shēn shàng dài zhe hùzhào

he body-on bring ASP passport

'He brought the passport with him.'

8) To activate (dàidòng 帶動)

正妹啦啦隊場邊帶氣氛

zhèng.mèi-lālāduì chăng.biān dàiqìfēn

pretty.girl-cheerleader spot.side bring atmosphere

'The pretty cheerleaders were activating the atmosphere on the side of the court.'

9) To appear/show with (chéngxiàn 呈現):

每個人的臉上都帶著笑容,

Měi.ge.rén de liăn-shàng dōu dài zhe xiàoróng

Everyone DE face-on all bring ASP smile

'Everybody shows smiles on the face.'

Regarding the nature of polysemy, numerous studies have pointed out that polysemy is a single lexeme with distinct but etymologically related senses (Lyons 1977, 1995, Ravin and Leacock 2000). Also, polysemy is a gradient that straddles the border line between total semantic identity and distinctness and thus there is a meaning common to the sub-meanings (Tuggy 1993, Greeraerts 1993, Deane 1988). Taking *dài* 'bring' as a polysemic verb, we may thus wonder how the distinct meanings given in 1) to 9) are related to each other and in overall presents a prototype category. That is to say, what might be the predominant core meaning that pertains to the prototypical use

of dài 帶 'bring'? In order to explore this issue, the results of the investigation on the distributional frequency of dài 带 'bring' with respect to various uses and their syntactic patterns are presented as below:

Syntactic Patterns	Meaning	Count		%
NP <sub>1</sub> <帶 <np<sub>2<coverb +="" np<sub="">3&lt; (VP)</coverb></np<sub>	Bring to	191/415	46%	46%
	Bring to	27/415	6.5%	
NP <sub>1</sub> <帶 <np<sub>2<vp< th=""><td>Lead</td><td>25/415</td><td>6%</td><td>19.5%</td></vp<></np<sub>	Lead	25/415	6%	19.5%
	Bring with	19/415	7%	
	Lead	2/415	0.5%	
	Bring with	40/415	9.6%	
	Be with	41/415	10%	
NP <sub>1</sub> <帶 <np<sub>2</np<sub>	Wear	6/415	1.4%	23.1%
	Take care of	6/415	1.4%	
	Activate	1/415	0.2%	
5/	Lead	4/415	1%	

Table 4. The Distributional Frequency of the Multi-faceted Uses of dài 帶<sup>6</sup>

Table 4 shows the grammatical distribution of the syntactic patterns of dài 帶 'bring' and the relevant semantic distinctions they are associated with. It is revealed that dài 帶 'bring' mainly occurs three syntactic 1) in patterns: NP<sub>1</sub><帶<NP<sub>2</sub><Coverb+NP<sub>3</sub><(VP) 2) NP<sub>1</sub><帶<NP<sub>2</sub><VP and 3) NP<sub>1</sub><帶<NP<sub>2</sub>, and among them the first pattern is the most salient and predominant one (occupied 46%), which is mostly associated with the use of dài 帶 'bring' in the sense of bring to. The second and third patterns, serial verb construction (SVC) and simple transitive pattern, occupy about two times less than the first one. In these two patterns, SVC is used

 $<sup>^6</sup>$  The distributional frequency is based on the first 300 and 200 instances of Sinica and Gigawords, among them only 415 entries are taken into account as the usable data. The meaning of *pick up* and *appear/show* in  $d\hat{a}i$   $\frac{me}{\Box}$  are not included in this Table due to their low frequency in occurrence and the limited selected database in distributional frequency count. Nevertheless, they do appear in the corpus and the syntactic pattern they mostly involve pertains to the transitive pattern.

mainly for the sense of *bring to, lead*, and *bring with* in nearly equal frequency, while the transitive pattern is associated more freely with all the other senses. But among these uses, the senses of *bring with* and *be with* show a higher frequency.

Other from the three major types of constructions  $d\hat{a}i$  帶 'bring' occurs in, it is also observed from the corpus that  $d\hat{a}i$  带 'bring' in the sense of *bring to* can participate in the most diverse ranges of syntactic alternations, as shown in the following Table. As for other uses, only  $d\hat{a}i$  带 'bring' in the sense of *lead* and *bring with* are involved with syntactic alternations, such as resultative *De* construction and locative  $Z\hat{a}i$  construction.

Syntactic Alternations						
Transitive- <i>Bă</i>	NP <sub>1</sub> <把 <np<sub>2&lt;帶<coverb+np<sub>3&lt;(VP)</coverb+np<sub></np<sub>	Bring to	18/415	4.3%	10%	
Passive- <i>Bèi</i>	NP <sub>2</sub> <被 <np<sub>1&lt;帶<coverb+np<sub>3&lt;(VP)</coverb+np<sub></np<sub>		13/415	3.1%		
Causative- Ràng	NP <sub>1</sub> <讓 <np<sub>2&lt;帶<np<sub>3<coverb+np<sub>3<vp< th=""><th>25 6</th><th>1/415</th><th>0.2%</th><th></th></vp<></coverb+np<sub></np<sub></np<sub>	25 6	1/415	0.2%		
Dative- <i>Gĕi</i>	a. NP <sub>1</sub> <帶 <np<sub>2&lt;給<np<sub>3</np<sub></np<sub>	8 5	7/415	1.7%		
	b. NP <sub>1</sub> <帶<給 <np<sub>2<np<sub>3</np<sub></np<sub>					
Resultative-De	NP <sub>1</sub> <把 <np<sub>2&lt;帶&lt;得<c< th=""><th>Bring to</th><th>1/415</th><th>0.2%</th><th>1.2%</th></c<></np<sub>	Bring to	1/415	0.2%	1.2%	
		Lead	4/415	1%		
Locative-Zài	NP <sub>1</sub> <帶 <np<sub>2&lt;在<np<sub>3</np<sub></np<sub>	Bring with	3/415	0.7%	0.7%	

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Table 5. The Distributional Frequency of the Multi-faceted Uses of dài 帶 'bring' with Respect to Syntactic Alternations

Given the distribution of syntactic patterns with the associated meanings, Table 6 provides another view by showing the distribution of the lexical meanings with respect to the possible syntactic patterns they may respectively involve.

Meanings	Syntactic Patterns	Count		Total
	$NP_1 < \stackrel{\text{\tiny HH}}{=} < NP_2 < Coverb + NP_3 < (VP)$	191/415	46%	
Bring to  NP <sub>1</sub> <## Bă/Bèi/Ràng/Gěi/De Alternations		27/415	6.5%	62.2%
		43/415	10.4%	

	NP <sub>1</sub> <荒 <np<sub>2<vp< th=""><th>25/415</th><th>6%</th><th></th></vp<></np<sub>	25/415	6%	
Lead	NP <sub>1</sub> <帶 <np<sub>2</np<sub>	2/415	0.5%	7.5%
	De Alternation	4/415	1%	
	NP <sub>1</sub> <帶 <np<sub>2<vp< td=""><td>19/415</td><td>4.6%</td><td></td></vp<></np<sub>	19/415	4.6%	
Bring with	NP <sub>1</sub> <帶 <np<sub>2</np<sub>	40/415	9.6%	14.9%
	Zài Alternation	3/415	0.7%	
D21	NP <sub>1</sub> <帶 <np<sub>2<vp< td=""><td>15/415</td><td>3.6%</td><td>10.20/</td></vp<></np<sub>	15/415	3.6%	10.20/
Be with NP <sub>1</sub> <帶 <np<sub>2</np<sub>		36/415	8.7%	12.3%
Wear	NP <sub>1</sub> <帶 <np<sub>2</np<sub>	6/415	1.4%	1.4%
Take care of	NP <sub>1</sub> <帶 <np<sub>2</np<sub>	6/415	1.4%	1.4%
Activate	NP <sub>1</sub> <帶 <np<sub>2</np<sub>	1/415	0.2%	0.2%

Table 6. The Distributional Frequency of the Meanings of dài 帶 'bring' with Respect to the Syntactic Patterns

It is suggested by Table 6 that though a specific meaning may be realized with one or more syntactic patterns, each meaning is predominantly associated with one specific syntactic form. The semantically significant form of syntactic realization with respect to the major sense distinctions of *dài* 带 'bring' will be further discussed in Chapter 5.

Based on the above findings, a crutial fact has been revealed that the predominant meanings of *dài* 带 'bring' include four: *bring to, lead, bring with,* and *be with* as indicated by their frequency. But among them, *bring to* shows the highest frequency and thus is assumed to be the most central and prototypical meaning of *dài* 带 'bring'. In the following section, the semantic distinction among the above mentioned predominant meanings of *dài* 带 'bring' will be given in detail in terms of their participant roles and semantic attributes.

# 4.2 Semantic Distinctions of dài 帶 'bring': Caused-Motion vs. Non-Motional Use

Based on the corpus distributions, dài 帶 'bring' in the use of bring to is found to

frequently occur in the caused-motion construction where the path of motion is syntactically specified, while other meanings of dài 帶 'bring' occur in the syntactic patterns that are without the encoding of Path. With the mapping of syntactic form and meaning, we assume that dài 帶 'bring' may denote a caused-motion event in the use of *bring to* while it can also denote a non-motional event with other senses. In this section, the observation on the semantic distinctions among the caused-motion and non-motional uses of dài 带 'bring' will be presented. Three central meanings of dài 带 'bring', including *bring to, lead* and *bring with* will be firstly differentiated in terms of their defining pattern, participant roles and semantic attributes in this section. Based on these observations, the sense correlations among the central and non-central meanings will be further analyzed in detail in Chapter 5.

## 4.2.1 Dài 帶 'bring' as a Caused-Motion Verb: Bring to

With the syntactic and semantic observation of the corpus data, *dài* 帶 'bring' in the use of *bring to* can be defined by the following syntactic pattern and semantic attributes.

#### **4.2.1.1 Defining Pattern and Alternations**

As mentioned in Section 4.1, *dài* 帶 'bring' in the use of *bring to* most frequently occurs in the caused-motion construction, which is structurally realized as below:

## ▶ NP1<帶<NP2<Coverb {到/至/入/往/上/下/進/出/回/來/去}+NP3<VP</p>

學生將不用再帶錢*到*學校繳註冊費,
xué.sheng jiāng bú yòng zài dài qián dào xuéxiào jiǎo zhùcè.fèi
student will NEG use again bring money arrive school pay register.fee
'Students won't have to bring the money to school to pay for the

registration fee anymore.'

2) 派出所警員要帶他回派出所指認贓車,

pàichū.suŏ jǐngyuán yào dài tā huí pàichū.suŏ zhǐrèn zāngchē

police.station police.officer is-going bring him back police.station identify

stolen.car

'The police officer is going to bring him back to the police station to identify the stolen car.'

3) 我帶著幾個學生去重慶南路買書。

wǒ dài zhe jǐ.ge xuésheng qù chóngq ìngnánlù mǎi shū

I bring ASP a few student go Chongqing South Rd. buy book

'I brought a few students to Chongqing South Road to buy some books.'

In the above syntactic form, the verb dài 帶 'bring' is required to take three argument roles; that are, Subject-NP, Object-NP, and a Coverb followed by an NP, where the Coverb functions to take the directional or deictic meaning in a motion event. Moreover, a VP may also optionally and sequentially follow the main construction to denote a purpose act following the motion event and thus form a pattern of complex serial verbs. This construction serves as the defining pattern for dài 帶 'bring' in depicting a caused-motion event as it describes a complete motion event where the Agent-Subject brings the Theme-Object to undergo a locational change.

It is also observed that the defining pattern of the caused-motion *dài* 帶 'bring' can have the following alternations and the event denoted by which are assumed to be originated from the core pattern mentioned above.

#### **♦** Pattern variations:

a. NP1<帶<NP2<Coverb{來/去}+()<VP

### ✓ 他要帶我們去()看您,

tā yào dài wŏmen qù kàn nín

he will bring us go see you

'He is going to take us to pay a visit to you.'

## b. NP1<帶<NP2<Coverb{到/至/入/上/下/進/出/回/來/去}+NP3<( )

✓ 她們帶他到鄰居家(),

tāmén dài tā dào línjū jiā

they bring him arrive neighbor home

'They brought them to the neighbor's home.'

## c. NP1<帶<NP2<VP<Coverb{到/至/入/往/上/下/進/出/來/去}+NP3

✓ 我就儘量帶學生跑到校外去,

wǒ jiù jìn liàng dài xué sheng pǎo dào xiào wài qù

I just try-best bring student run arrive campus.outside go

'I just brought the students to run to the outside of the campus.'

## d. NP1<帶<NP2<VP<( )

✓ 你帶了秀兒逃命。

nĭ dài le Xiùér táom ìng

you bring ASP Xiuer run.life

'You take Xiuer to run for your lifes.'

Besides, the caused-motion pattern is also found with various syntactic alternations that are commonly found in Mandarin Chinese, as listed below:

## ◆ Transitive Bă -Construction: NP<sub>1</sub><把<NP<sub>2</sub><帶<Coverb+NP<sub>3</sub>< (VP)

我們必須把這些裝備帶回國。

wŏmén bìxū bă zhè.xiē zhuāngbèi dài huí guó

we must BA these equipment bring back country

'We must take these equipment back to our country.'

- ◆ Passive Alternation: NP<sub>2</sub><被<NP<sub>1</sub><帶<Coverb+NP<sub>3</sub>< (VP)
  - ✓ 去年只有幾名青年被()帶至台灣。

    qùnián zhǐyǒu jǐ.míng qīngnián bèi dài zhì táiwān

    last year only few teenager BEI bring to Taiwan

    'Last year, only few teenagers were brought to Taiwan.'
- ◆ Causative Ràng-Construction: NP<sub>1</sub><讓<NP<sub>2</sub><帶<NP<sub>3</sub><Coverb+NP<sub>3</sub><VP
  - tā zài huàn.bìng.hòu què cóngbú ràng rén dài tā dào yīyuàn she in get.disease.after but-yet-however never let people bring her

'She never let people to bring her to the hospital after she got the disease.'

◆ Locative Zài-Construction: NP<sub>1</sub><把<NP<sub>2</sub><帶<在<NP<sub>3</sub>

她在患病後卻從不讓人帶她到醫院,

- ✓ 他一直把信帶在身上。

  tā yì zhí bǎ xìn dài zài shēn shàng

  he keep BA letter bring in body

  'He keeps bringing the letters with him.'
- ◆ Dative Alternation: NP<sub>1</sub><帶<NP<sub>2</sub><給<NP<sub>3</sub>

arrive hospital

✓ 我帶了食物和新衣服給她,
wǒ dài le shí wù hé xīn yī fú gěi tā
I bring ASP food and new clothes give her
'I brought foods and new clothes for her.'

#### **4.2.1.2 Participant Roles**

Given the basic syntactic pattern of caused-motion *dài* 帶 'bring', it is necessary to see how semantic roles map unto syntactic roles in denoting a prototypical caused-motion event. The core participant roles and the non-core frame elements in the caused-motion frame of *dài* 带 'bring' are given and defined as below:

## ◆ Core Participant Roles:

- Agent\_Mover [NP]: a sentient being who controls the movement of the theme and has overall motion in directing the motion of the theme

  E.g. [父母/Agent\_Mover]帶小孩到醫院看病。
- ➤ Theme\_Co-movee [NP]: a person or physical object that undergoes the control of the agent and moves along with the Agent during motion
  - E.g. a.父母**帶**[小孩/Theme\_Co-movee]到醫院看病。 b.學生將不用再**帶**[錢/Theme\_Co-movee]到學校繳註冊費,
- Cause [NP]: expressions that indicate some non-intentional, typically non-human, force that causes the Theme to be set in motion.

  E.g. [滾滾的浪頭/Cause]能帶我出峽、出海,
- Location [NP]: a spatial location where the movers ends up after the motion E.g. 只有在症狀嚴重時,父母才會帶小孩到[醫院/Location]看病。
- > Target\_Act [VP]: the act the agent or the co-movee is about to do after arriving at the final destination

E.g.學生將不用再帶錢到學校[繳註冊費/Target\_Act],

- ◆ *Non-Core Participant Roles:* 
  - Source [NP]: the location where the mover or co-movee originates before their change of location
    - E.g. a. 回國或出國旅客從[停車場/Source]帶著行李到大廳 CHECK-IN

- b. 他經常忘記帶錢出[街/Source],
- Manner [VP]: the action that describes a property of the motion of the movers which is not directly related to the trajectory of motion
  - E.g. 我就儘量帶學生[跑/Manner]到校外去,
- > Stimulus [CL]: a situation or an entity which arouses the action of an agent E.g. 動物園希望[年假期間天氣能趕快轉好/Stimulus],好讓家長帶著小朋友們一起來到動物園和可愛的動物一起歡渡春節。
- Body Part [NP]: body part which has an entity on E.g. 他一直把信**帶**在[身上/Body part]。

Given the defined participant roles of prototypical caused-motion event of *dài* 帶 'bring', the mapping of the core participant roles with the defining pattern can thus be demonstrated as below:

Agent\_Mover[NP<sub>1</sub>]<\*<Theme\_Co-movee[NP<sub>2</sub>]<Coverb+Location[NP<sub>3</sub>]<Targ et\_Act[VP]

E.g. [學生/Agent\_Mover]帶[錢/Theme\_Co-movee][到/Path][學校/Location][繳註冊費/Target\_Act]。

xuésheng dài qián dào xuéxiào jiǎo zhùcèfèi

student bring money arrive school pay register.fee

'Students bring the money to school to pay for the registration fee.'

## **4.2.1.3 Semantic Attributes on Participant Roles**

Given the core and non-core semantic roles of the caused-motion *dài* 帶 'bring', this section aims to present a detailed semantic attributes and constraints on the core participant roles observed from the corpus.

For the Cause/Agent-Subject, the Agent\_Mover is only restricted to be an [+animate] entity, either a human or animal, or a [+natural] force that is able to initiate the motion and exert a general force on the Theme-Object. But in a non-prototypical case, the Agent can also be an abstract entity. As for the Theme-Co-movee, it is typically an animate being that is able to receive the driving force from the Agent and has the volition in motion. In addition, it can also be a non-animate physical object whose property is restricted to be [+concrete, +portable]; that is, being manipulable by the Agent during the bringing event. Such a property can be proved by the unacceptable sentence in (16b) below, where the objects  $fangji\bar{a}n$  房間 'room' and  $y\acute{z}u\grave{o}h\acute{u}$  一座湖 'a lake' are not portable objects.

- (16) a. 她帶了一些*錢/一本書*到學校。 *tā dài le yì xiē qián /yì běn shū dào xué xiào*she bring ASP some money/a book arrive school

  'She brought some money/a book to school.'
  - b. \*她帶*房間/一座湖*到學校。

    \*tā dài fáng jiān yí zuò hú dào xué xiào

    \*she brought room/a lake arrive school

    '\*She brought a room/a lake to school.'

As for the role of Location, it typically designates a spatial location, but sometimes it can also extend to denoting a non-spatial or abstract location in expressing a conceptually abstract event. As to the role of Target\_Act, it is subject to be a non-motional activity that is about to be done after the motion event. The semantic features of each participant role can be summarized by the following Table.

Semantic Roles	Semantic Features		Examples
Agent_Mover	[+animate] [+human]		父母才會帶小孩到醫院看病。
		[+animal]	白馬帶著她一步步的回到中原。
	[+natural force]		何年何月 <b>滾滾的浪頭</b> 能帶我出峽、出海,
	[+abstract]		<b>詩中的文句</b> 就可以帶人進入不同的生命境界。
Theme_	[+animate]		父母才會帶小孩到醫院看病。
Co-movee	[+concrete, +portable]		她帶了 <b>一些錢/一本書</b> 到學校。
Location	[+spatial]		帶小孩到 <b>醫院/學校。</b>
	[+abstract]		詩中的文句就可以帶人進入 <b>不同的生命境界。</b>
Target Act	[+activity, -motion]		帶小孩到醫院 <b>看病</b> 。

Table 7. The Semantic Features of the Participant Roles of Caused-Motion dài 帶 'bring'

## 4.2.2 Dài 帶 'bring' in Non-Motion Uses: Lead (dàiling 帶領) vs. Bring with (xīdài 攜帶)

Given the syntactic and semantic attributes of caused-motion *dài* 帶 'bring', this section discusses the semantic distinction of *dài* 带 'bring' in non-motional uses, where *dài* 带 'bring' in the uses of *lead* (*dài ling* 帶領) and *bring with* (*xīdài* 攜帶) will be defined and distinguished from the prototypical sense of *bring to*.

#### 4.2.2.1 *Lead*

With the syntactic and semantic observations of the corpus data, *dài* 帶 'bring' in depicting a leading event with the sense of *lead* (*dàiling* 帶領) can be defined by the following syntactic pattern and semantic attributes.

#### 4.2.2.1.1 Defining Pattern and Alternations

According to the distributional frequency given in Section 4.1, dài 帶 'bring' in the sense of *lead* (dài ling 帶領) is found to most frequently occur in the typical serial verb construction, where a VP complement is subordinated to the main clause, as

shown below:

## ▶ NP<sub>1</sub><帶<NP<sub>2</sub><VP

- a. 老師帶著一群小朋友在寫生。

  lǎoshī dài zhe yì.qún xiǎopéngyǒu zài xiěsheng

  teacher bring ASP a.group children in sketch

  'The teacher is leading a group of children to do the sketch.'
- b. 總統將帶他們重新訪問中華民國。

  zǒngtong jiāng dài tāmén chóngxīn fangwèn zhōnghuámínguó

  president MOD bring them restart visit Republic of China

  "The President will lead them to revisit Republic of China again."
- c. 媽媽帶著幾個女兒在家織布。 *māma dài zhe jǐ.ge nǚér zài jiā zhībù*mom bring ASP few daughter in home sewing

  'The mother leads the daughters to do the sewing at home.'

With this construction, *dài* 帶 'bring' denotes an event where the role in Subject-NP leads the role in Object-NP to do the Act denoted in the VP Complement. Thus, with the mapping of participant roles and argument roles, it is postulated that this construction serves as the defining pattern for *dài* 帶 'bring' in depicting a leading event. The participant roles involved in the leading frame will be given in the following subsection.

Except for the above defining pattern, *dài* 帶 'bring' in depicting a leading event is also found to occur in the transitive pattern shown as below, though with a low frequency.

### ➤ NP<sub>1</sub><帶<NP<sub>2</sub>

a. 他在**帶**班。

tā zài dài bān

he PROG bring class

'He is taking over the class.'

b. 教授不能只**帶**研究,也要**帶**思想。

jiàoshòu bù néng zhǐ dài yánjiù yĕ yào dài sīxiăng

professor NEG MOD only bring research also bring thought

'Professors cannot only lead the research but also need to lead the thought.'

It is assumed that the leading event denoted by the above pattern is originated based on the event denoted in the defining pattern since the sense of *lead* cannot be obtained without the Act led and initiated by the Agent-Subject.

In addition,  $d\hat{a}i \stackrel{\text{th}}{=}$  'bring' in depicting a leading event is also found to occur with the alternations of Ba and De constructions, which are used to denote a resultative state of the leading event, as shown by the following:

#### $\diamond$ Resultative *De* construction (with *Ba* alternation):

- ▶ NP<sub>1</sub><把<NP<sub>2</sub><帶<得<Result
  - a. 他把負工帶得很好。

tā bă yuángong dài dé hěn hǎo

he BA employee bring DE very good

'He takes a good lead of the employees.'

b. 他把一個班帶得呱呱叫,

tā bă yíge bān dài de guāguā.jiào

he BA one-CL class bring DE quack.quack.yell 'He leads the class superb.'

#### **4.2.2.1.2 Participant Roles**

Given the defining pattern of *dài* 帶 'bring' in depicting a leading event, this section introduces the core and non-core participant roles that are mapped unto the syntactic roles of the basic patterns. The core participant roles and the non-core elements of the *dài* 带 'bring' in the use of *lead* are given and defined as below:

## ◆ Core Participant Roles:

- Agent\_Leader [NP]: a sentient being who controls the theme and has the role of leading the act
  - E.g. [總統/Agent\_Leader]將帶他們重新訪問中華民國。
- ➤ Theme\_Leadee [NP]: a sentient being whose actions and beliefs are directed by the leader. This entity may be a person, or a group of people E.g. 他每天帶著[成千的工人/Theme\_Leadee],鑿山洞,造橋樑。
- Led\_Act [VP]: the act or activity the leader leads somebody to do E.g. 他每天帶著成千的工人,[鑿山洞,造橋樑/Led\_Act]。

## ◆ *Non-Core Participant Roles:*

➤ **Result**: The situation or state of the Theme Leadee resulted from the leading event

E.g. 國民黨把台灣帶得|越來越孤立/Result]。

With the defined participant roles for the prototypical leading event of *dài* 帶 'bring', the mapping of the core participant roles into the defining pattern can be demonstrated as below:

## ➤ Agent\_Leader [NP<sub>1</sub>]<\*<Theme\_Leadee [NP<sub>2</sub>]< Led\_Act [VP]

[他/Agent\_Leader]每天**帶**著[成千的工人/Theme\_Leadee][鑿山洞,造橋樑/Led\_Act]。

tā měitiān dài zhe chéng.qiān de gongrén záo shāndòng zào qiáoliáng
he everyday bring ASP form.thousand DE worker dig mountain.hole build
bridge

'He leads thousands of workers to dig the mountain holes and build the bridge every day.'

### 4.2.2.1.2 Semantic Attributes on Roles of dài 帶 'bring' in Sense of Lead

As one of the central meanings, *dài* 帶 'bring' in denoting a leading event can be drawn with some semantic properties on the participant roles.

In describing a prototypical leading event, the cases for the Agent\_Leader and Theme\_Leadee are only restricted to be an animate being since only animate beings have volition and ability in controlling over the Theme. In addition, only animate beings are able to initiate the act and perform the act. As for the role of Led\_Act, it denotes either a non-motional act or a general activity event that is able to be done by the animate beings designated by the Agent and Theme. Besides, there is another semantic constraint on the Theme\_Leadee as it occurs in the transitive pattern. With no Led\_Act specified, the NP object is only limited to be a generic noun that denotes non-individualized human or a general abstract entity, as evidenced by the following examples, where  $d\hat{a}\hat{i}^{\frac{HHE}{177}}$  'bring' is not allowed to take a definite proper noun or an individual.

#### (17) a. 他在帶**班/研究**。

tā zài dài ban/yanjiù

he PROG bring class

'He is taking over the class/research.'

b. ??他在帶小英/某個人 (in the interpretation of leading sense)

tā zài dài XǎoYīng /mǒu ge rén

he is bring XaoYing someone

"He is leading XaoYing/someone."

The semantic features of the participant roles of *dài* 帶 'bring' in the sense of *lead* can be summarized in Table 8.

Semantic Roles	Semantic Features		Examples
Agent_Leader	[+animate]	[+human]	他帶大家唱歌,
		[+animal]	老鷹帶小鷹飛翔
Theme_Leadee	[+animate]	[+human]	他帶 <b>大家</b> 唱歌,
		[+animal]	老鷹帶小鷹飛翔。
	[+generic]	[+human]	他在帶班/員工。
		[+activity]	他在帶活動/團康。
		[+abstract]	教授不能只带 <b>研究</b> ,也要带 <b>思想</b> 。
Led_Act	[+activity, -motion]		帶女兒在家織布。

Table 8. The Semantic Features of the Participant Roles of Leading dài 帶 'bring'

## **4.2.2.2** *Bring with*

Other from the *leading* sense, *dài* 帶 'bring' can also describe a non-motional bringing event with the sense of *bring with* (*xīdài* 攜帶). Based on the syntactic and semantic observations of the corpus data, *dài* 帶 'bring' in the sense of *bring with* can be defined by the following syntactic pattern and semantic attributes.

#### **4.2.2.2.1 Defining Pattern**

As indicated in Section 4.1, dài 帶 'bring' in the use of bring with is found to

most frequently occur in the basic transitive pattern:  $NP_1 < \frac{m}{11} < NP_2$ . With the mapping of the participant roles and the argument roles, this pattern can be used to describe a non-motional bringing event where an Agent in the Subject-NP is bringing along a Theme entity denoted in the Object-NP without physical movement. Therefore, this pattern serves as the defining pattern for the sense of *bring with*. Some examples are given as below:

## ➤ NP<sub>1</sub><帶<NP<sub>2</sub>

a. 我帶了袋子,

wŏ dài le dàizi

I bring ASP bag

'I brought the bag with me.'

b. 兩個人都帶了高品質的鐘:

liăng.ge.rén dōu dài le gāo-pĭnzhí de zhōng

two-CL people both bring ASP high-quality bell

'Both of them brought the high quality bells with them.'

c. 他身上**帶**著護照。

tā shēnshàng dài zhe hùzhào

he body.on bring ASP passport

'He brought the passport with him.'

## 4.2.2.2.2 Participant Roles

This section presents the core and non-core participant roles involved in the event of  $d\hat{a}i$   $\ddot{\dagger}$  'bring' in the sense of *bring with*. The defined core frame elements that are mapped unto the syntactic form and the non-core frame elements are given as below:

- Core Participant Roles:
  - ➤ Agent\_Carrier [NP]: a sentient being who physically carries the theme along with him/her
    - E.g. [我/Agent\_Carrier]帶了袋子,
  - ➤ **Theme\_Entity [NP]**: a concrete entity that is carried by an agent E.g. 兩個人都帶了[高品質的鐘/Theme\_Entity],
- ♦ *Non-Core Participant Roles:* 
  - > Self\_Act [VP]: an action acted by the agent self while carrying a theme entity
    - E.g. 很多年輕人,帶著隨身聽,[一邊兒走,一邊兒聽/Self\_Act],
  - **Body Part [NP]**: body part which has an entity on
    - E.g. 年輕人[身上/Body part]經常帶著刀子

Given the semantic roles and syntactic pattern of *dài* 帶 'bring' in describing a non-motional bringing event, the mapping of the core participant roles with the defining pattern can thus be demonstrated as below:

➤ Agent\_Carrier [NP<sub>1</sub>]<\*<Theme\_Entity [NP<sub>2</sub>]

[兩個人/Agent\_Carrier]都帶了[高品質的鐘/Theme\_Entity],

liǎng.ge.rén dōu dài le gāo-pǐnzhí de zhōng

two-CL people both bring ASP high-quality bell

'Both of them brought high quality bells with them.'

## 4.2.2.2.3 Semantic Attributes on Roles of dài 帶 'bring' in Sense of Bring with

Given the defined roles for dài 帶 'bring' in the sense of bring with, corpus observations have revealed some semantic attributes and constraints on the given

participant roles. These semantic properties are found to be crucial for the interpretation of possible slightly different senses of *dài* 帶 'bring' relative to the sense of *bring with*, including *wear* (*pèidài* 佩帶), *be with* (*dàiyǒu* 帶有), and *appear/show with* (*chéngxiàn* 呈現).

For the Agent\_Carrier, it is typically an animate being who has the volition to perform the act of bringing. In some cases, the Agent Carrier can also be a body part of the Agent which serves as a carrier of the Theme. As for the Theme\_Entity, it is only semantically restricted to be a concrete and portable entity that is small enough to be carried by the Agent or Agent's body part. Sometimes, the concrete and portable entity can also be the object that is wearable by the Agent, and thus bears the semantic feature of [+wearable]. The semantic features of the prototypical Agent\_Carrier and Theme\_Entity in describing the non-motional bringing event are given as below:

Semantic Role	Semantic Features	Examples
Agent_Carrier	[+animate]	警察平時服勤甚至不帶槍械。
	[+body part]	兩名女性,其中只有一人身上帶著護照。
Theme_Entity	[+concrete, +portable]	我帶了 <b>袋子</b>
	[+wearable]	他身上帶著香包。

Table 9. The Prototypical Semantic Features of the Participant Roles of dài 帶 'bring' in Bring with

However, it is also found that the Agent\_Carrier and Theme\_Entity can also extend to map unto a more physical or abstract domain to denote non-prototypical and non-central senses of *dài* 帶 'bring'. The extended features can be shown in Table 10.

Semantic Role	Semanti	c Features	Examples
Agent_Carrier	[-animate]	[+concrete]	有 <b>一條白色的長釣線</b> ,帶著一個彎彎
			的釣魚鉤,
		[+physical]	<b>陳文茜和黎明柔的聲音</b> 都帶著一股強
			烈的慵懶,

Theme_Entity	[+abstract]	[-concrete]	美國士兵在希望中帶著 <b>懷疑</b>
		[+physical]	每個人的臉上都帶著笑容/倦容/微笑
		[+property]	這位女性不帶 <b>男性特徵</b> 。

Table 10. The Non-Prototypical Semantic Features of the Participant Roles of dài 帶 'bring' in

Bring with

Based on the semantic features given in Table 10, *dài* 帶 'bring' in the sense of *bring with* can extend to denote slightly different senses shown in Table 11. That is, three other different senses, including *wear*, *be with* and *appear/show with*, can be generated when *dài* 帶 'bring' selects the argument that bears a specific semantic feature that contributes to the interpretation of a certain meaning. This result is also supported by the grammatical distribution of above three meanings, in which they only occur in the transitive pattern (i.e., NP<sub>1</sub><帶<NP<sub>2</sub>) that also occurs to *dài* 帶 'bring' in the use of *bring with*.

Senses	Semantic	Features	Evamples
Senses	Agent[NP]	Theme[NP]	Examples
Wear	[+animate]	[+wearable]	他身上帶著香包。
Be with	[+concrete]	[+concrete]	有一條白色的長釣線,帶著一個彎彎
			的釣魚鉤,
	[+animate]	[+property]	<b>這位女性</b> 不帶 <b>男性特徵</b> 。
	[+physical]	[+abstract]	陳文茜和黎明柔的聲音都帶著一股強
			烈的慵懶,
Appear/show	[+body part]	[+physical]	每個人的臉上都帶著笑容/倦容/微笑

Table 11. The Semantic Features of the Participant Roles of the Extended Senses of dài 帶 'bring'

However, due to the higher frequency of use among other senses (See Table 6), it is noted that the sense of *be with* can be taken as one of the predominant meanings of *dài* 帶 'bring', even though it is defined as an extension from the sense of *bring with*. The semantic distinction and correlation of the sense of *bring with* and *be with* will be further explicated in Chapter 5.

#### **4.2.3 Interim Summary**

Mandarin verb dài 帶 'bring,' as indicated in the previous sections, encompasses multiple uses with different sense interpretations. These sections give an overview of the grammatical distribution of the similar but distinct meanings of dài 帶 'bring' with regard to the possible syntactic patterns they may occur with. Based on the result of the distributional frequency, it has revealed that the most prototypical use of dài 帶 'bring' falls in denoting a caused-motion event, which dài 帶 'bring' means bring to, while other uses of dài 帶 'bring' fall into a non-motional domain with several other senses, including lead, bring with, be with, take care of, and appear/show with. Among the four predominant meanings of dài 帶 'bring,' the semantic distinctions among them are given and obtained via the syntactic and semantic observations on their defining pattern, participant roles, and together with the specification of the prototypicality of the semantic attributes on the semantic roles involved in different frames of dài 带 'bring'.

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## **4.3 Collocation Patterns**

In this section, a close inspection on the collocational patterns of some verb-external semantic elements with respect to different uses of *dài* 帶 'bring' will be presented. By a thorough investigation of corpus data, we aims to reveal the collo-constructional variations and also, the interrelations between the syntactic behaviors and semantic properties relevant to different uses of *dài* 带 'bring' in both caused-motion and non-motion domain.

## 4.3.1 Collocation Patterns of Caused-motion dài 帶 'bring'

Dài 帶 'bring' is used prototypically to describe a caused-motion event in the

sense of *bring to*. As a caused-motion verb, *dài* 帶 'bring' is found with three collocational patterns and constraints.

First, *dài* 帶 'bring' in the sense of *bring to* is required to occur with a motional Path that is followed by a Locative NP, as shown by the contrast below:

## 1) (Required) collocation with a motional Path with Loc-NP:

a. 我就儘量帶學生*跑到校外去*,

wǒ jiù jìnliàng dài xuésheng pǎo dào xiào.wài qù

I just try-best bring student run arrive campus.outside go

'I just brought the students to run to the outside of the campus.'

b. \*我就儘量帶學生

\*wŏ jiù jìnliàng dài xuésheng

I just try-best bring student

"\*I just brought the students"

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Such a constraint suggests that *dài* 帶 'bring' can only mean to describe a caused-motion event with the sense of *bring to* when the motional and locational change is overtly specified. And this constraint further gives an evidence that the verb *dài* 带 'bring' only surfaces as the causative part of the overall motion event.

Second, it is observed that caused-motion  $d\hat{a}i$  帶 'bring' can collocate with a preverbal adverb, such as  $s\bar{\imath}$  私 'self' that describes a particular way of the bringing action. Moreover, such a preverbal adverb can usually combine with  $d\hat{a}i$  帶 'bring' to form a near compound verb, as in what follows:

#### 2) Collocation with a Manner Adverb

a. 钮承泽私带大陆人士进入台湾军港 (Google 2013/07/18)

niǔchéngzé sī.dài dàlù.rénshì jìn.rù táiwān jūngang

Niu Cheng-ze private.bring Mainlander enter Taiwan military port

'Niu Cheng-ze privately brought the Mainlanders to go into Taiwan military ports.'

However, it is also observed that *dài* 帶 'bring' is not acceptable to co-occur with the Manner adverbial phrase that specifies manner of physical force, as shown below:

#### **b.**\*我*用力的*帶她去學校

\*wŏ yònglì de dài tā qù xuéxiào

I use effort DE bring her go school

\*'I forcefully bring her to school.'

Third, caused-motion *dài* 帶 'bring' can collocate with the verb *tong* 同 'along with' to form a V-V compound which is used to specify the co-movement of the Agent and Theme involved in the motion event, as shown below:

#### 3) Collocation with the verb 同

他帶同專案人員前往雙城公園。

tā dàitong zhuānàn.rényuán qiánwăng shuāngchéng-gongyuán

he bring along-with project member go-to ShuangCheng Park

'He brings along with the project members to go to Shuang-Cheng Park.'

Based on the above collocation patterns, we can conclude some specific semantic properties of caused-motion  $d\hat{a}i \ \ ^{\circ}$  'bring'. On the one hand, the verb  $d\hat{a}i \ \ ^{\circ}$  'bring' in the sense of *bring to* is subject to the caused-motion use. On the other, the

caused-motion event evoked by it requires the **concurrent** of causing event and motion event where the co-motion of the Agent and Theme is presupposed. In addition, as *dài* 带 'bring' requires a collocated Manner adverb to specify the manner of bringing event but meanwhile bears a certain restriction on the manner, we may thus evidently show that *dài* 带 'bring' is a neutral verb that does not lexicalize manner.

## 4.3.2 Collocation Patterns of Non-motional Uses of Dài 帶 'bring'

As for *dài* 帶 'bring' in non-motional uses, some specific collocation patterns are found to be subject to the uses of *lead*, *bring with* and *be with* in the senses of *dài* 帶 'bring'.

When *dài* 帶 'bring' denotes the sense of *lead*, three collocation patterns are found. First, the purpose for the leading act will usually be specified. Therefore, *dài* 带 'bring' in the sense of *lead* often collocates with a purpose event, as shown by the contrast in 1).

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## 1) Collocation with a Purpose Event

a. 媽媽帶著幾個女兒在家織布。

māma dài zhe jǐ.ge nǚér zài jiā zhībù

mom bring ASP few daughter in home sewing

'The mother leads the daughters to do the sewing at home.'

b. ??媽媽帶女兒在家

māma dài nǚér zài jiā

mom bring daughter in home

??'The mother is leading the daughter at home.'

Secondly, dài 帶 'bring' in the sense of lead often collocates with a resultative

verb, such as *hǎo* 好 'good,' *qǐ* 起 'up,' *dòng* 動 'move,' to specify the resultative state of a leading event, and these verbs usually combine with the main verb *dài* 帶 'bring' to form a compound verb.

#### 2) Collocation with a Resultative Verb:

創意素人帶起環保精神 (Google 2014/04/13)

chuàngyìsùrén dài.qǐ huánbǎo-jīngshén

creativity-ordinary.people bring.up environmental.protection-spirit

'The spirit of environmental protection has been brought up by the ordinary people with extraordinary creativity.'

In addition, it is also observed that when used to refer to a leading event, dài 帶 'bring' can collocate with a manner adverb that specifies the attitude of the Subject, such as nǔlì-de 努力的 'hard-working', or qínkuài-de 勤快的 'diligent', as shown below:

#### 3) Collocation with an Attitudinal Manner Adverb:

爸爸媽媽*勤快的*帶著小朋友收割稻草, bàba māma qínkuà- de dài zhe xiǎopéngyǒu shōugē dàocǎo father mother diligently bring ASP children harvest rice 'Parents lead the children diligently to harvest the rice.'

Other from the use of *lead*, two collocation patterns are also found with  $d\hat{a}i$  帶 'bring' in the sense of *bring with*. The first is that  $d\hat{a}i$  帶 'bring' frequently co-occurs with the manner verb that specifies a hand motion, such as  $ji\acute{a}$  挾 and  $x\bar{\imath}$  攜. These verbs bear the similar meaning as 'carry' but are further specified with the style or way

through which the Theme is being carried. They are usually syntactically incorporated with the verb *dài* 带 'bring' to surface as a compound, such as shown below:

#### 4) Collocation with the Manner Verb of Hand Motion

a. 风挟带着沙砾袭击岩石和断崖

fēng jiá.dài zhe shālì xíjí yánshí hé duànyái
wind carry ASP gravel attack rock and cliff
'The wind carried with gravels attacks the rocks and cliffs.'

b. 要隨身**攜**帶麥克筆跟白紙!

yào suíshēn xīdài màikèbǐ gēn báizhǐ
need along.body carry.carry marker and white.paper
'Be sure to carry the markers and plain papers with you.'

Secondly, when *dài* 帶 'bring' is extended to refer to a stative relation with the extension of its sense from 'bring with' to 'be with', *dài* 帶 'bring' is found to be able to collocate with the preverbal degree adverb, such as *wèi* 微 'slight,' or *yǒudiǎn* 有點 'a little,' as shown below:

#### 5) Collocation with a Degree Adverb

a. 經過特別醃製的豬肉片**微**帶甜和辣的味道。 *jīngguò tèbié yānzhì de zhūròu.piàn wéi dài tián-hé-là de wèidào*through special pickle DE pork.slice little bring sweet-and-spicy DE taste

'The pickled pork have a little bit taste of sweet and spicy.'

b. 這..內容..**有點**帶髒 (Google 2008/07/28)

zhè nèiróng yǒudiǎn dài zāng

this content a-little-bit bring dirty

'This content is a little bit dirty.'

The degree marker is used to mark the degree to which the Agent possesses the entity or property denoted by the Theme. Thus, it is found that such a marker is only acceptable to collocate with  $d\hat{a}i \stackrel{\text{\tiny{degree}}}{=}$  'bring' in the non-motional use with the relatively stative meaning be with.

According to the above, *dài* 帶 'bring' in similar but distinct meanings indeed show with different collocational behaviors. With the interaction between the collo-construction and lexical meaning, the semantic properties or event types of the multi-faceted *dài* 带 'bring' can thus be even more clearly revealed. In the next chapter, a detailed semantic analysis will be given to account for the semantic correlations among different uses of *dài* 带 'bring' along with the support of the collo-constructional behaviors mentioned in this section.

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## Chapter 5

## Semantic Analysis on the Polysemic Dài 帶 'Bring'

This chapter presents a frame-based constructional analysis of the multiple uses of dài 帶 'bring' with a cognitive semantic perspective. Section 5.1 describes the prototypical use of dài 帶 'bring' with a conceptual schema, which serves as the semantic base for other various semantic profilings and extensions. Section 5.2 gives the account for the semantic relations of subtypical meanings of dài 帶 'bring' based on the prototype, and presents the semantic-to-syntactic correlations among them. The overlapping cases of sense interpretations will also be accounted for. Section 5.3 shows the semantic extensions of dài 帶 'bring' from the three central meanings, *bring to*, *lead*, and *bring with*, proposing that the non-central meanings are derived based on the semantic features of the participant roles or via different semantic profilings. Section 5.4 summarizes the interrelationship of the multiple meanings of dài 帶 'bring' by displaying the hierarchical structure of sense relations. Section 5.5 gives the frame-based account by introducing the conceptual schema of caused-motion frame and the hierarchical structure of the framing system with the focus on the Co-movement frame, and Section 5.6 summarizes this chapter.

## 5.1 The Semantic Base: the Prototype of Caused-motion dài 帶 'bring'

Based on the findings presented in the previous chapter, it has shown that *dài* 帶 'bring,' though polysemic in nature, is found to be used most frequently to describe a caused-motion event, as supported by the distributional frequency. Therefore, we postulate that the prototype of *dài* 帶 'bring' falls in denoting a conceptual caused-motion event, endowing *dài* 帶 'bring' with the meaning of *bring to*. In view

of the conception of semantic base and profile proposed by Langacker (1987), dài 帶 'bring' in the prototypical caused-motion use can thus be postulated as a semantic base for the predication of other uses. With different profilings of designated entities, the prototype of dài 帶 'bring' may be extended to include other subtypical meaning facets with different focal points. In this section, the semantic base of the caused-motion event will be conceptually defined with a given schematic structure, which serves as the backgrounded knowledge base for identifying the event of dài 帶 'bring' and provides a ground for the derivation of other related senses.

## 5.1.1 The Conceptual Schema of Caused-motion dài 帶 'bring'

As defined in Section 4.2.1, dài 帶 'bring' prototypically describes an caused-motion event in which an Agent human brings a Theme human or entity to move to a spatial location to do a target act following a path. At the meantime, the Agent is the Mover who has the control of the Theme and the Theme is the Co-movee who moves along with the Agent Mover completely during the motion. A conceptual schema is given to represent the prototypical event of caused motion designated by dài 带 'bring', as shown below:

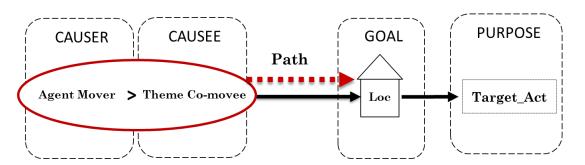


Figure 3. The Prototype Conceptual Schema for Caused-motion dài 帶 'bring'

The above schema represents the prototype of dài 帶 'bring' in depicting a

prototypical caused-motion event. The entire event is completed only when the CAUSER Subject, an Agent human, firstly takes control over the CAUSEE, the Theme human or object (as indicated by '>'), and then moves them to a specific spatial location (i.e., GOAL) through a surface Path (as indicated by the first black arrow). Sometimes the entire event is followed by an act (i.e., Target Act) that the Agent or Theme is about to do at the spot of their final location (as indicated by the second black arrow). On the other hand, dài 带 'bring' requires the Agent to move together with the Theme along a path completely during the motion (as indicated by the oval with the dotted arrow followed). Therefore, the Agent and Theme bear the relation of Mover and Co-movee. An example can be seen from the sentence: xuésheng dài qián dào xuéxiào jiǎo zhùcèfèi [學生/Agent\_Mover]帶[錢 Theme\_Co-movee]到[學校/Location][繳註冊費/Target\_Act] 'Students bring the money to the school to pay for the registration fee.'

When used for a caused-motion event, it is observed that the spatial and motional goal of the bringing event can also be extended to denote a non-motional goal. Such a non-spatial goal is mostly referred to as an abstract location that can be reached without spatial movement, as illustrated below:

#### (18) 人民公社把社員們帶向人類歷史上最高的仙境,

rénmíngōngshè bă shèyuán.men dài xiàng rénlèi-lìshǐ-shàng zuì.gāo de xiānjìng

people.commune BA members bring to human-history-on most.high DE wonderland

'The People's Commune has led the commune members to the greatest wonderland in human history.'

In this non-prototypical use, dai 帶 'bring' has been metaphorically transferred to the non-spatial and non-motional domain in which no physical movement is involved. Therefore, dai 带 'bring' in this case may also bear the meaning of  $lead^7$  as the Agent-subject brings and thus leads the Theme-object towards a certain non-spatial goal.

On the basis of the definition of the prototype, we suggest that the core semantic base of caused-motion  $d\hat{a}i$   $\ddot{\dagger}$  'bring' conceptually represents a **co-motion** event where the Agent and the Theme undergo a movement at the same time during the motion. In the following sections, the semantic extensions in relation to the semantic base of  $d\hat{a}i$   $\ddot{\dagger}$  'bring' in caused-motion domain will be semantically analyzed along with constructional evidence.

## 5.2 The Semantic Profiles: the Subtypes of dài 帶 'bring'

According to the semantic and syntactic observations given in Chapter 4, dài 帶 'bring' is also found to frequently denote two other meanings: lead (dài ling 帶領) and bring with (xīdài 攜帶). With the mapping of both semantic and syntactic roles, it is defined that dài 帶 'bring' depicts an event where an Agent leads the Theme to do an act in the sense of lead, while dài 帶 'bring' describes an event where the Agent human brings the Theme entity along with him/her in the sense of bring with. But how are these two meanings related to the prototypical meaning of dài 帶 'bring'? This study proposes that they are generated via the mechanism of the semantic profilings,

<sup>&</sup>lt;sup>7</sup> The overlapping senses of *bring to* and *lead* in this case was kindly pointed out by Prof. Han-chun Huang. In this study, *dài* † 'bring' in the use of *lead* is defined as involving an Agent leading a Theme to do an act (please refer to section 5.2), but it is also pointed out that the leadership relations can also be realized in the caused-motion event when the goal of motion is metaphorically transferred to a non-motional goal. Hence, the leading event may also describe an event of the Agent leading a Theme to a certain non-spatial goal.

where different perspectives of the main scope of the prototype of *dài* 帶 'bring' is emphasized. In this section, the semantic extension from the prototypical *dài* 带 'bring' to the subtypical meanings *lead* and *bring with* will be discussed.

## 5.2.1 The Subtype 1: the Sense of Lead (dàiling 帶領)

Given the conceptual basis of the prototypical *dài* 帶 'bring', this section aims to discuss the leading sense in relation to the caused-motional bringing event. For a leading event, it has been defined that a typical leading event involves a Leader controling and taking the lead of the Leadee to do or perform a certain act. Thus, a typical leading event can be represented by the following conceptual schema.

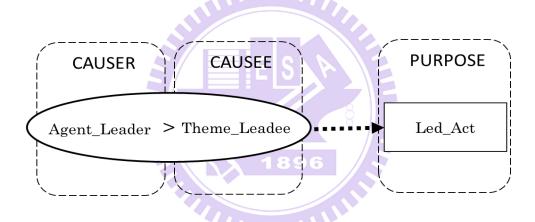


Figure 4. The Conceptual schema for Leading dài 帶 'bring'

But what is the relation of such a leading event born with the caused-motion event encoded by *dài* 帶 'bring'? A cognitive semantic account is given in the following section.

#### 5.2.1.1 Semantic Relation between Bring to and Lead

As mentioned in the above sections, *dài* 帶 'bring' itself forms a prototypical semantic category which describes a caused-motion event where the co-movement of

both Agent and Theme takes place. In view that a schematic representation of the conceptual core of a category can be understood as a prototype and that a prototype may be applied to the cluster of central members that share similar attributes (Taylor 1995), we assume that the subtypical meaning of *dài* 带 'bring' that describes an event of leading may share some central features of the caused-motion event. In other words, the leading event of *dài* 带 'bring' must possess some certain semantic attributes that partially resemble to the prototype event. A question then thus rises as to what are the shared semantic attributes of the prototype and subtype event of *dài* 带 'bring'.

The semantic attributes shared by both events may pertain to the concurrent movement of Agent and Theme encoded by the prototypical caused-motion event. What is involved is a semantic transfer from co-motion to co-action. As the co-motion event itself implies the co-action of the Agent and Theme, the leading event profiles the initiative role of an Agent leading a Theme to reach a goal without physical movement. That is, the spatial translocational co-motion may be transferred to denote a non-spatial co-action, as can be seen from the following examples:

(19) **a. Co-motion**: [老師/Agent\_Mover]帶著[小朋友/Theme\_Co-movee]到[博物館/Location][寫生/Target\_Act]

lǎoshī dài zhe xiǎopéngyǒu dào bówùguǎn xiěsheng
teacher bring ASP children arrive museum sketch
'The teacher brings a group of children to the museum to do the sketch.'

b. Co-action: [老師/Leader]帶著[一群小朋友/Leadee]在[寫生/Led Act]
lǎoshī dài zhe yìqún xiǎopéngyǒu zài xiěsheng
teacher bring ASP a.group children in sketch
'The teacher is leading a group of children to do the sketch.'

Based on the event of (19a), we postulate that the sense of *lead* in (19b) is arised from the backgrounding of the locational goal of the motion event and the semantic profiling of the co-action between the Mover and Movee. With the locational goal being backgrounded, the leading *dài* † 'bring' no longer specifies the motional path of how the Agent and Theme moves, but instead, it only emphasizes on the action that are done together by Agent and Theme. In such a case, the semantic relation of Agent and Theme is extended to designate as a Leader and Leadee, where the former initiates the Led Act while leading the latter. A related conceptual schema is given to represent the semantic relation of *bring to* and *lead*, as shown below:

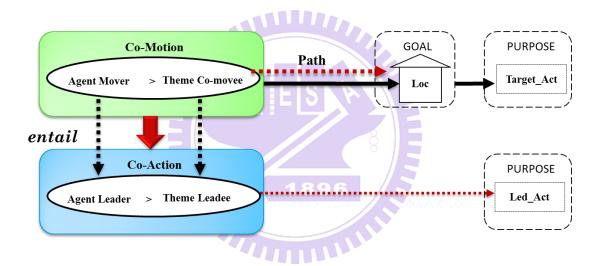


Figure 5. The Conceptual Schema for Leading dài 帶 'bring' in Relation to Bring to

With the semantic base of the conceptual leading event, *dài* 帶 'bring' in the use of *lead* can also profile the leadership relation between the participants. There appear to be two possible leading relations. When the Purpose Act (Led Act) of the Agent and Theme is backgrounded, the leading event highlights the leadership relations between Leader and Leadee, while with the Leadee being backgrounded, what the leading event emphasizes turns to be the leadership relation between the Agent Leader and Led Act, which is usually used to designate a certain activity. Examples of the above

two relations can be seen as below:

#### (20) [老師/Leader]在帶[一群小朋友/班/Leadee]

lǎoshī zài dài yìqún xiǎopéngyǒu/bān
teacher in bring a.group children/class
'The teacher is taking over a group of children/a class.

#### (21) [老師/Leader]在帶[寫生/活動/唱歌/Led Act]

lǎoshī zài dài xiěshēng/huódòng/change
teacher in bring sketch/activity/singing
'The teacher is leading (someone) to do the sketch/activity/singing.'

The leadership relations can usually be identified by the role differences between the Agent and Theme in terms of agentivity or social status. For instance, the Agent and Theme can usually be in a superior-subordinate relationship (e.g. *lǎoshī* 老師 'teacher' vs. *xuéshēng* 學生 'student'/ *xuézhǎng* 學長 'senior student' vs. *xuédì* 學 弟 'junior student'). Nevertheless, there also exist some semantic constraints on the Theme Object in describing a leading event with leadership relations beinging highlighted. For example, the Theme object in a nonprototypical case is only limited to be a generic noun and its semantic feature is only restricted to denote a group of people (e.g. *bān* 班 'class'/yuángong 員工 'employee'/yánjiù 研究 'research'). Such a constraint may be ascribed to the fact that such a leading event is a non-central and less prototypical event that is abstracted from the physical co-action event.

#### 5.2.1.2 The Semantic-to-Syntactic Correlation

Given the conceptual specification of the semantic correlations of *dài* 帶 'bring' in the sense *bring to* and *lead*, this section aims to further provide an evidential

constructional account. As have seen in the grammatical distributions given in Chapter 4,  $d\grave{a}i$  帶 'bring' in the use of *bring to* mostly occurs in the caused-motion pattern where the path of motion is structurally realized in the non-predicate verb, and such a pattern is found to be associated with various syntactic alternations. On the other hand,  $d\grave{a}i$  带 'bring' in the use of *lead*, as a subtypical event of caused-motion  $d\grave{a}i$  带 'bring', is found to mainly occur in a simple serial verb construction realized as  $NP_1 < \P < NP_2 < VP$  or a transitive pattern, sometimes with resultative constructions as an alternation.

According to the grammatical performances, a crucial fact has been revealed that the semantic meaning are crucially defined by the syntactic behaviors of the verb. It is noted that the prototypical *dài* 带 'bring' mostly occurs in the Mandarin caused-motion construction. In view that a caused-motion construction is associated with the meaning 'X CAUSES Y TO MOVE Z' as defined by Goldberg (1995), it is assumed that the verb *dài* 带 'bring' is mostly associated with a caused-motion sense in the construction. With the fusion of participant roles of the lexical frame of *dài* 带 'bring' and the argument roles of the construction, *dài* 带 'bring' thus denotes a prototypical caused-motion event in the sense of *bring to*.

On the other hand, since dai 帶 'bring' in the use of lead only occurs in the basic serial verb construction or a basic transitive pattern without the direction or path of motion beinging realized, we may consequently assume that leading dai 带 'bring' is not semantically associated with caused-motion sense. Instead, it merely denotes an independent non-motional leading event bearing the lexical meaning of 'to lead.' In addition, since the co-action event is highlighted, the action that is done in the event is also semantically prominent. As a result, dai 带 'bring' in the use of lead is required to take a VP argument that denotes a certain activity. To link the semantic meaning to the syntactic form, we can conclude that the sense of lead is carried out only through the

mapping of the participant roles (i.e., Leader, Leadee, and Led Act) evoked by the verbal meaning of *dài* 带 'bring' and the argument roles (i.e., the subject NP, object NP, and VP complement) in the SVC pattern.

In short, with the interaction between the frame elements evoked by different senses of *dài* 帶 'bring' and their relevant constructions, we can disclose how the semantics interacts with syntactics with respect to similar but distict senses of a verb.

#### **5.2.1.3** The Overlapping Cases: the Dual Interpretations

Even though the different uses of *dài* 帶 'bring' are semantically and syntactically defined with respect to their form-meaning correspondences, there are still some fuzzy cases that surface to straddle the borderline of the two cases.

According to the observed syntactic patterns, *dài* 帶 'bring' can occur in the pattern of [NP1 帶 NP2 VP]<sup>8</sup> to mean either *bring to* or *lead*. The first thing that needs to be clarified is how the motional sense of *bring to* can be interpreted with no overt marking of path of motion in the syntactic form. That is, how can the sense of *bring to* be obtained if there is no overt path in a caused motion event?

In such a case, we assume that the caused-motion sense is determined by the semantic attributes of the selected VP argument. When the coordinated subsequent VP argument denotes a motional act that describes the physical movement of the Agent and Theme, we presume that a motional event towards a locational goal will occur. Take (22) for an example, the act *táom ng* 沙命 'run for life' is a motional act, so we assume that such a motional act must occur in a motional sequence. In contrast, as proposed by

<sup>&</sup>lt;sup>8</sup> To deal with the overlapping cases in the frequency account (See Chapter 4), we categorize the case such as (22a) into the sense of *bring to* since we consider caused-motion event as the most prototypical event denoted by *dài* 帶 'bring,' while the sense *lead* is only one of its meaning facets profiled or entailed by the prototypical event.

Liu et al (2013), a path endpoint such as [到/Path][張家界/Location] specifies the path of motion and the locative goal of motion.

#### (22) Motion Event with Path unspecified vs. Path specified

- a. 你帶了秀兒[姚命]Motion
- b. 你帶了秀兒[逃命]Motion ([到]Path[張家界]Location)

nǐ dài le Xiùér táom ìng (dào zhāngjiājiè)

you bring ASP Xiuer run.life (arrive ZhangJiaJie)

'You take Xiuer to run (to ZhangJiaJie) for your lifes.'

In other words, with the backgrounded motion event, *dài* 帶 'bring' can still depict an event in which the Agent brings the Theme to move along towards an unspecified location. In short, even though the path of motion is sometimes unspecified, we can still associate *dài* 帶 'bring' with the sense of *bring to* from the semantic attributes of its VP argument.

In cases such as the above where an overt path is absent, a dual interpretation may thus arise in between the meanings of *bring to* and *lead*. With a motion event, *dài* 帶 'bring' supposedly bears its prototypical meaning of *bring to*. However, when the path of motion is not realized and backgrounded, *dài* 带 'bring' may also bear the meaning of *lead* since the event turns to merely focus on the co-action rather than the co-movement. Therefore, the sentence in (22a) can be either interpreted as 'You brought Xiuer to escape (to somewhere)' or 'You led Xiuer to escape.'

In the same vein, when a non-motional act appears in a non-typical cause-motion construction where the endpoint of motion is not specified, an overlapped sense of *dài* 带 'bring' between *bring to* and *lead* may also be evoked. For example, in the case of *lǎoshī dài xiǎopéngyǒu qù xiěsheng* 老師帶小朋友去寫生 'The teacher brings/leads

the children to do the sketch,' the bringing sense and leading sense may both be possible. On the one hand, due to the fact that the deictic verb 去 'go' presupposes and delimits a path of motion, this sentence can be interpreted as depicting a caused-motion event. Nevertheless, without a specification of the locative goal, the event is on the other hand emphasizes merely on the perspective of the action initiated and performed by the Agent and Theme. In such a case, the event may describe either the co-motion event where the teacher physically brings along the children to somewhere to do the sketch, or the co-action event in which the teacher leads the children to do the sketch. From such an example, the overlapping case of *bring to* and *lead* has proved a close semantic correlation in which they are distinct but interrelated in terms of that *lead* is one of the semantic aspects of *bring*.

#### 5.2.2 The Subtype 2: the Sense of Bring with (xīdài 攜帶)

In addition to the sense of *lead*, *dài* 帶 'bring' is also frequently associated with the non-motional sense *bring with*. This section aims to discover the semantics of *dài* 帶 'bring' in the use of *bring with* in relation to the prototypical sense *bring to*.

Dài 帶 'bring' in the use of *bring with* typically describes an event where the Agent brings with a Theme along with him/her without encoding the co-motion of Theme, and such an event usually requires the Theme to be a non-human portable object that can usually be put onto the body. Unlike the uses of *bring to* and *lead*, such an event denotes a relatively stative event in which no movement of the participants in the event occurs but only the act of 'taking something' on the Agent's part. Figure 7 gives a conceptual schema to illustrate such an event, where the Agent and Theme can be taken as a whole since the Theme entity must stay with the Agent in the whole bringing event.

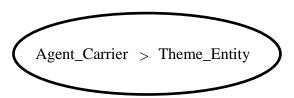


Figure 6. The Conceptual Schema for dài 帶 'bring' in Sense of Bring with

Given the basic definition of *dài* 帶 'bring' in the use of *bring with*, the next question to be asked is how such an event is semantically related to the prototypical caused-motion event? A cognitive semantic-to-syntactic account will be given in the following section.

#### 5.2.2.1 Semantic Relation between Bring to and Bring with

As mentioned in Section 5.1, dài 帶 'bring' in the caused-motion bringing sense has been defined as the prototype for the meaning of dài 帶 'bring'. Therefore, other meanings manifested by dài 帶 'bring' are assumed to be one of the central meanings within the prototypical semantic category. Based on the grammatical distribution and the prototypicality of the participant roles of *bring with*, we assume that the sense of *bring with* may also be one of the subtypical meanings that bears a certain relation to the prototypical sense. The study demonstrates that the semantic correlation between *bring to* and *bring with* can be accounted for through the conception of semantic profile, and can be supported along with constructional evidence.

We have postulated that the semantic base of *dài* 帶 'bring' is the representation of the **co-motion** event, where the concurrent spatial movement of Agent and Theme towards a locational goal is realized. As for *dài* 帶 'bring' in the sense of *bring with*, it is on the other hand describes a non-motional event which specifies how the Theme is being carried by the Agent. In light of semantic profiling, we postulate that the co-motion event will profile the **co-existence** relationships between the Agent and

Theme. In other words, the co-existence relationship between the Agent and Theme can be highlighted as a result of the caused-motion event. Accordingly, we may see the differences in the following examples:

(23) **a. Co-motion**: 我帶了袋子到學校

wŏ dài le dàizi dào xuéxiào

I bring ASP bag arrive school

'I brought the bag to the school.'

b. Co-existence: 我帶了袋子

wŏ dài le dàizi

I bring ASP bag

'I brought the bag with me.'

形om (23), it is shown that the co-existence relation between the Agent Carrier wǒ 我 'I' and the Theme Entity dài zi 袋子 'bag' is assumed to be resulted from the caused-motion event where the Agent is actually bringing the bag to some locational goal. Thus, dài 帶 'bring' in the sense of bring with does not specify the motional act of Agent and Theme; instead, only the result of the motion event of dài 帶 'bring' is being highlighted. Therefore, the result of the bringing event is that the brought entity is with the Agent, either on the Agent or Agent's body part. With such a connection, the Agent Mover and the Theme Co-movee in the caused-motion bringing event may be respectively extended to be a Carrier and the Entity being carried in describing a non-motional bringing event. A related conceptual schema is given to represent the semantic relation of bring to and bring with, shown as below:

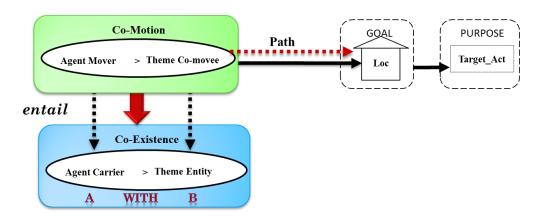


Figure 7. The Conceptual Schema of Bring with in Relation to Bring to

#### **5.2.2.2** The Semantic-to-Syntactic Correlation

Given the semantic account on the sense relation between *bring to* and *bring with*, this section aims to further provide a constructional account that supports the above analysis. Since *dài* 带 'bring' in the sense of *bring with* denotes a resultative state of the bringing event, and thus describes a co-existence relation between the Agent and Theme, we may wonder how such a semantic interpretation can be connected to the syntactic behaviors? This section presents the semantic-to-syntactic correlations that reflect the semantics of *dài* 带 'bring' in the sense of *bring with*.

To begin with, the defining pattern for dài 帶 'bring' in the use of bring with is associated with a basic transitive pattern 'Agent\_Carrier [NP1]<\*<Theme\_Entity [NP2]'. However, due to that the sense of bring with can be regarded as one of the semantic perspectives of the co-motion event conceptualized in the prototype of dài 帶 'bring', we may assume a backgrounded motion event that occurs to the event encoded in the sense of bring with. Therefore, dài 帶 'bring' in (23b) can also be compatible with a caused-motion construction which depicts a motional event, such as in (23a). In addition, sometimes the final location of the Theme in relation to the Agent may also be lexically specified in the locative zài 在 'on/in' phrase, and such a location is mostly the body part of the Agent, as shown in (24).

#### (24) 我帶了袋子在身上

wŏ dài le dàizi zài shēnshàng

I bring bag on my body

'I brought the bag with me.'

Moreover, it is also found that such a final location (i.e., the Agent's body part) can further extend to be the Agent Carrier via the metaphorical transfer: Body Part is Agent Carrier, such as in wǒ shēnshàng dài le dàizi 我身上帶了袋子 'I brings the bag with me.' On the other hand, since dài 帶 'bring' in the use of bring with highlights a non-motion but co-presence relation between the Agent and Theme, the event itself does not emphasize the causative relations but the direct manipulation between the Agent and the Theme. Therefore, we can see why dài 帶 'bring' in the sense of bring with often collocates with a manner verb of hand motion, such as in jiádài 挾帶 and xīdài 攜帶 that further specifies the way how the Agent brings with the Theme.

To sum up, the above collo-constructional patterns have provided and demonstrated the syntactic evidence that support the given semantic distinction and correlation between the prototypical and subtypical meaning of *dài* 带 'bring' *bring to* and *bring with*. Therefore, it again reveals that the semantic-to-syntactic distinction and correlation between the polysemic verb *dài* 带 'bring' can be well-substantiated through a close inspection on the grammatical performances.

#### 5.3 Semantic Extensions of the Prototype and Subtypes of dài 帶 'bring'

Previous sections have evidently shown that *dài* 帶 'bring' as a polysemic verb shows a prototype effect, in which the event brought out by the core sense *bring to* can

be defined as a semantic category, from which other two subtypical meanings, *lead* and *bring with*, are carried out through different semantic profilings. With the given semantic criteria and correlations among these three meanings, this section aims to investigate other less commonly occurred senses of *dài* † 'bring', including *pick up, take care of/bring up, activate, wear, be with*, and *appear/show with* in relation to the three meanings mentioned above.

Among the six non-central meanings, we assume that the sense of *pick up* is extended from the core meaning *bring to*, the sense of *take care of/bring up* and *activate* are extended from the meaning of *lead*, while the senses *wear, be with* and *appear/show with* are assumed to be extended from the sense of *bring with*. We postulate that the sense extensions can be accounted for via the shared semantic and syntactic attributes or through a specific semantic profiling of the core event denoted by the three central meanings. The semantic accounts along with the syntactic evidence on the sense relatedness of these extensions will be respectively given in Section 5.3.1~5.3.3

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#### 5.3.1 Sense Extension of Caused-motion *Bring to*

Previous sections have demonstrated the sense relations of caused-motion *bring to* with respect to the other two non-motional senses *lead* and *bring with* in terms of the semantic profiling of caused-motion domain. Nevertheless, it is found that the sense of *bring to* can also extend to designate the sense of *pick up* in a certain linguistic context, as illustrated in (25).

#### (25) a. 老闆娘還會到車站帶我。

lăobănniáng hái.huì dào chēzhàn dài wŏ hostess still.would arrive station bring me

'The hostess would come to the station to pick me up.'

#### b. 我的主人快来带我回家 (Google 2014/05/19)

wǒ de zhǔrén kuài.lái dài wǒ huí.jiā

my DE master quickly.come bring me recede.home

'My master, please quickly come to bring me /pick me up home.

Different from the relation of *bring to* with *lead* and *bring with*, the event denoted in the picking up event still preserves the prototypical conceptual event of *dài* 帶 'bring'. But what is the semantic relation between *bring to* and *pick up* and how can a caused-motion bringing event be extended to denote an event of picking up?

According to the data, we assume that the sense of *pick up* is derived through a specific semantic profiling of a typical caused-motion brining event. When *dài* † 'bring' is used to denote *pick up*, the prior motion of the Agent towards the location of the Theme will be semantically profiled. Such a prior motion is usually followed by a typical caused-motion event where the Agent brings along with the Theme to move away from its initial position (i.e. Source) towards a locational goal, though such a motion event is usually backgrounded or unspecifed. Based on the prototype conceptual schema of caused-motion event given in Figure 3, a subschema can be used to represent a conceptual event of picking up, as shown in Figure 9.

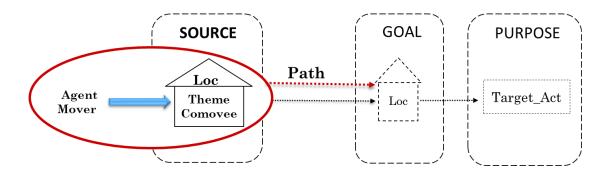


Figure 8. Conceptual Subschema of Caused-motion Picking up Event

That is to say, within the conceptual domain of caused motion, a picking up event occurs with the prerequisite of a prior motion that precedes the main event of dài 帶 'bring'. With no such a prerequisite, dài 帶 'bring' can merely denote a simple bringing event without carrying out the sense of pick up. Nevertheless, due to that such a prerequisite of the prior motion, if not lexically expressed, can only be referred by the linguistic contexts, sometimes the interpretation of the sense pick up can only be identified with the presence of cóng-phrase, which specifies the source location of the Theme object where the pre-movement of the Agent may be preseupposed, such as in tā dài wǒ cóng chēzhàn huilái le 他帶我從車站回來了 'He has picked me up/brought me from the station.'

- (26) [老闆娘還會到車站帶我]Causing event[回去民宿]Motion event °

  lǎobǎnniáng hái.huìdào chēzhàn dài wǒ (huídào mín sù)

  hostess still.would arrive station bring me (go.back hostel)

  'The hostess would come to the station to pick me up back to the hostel.'
- (27) 我的主人快来帶我<del>回家</del> (Google 2014/05/19)

  wǒ de zhǔ rén kuài lái dài wǒ huí jiā

  my DE master quickly come bring me recede.home

  'My master, please quickly come to bring me /pick me up home.

Since the expression of motion event is usually optional when *dài* 帶 'bring' denotes the sense of *pick up*, we may thus draw a fact that such an event emphasizes more on the causative part in between the Agent and the Theme rather than the result of the movement.

#### **5.3.2** Sense Extensions of *Lead*

Except for the sense of *pick up*, *dài* 帶 'bring' is also found to be associated with two other meanings, *take care of/bring up* and *activate*, though they appear in a relatively low rate. The examples of these two senses are repeated here as below:

(28) take care of/bring up (zhàogù 照顧、fǔyang 撫養)

我在家帶兩歲多的女兒,

wǒ zài.jiā dài liăng-suì-duō de n\u00e4er

I at-home bring two-year-more DE daughter

'I was taking care of my two-year-old daughter at home.'

(29) activate (dàidòng 帶動):

正妹啦啦隊場邊帶氣氛

zhèng.mèi-lālāduì chăng.biān dài qìfēn

pretty.girl-cheerleader spot.side bring atmosphere

'The pretty cheerleaders were creating the exciting atmosphere on the side of the court.'

According to our observations, we propose that these two senses are the semantic extension of the non-motional use of  $d\hat{a}i \stackrel{\text{\tiny them}}{=}$  'bring' in the sense of lead. But what are the defining criteria for these two senses and how are they related to the sense of lead?

The semantic correlations of these two senses with *lead* can appeal to the shared but distinct semantic attributes or perspectives from the prototypical leading event. Section 5.3.2.1 explains how the sense of *lead* is extended to *take care of/bring up* and Section 5.3.2.2 gives a semantic account on the sense extension from *lead* to *activate*.

#### 5.3.2.1 From Lead to Take Care Of/Bring Up

As defined in Section 5.2, the prototypical leading event encoded by *dài* 帶 'bring' depicts a co-action event where the Agent causes and leads the Theme to do a certain act. Besides, within the prototype event, the leadership relationship can also be profiled and manifested especially when the Agent and Theme are in roles of different social status. On the basis of the above typical leading event, we observe that *dài* 帶 'bring' in the sense of *lead* can extend to designate *take care of/bring up* with the shared but slightly different semantic attributes from the prototype.

The sense extension from *lead* to *take care of/bring up* arises when the leading event profiles a long-term leadership relation between the Leader and Leadee. That is, the leading event is extended from an instant activity of leading a person to do one act to a time-extended activity where the leading event continues for an extended period of time. Therefore, whenever the led person is under the control of the Leader in the overall state for a durative and continuous time period, the sense of *take care of/bring up* can be interpreted.

The correlations between *lead* and *take care of/bring up* can be substantiated with their shared collo-construction patterns. The first is the collocation pattern of the durative temporal adverb, such as *yźhènzi* 一陣子 'a period of time.' Whenever *dài* 带 'bring' in the sense of *lead* co-occurs with such an adverb, the sense of *take care of/bring up* can be derived in interpreting the leading event since such an adverb clearly specifies a durative time period. The second shared construction by both

senses is the resultative construction. *Dài* 帶 'bring' in the sense of *lead* and *take* care of/bring up can both occur in this construction since the event of both can specify the resultative state of the person being controlled, led, or taken care of, such as in tā bǎ yuángong dài dé hěn hǎo 他把員工/小孩帶得很好 'He takes good lead/care of the employees/children.'

#### 5.3.2.2 From Lead to Acticvate

Except for the sense of *take care of/bring up*, the sense of *acticvate* is also found to be semantically associated with the sense of *lead*. The examples of *dài* 帶 'bring' in the sense of *activate*, which are only found to occur in the basic transitive pattern in the corpus, are repeated and shown as below:

#### (30) a.正妹啦啦隊場邊帶氣氛

zhèng.mèi-lālāduì chăng.biān dài qìfēn
pretty.girl-cheerleader spot.side bring atmosphere

'The pretty cheerleaders were activating the atmosphere on the side of the court.'

b. 千頌伊掀髮帶熱潮 (Google 2014/03/20)

qiān song-yì xiān fă dài rè cháo

Qian Song-Yi lift hair bring hot trend

'Qian Song-Yi has led a hot trend of lifting hairs.'

What we may concern in this study is how the sense of *lead* and *activate* are semantically related to each other. It is proposed that the semantic relatedness between these two senses can be accounted for via the semantic extension of the the participant roles involved in the leading event of *dài* 带 'bring'.

As mentioned in Section 4.2.1 (Table 8), dài 帶 'bring' in expressing a prototypical case of leading event typically selectes an Agent and a Theme whose semantic features are restricted to be [+human]. However, while the semantic attribute of the Theme Object is extended to designate a non-human abstract entity and furthermore whose properties can be stated in terms of a certain degree or values, the sense of dài 帶 'bring' can be interpreted from lead to activate. In other words, the sense of activate is derived when a prototypical leading event transfers from denoting a physical leading event to a more abstract event of an Agent leading a non-human entity to a certain degree or state.

With the above connotation, *dài* 帶 'bring' in the sense of *activate* can usually collocate with a resultative verb, such as *qǐ* 起 'up' and *dòng* 動 'move', to form a compound verb that specifies the resultative state of the activated entity, as in:

# (31) a. 創意素人帶起環保精神 (Google 2014/04/13) chuàng yì sùrén dài.qǐ huán bǎo jīng shén creativity. ordinary-people bring.up environmental protection spirit 'The spirit of environmental protection has been brought up by ordinary people with extraordinary creativity.'

b. 千頌伊掀髮帶動熱潮 (Google 2014/03/20)

qiānsongyì xiānfǎ dài.dòng rècháo

Qian Song-Yi lift hair lead hot trend

'Qian Song-Yi has led a hot trend of lifting hairs.'

With the support of the above collocation, the sense extension of *dài* 帶 'bring' from *lead* to *activate* can thus be successfully substantiated.

#### 5.3.3 Sense Extensions of *Bring with*

Other from sense extensions carried out by bringing and leading sense, there are still three other senses of dài 帶 'bring'; that are, wear (pèidài 佩帶), be with (dàiyǒu 帶有), and appear/show with (chéngxiàn 呈現) that needed to be thrown light upon. On the basis of the corpus observations, these three senses share the similar semantic and syntactic attributes pertaining to the sense of bring with, which is the subtypical meaning profiled from the prototypical dài 帶 'bring'. Therefore, it is assume that these senses are the semantic extensions of the sense of bring with. The semantic relatedness among the three meanings with respect to their core sense will be discussed in this section.

#### 5.3.3.1 From Bring with to Wear

It is observed from the corpus that  $d\grave{a}i$  帶 'bring' in the sense of wear is semantically associated with the sense of bring with profiled from the caused-motion event. According to the data,  $d\grave{a}i$  带 'bring' in the sense of wear describes an event in which a human Agent wears a certain Theme entity, as shown in below:

#### (32) wear (pèidài 佩帶)

a. 布希總統胸腔上帶著電子心臟監聽器,
bù.xī-zŏngtong xiōngqiāng-shàng dài zhe diànzi-xīnzàng-jiāntīng.qì
Bush-president chest-on wearASP electric-heart-audio.monitor

'President Bush wears a cardiac audiomonitor on his chest.'

b. 他身上**帶**著香包。

tā shēn.shàng dài zhe xiāngbāo

he body.on bring ASP scented.sachet

'He wears a scented sachet on him.'

As defined in Section 5.2.2,  $d\hat{a}i \stackrel{\text{th}}{=}$  'bring' in the sense of *bring with* highlights the co-existence relationship between the Agent Mover and Theme Co-movee resulted from a motional event. In consequence, the Agent usually becomes the Carrier who carries the Entity encoded in the Theme Object along with him/her. But what is the semantic relation of such a bringing event bearing with the wearing event described in (31)? We propose that the semantic relatedness between the two senses is the semantic extension and their relation can be accounted for in the light of the semantic attributes of the participant role.

It is observed that the sense of *wear* is derived from the semantic transfer and restrictions on the semantic attributes of the Theme object. As shown in Section 4.2.2, the core participant roles involved in the frame of *bring with* include the Agent Carrier and the Theme Entity. And the former is restricted to be a human Agent and the latter to be a concrete and portable Theme entity that can only be carried by hand. However, it is found that when the Theme object is further restricted to be a [+wearable] object that can be worn by Agent's body,  $d\hat{a}i \stackrel{\text{the}}{\sqcap}$  'bring' in the sense of *bring with* can extend to denote the sense of *wear*. That is, the sense of *wear* can be derived and attributed from the semantic property of the Theme object encoded by  $d\hat{a}i \stackrel{\text{the}}{\sqcap}$  'bring' in the sense of *bring with*.

The semantic distinction between *bring with* and *wear* can be further seen and supported by the collocation pattern. It is found that *dài* 帶 'bring' in the sense of *wear* is usually required to take a body part phrase, such as *xiōngqiāngshàng* 胸腔上 'on chest' or *shēnshàng* 身上 'on body,' along with the Agent, as in (32). Thus we may assume that the location of the Theme entity in the typical bringing event has metaphorically transferred to be an Agent carrier in describing a wearing event. In short, with the semantic extension of the Theme entity of *dài* 帶 'bring', the sense

correlateness and distinction between *bring with* and *wear* can cleary be manifested.

#### 5.3.3.2 From Bring with to Be with

Except for the sense extension of dài ## 'bring' from bring with to wear, it is also found that bring with can also extend to the sense of be with to describe a relatively stative event. The event encoded in the sense of be with typically describes an event in which the Agent, either a human or a non-human entity, possesses or has a certain property encoded by the Theme object, as shown by the following examples:

#### (33) be with (dàiyǒu 帶有)

a. 這位女性並不帶男性特徵,

zhè-wèi nǚxìng bìng bú dài nánxìng tèzhēng
this-CL female Adv Neg bring male characteristic
'This woman does not possess any masculine feature.'
b. 有一條白色的長釣線,帶著一個彎彎的釣魚鉤。
yǒu yìtiáo báisè de chángdiàoxiàn dài zhe yí ge wānwān de diàoyúgōu
exist one-CL white DE long fish line bring ASP a bent fishing hook
'There is a white strip of fish line with a bent fishing hook.'

The questions as to how a bringing event can extend to depict a stative event and the process of semantic transfer will be discussed in this section.

This study postulates that the sense extension from *bring with* to *be with* can be accounted for through the extensions of the prototypical case of participant roles involved in the bringing event. As pointed out in Section 4.2.2.2, the semantic feature of the role of Agent Carrier can transfer from a human to a non-human concrete or a physical entity, such as *diàoxiàn* 釣線 'fish line,' and *shēngyīn* 聲音 'voice,' whereas

the Theme Entity can be extended from a concrete entity to an abstract entity, such as *huáiyí* 懷疑 'doubt' or a property *nánxìngtèzhēng* 男性特徵 'masculine feature.' And these semantic transfers are made possible via the metaphorical extensions where the concrete or physical entity is taken as a human Carrier and the abstract entity is a carried Entity.

Due to the semantic transfer of the participant roles, the bringing event denoted by the sense of *bring with* can no longer describe a physical bringing event; instead, the event turns to describe a stative co-existence event which only emphasizes on the existential relation of the Agent Carrier and Theme Entity. This is mainly due to the fact that the Agent fails to perform a physical act of bringing a concrete and portable entity. In short, with the transfer of the semantic domain of the participant roles, the sense of *dài* 带 'bring' can extend from denoting a bringing event with the sense of *bring with* to describing a stative event where the the entity denoted in the Agent Subject owns or possesses a certain property or entity denoted in the Theme Object.

There are some semantic and syntactic properties that can be drawn to supplement the differentiation between the eventive and stative bringing event. First of all, the relation between the Agent Carrier and the Theme Entity in the stative event of dài 帶 'bring' appears in a part-whole relationship. The entity or property encoded in the Theme can usually be taken as one part of the features of the Agent self, such as in (33), the Theme entity nánxìngtèzhēng 男性特徵 'masculine feature' and diàoyúgōu 釣魚鉤 'fishing hook' respectively belongs to the part of the Agent nǚxìng 女性 'female' and the entity diàoxiàn 釣線 'fish line.' Such a relation can only be observed from the stative event of dài 帶 'bring'. Second, the stative predication of dài 帶 'bring' in the sense of be with can be evidenced by the syntactic modification of the degree adverbs, such as wéi 微 'a little,' or yǒudiǎn 有點 'a little bit,' as observed in Section 4.3.1. Since degree markers can only be used in a stative predication, they have in turn

proved the stative property of *dài* 帶 'bring' in the sense of *be with*. Examples can be seen in (34).

#### (34) a. 經過特別醃製的豬肉片微帶甜和辣的味道。

jīngguò tèbié yānzhì de zhūròu.piàn wéi dài tián hé là de wèidào through special pickle DE pork.slice little bring sweet and spicy DE taste 'The pickled pork have a little bit taste of sweet and spicy

b. 這..內容..**有點**帶髒 (Google 2008/07/28)

zhè nèiróng yǒudiǎn dài zāng

this content a little bit bring dirty

'This content is a little bit dirty.'

In short, with the extensions of the semantic attributes of the participant roles of *dài* 帶 'bring', the eventive bringing event designated by the sense *bring with* can also extend to be associated with a stative event with a seemly distinct sense *be with*.

## 5.3.3.3 From Bring with to Appear/Show with

On the basis of the semantic extensions from the typical *bringing* event to the stative event, it is found that the stative use of *dài* 帶 'bring with' can also extend to denote *appear/show with* as it also describes a stative event. *Dài* 带 'bring' in the sense of *appear/show with* typically describes an event in which an Agent entity is appearing or showing up with a Theme entity, as shown in (35). This section aims to illustrate how the sense *bring with* can be extended to denote the sense of *appear/show with*.

#### (35) a. 每個人的臉上都帶著笑容,

měi.ge.rén de liăn-shàng dōu dài zhe xiàoróng

Everyone DE face-on all bring ASP smile

'Everybody shows smiles on the face.'

#### b. 表情裡帶著一股悽慘的氣憤;

biǎoq íng-lǐ dài zhe yìgǔ qīcǎn de qìfèn
facial expression-inside bring ASP a miserable DE anger
'There appears a kind of miserable anger on the face.'

#### c. 說話帶口音

shuō.huà dài kǒuyīn
speak.word bring accent
'(He) speaks with accents.

The sense correlation between *bring with* and *appear/show with* can be shed light on the co-existence relationships between the Agent and Theme. However, the sense difference between them can be further ascribed to other semantic relation or restriction on the Agent and Theme. As mentioned in the previous section, the eventive event of *dài* 带 'bring' in the sense of *bring with* can transfer to denote a stative event with the sense of *be with*, where the whole-part existential relationship between the Agent Carrier and the Theme Entity can be highlighted. It is nevertheless found that when such a stative event emphasizes on the external appearance of the Theme Entity; that is, the ground where the Theme is appearing, the sense of *be with* can extend to the sense of *appear/show with*. In such a case, the Agent Carrier usually serves as the surface ground where the Theme Entity appears. In most cases, the Agent Carrier is usually the body part of the Agent (e.g., *miàn* 面 'face,' *liǎnshàng* 臉上 'on the face,' or *biǎoq̂ng* 表情 'facial expression'), and the Theme Entity mostly denotes a certain physical expression whose presence takes place on the

surface part (e.g., xiàoróng 笑容 'smile,' or q ȳen 氣憤 'anger'). Sometimes, the surface entity which conceptually carries the Theme entity can also metaphorically extend to a manner of action, such as  $shu\bar{o}.hu\dot{a}$  說話 'to speak,' which serves as the ground for the entity  $k\check{o}uy\bar{v}n$  口音 'accent' to appear with, as shown in (35c).

Based on the semantic relations between the Agent and Theme, it has been revealed that the subtypical sense of *dài* 帶 'bring' *bring with* can extend to denote slightly different sense *appear/show with* that is found to be correlated to its core sense.

#### 5.4 The Interrelationship of the Multi-faceted Meanings of dài 帶 'bring'

The semantic analysis for  $d\hat{a}i$  帶 'bring' given in the above sections has revealed that the nine different senses are not distinct but are interrelated in a specific way. This section aims to summarize the above analysis by proposing a multi-faceted hierarchical structure that displays the correlations among the various meanings of  $d\hat{a}i$  带 'bring'.

With the support of the corpus data, this study has demonstrated that the interrelationship among the different senses can be accounted for through an inspection on the prototype of dài thing, the caused-motion bringing event (i.e., a co-motion event), from which the semantic extensions of bring to to lead and bring with occur while the event itself respectively highlights the co-action or co-existence perspective of the motion event. Furthermore, within the highlighted domains, the co-action event (i.e., the leading event) can extend to denote an event of taking care of somebody or activating a certain entity, whereas the co-existence perspective of the motion event; that is, the event of bringing along with something, can extend to denote a sense of wearing or describe a stative co-existing event with the sense of be with and appear/show with. This study proposes that the derived senses from the core meaning

of  $d\hat{a}i$  帶 'bring' are not only determined by the extensions of the semantic attributes of their arguments, but also by their interrelationships with the core sense in terms of the highlighted meaning facet. Also, the metaphorical extensions may be involved in the process of sense extensions. Based on our analysis, the interrelationships among the various meanings of  $d\hat{a}i$  带 'bring' can be presented and summarized by the hierarchical structure schematized as below:

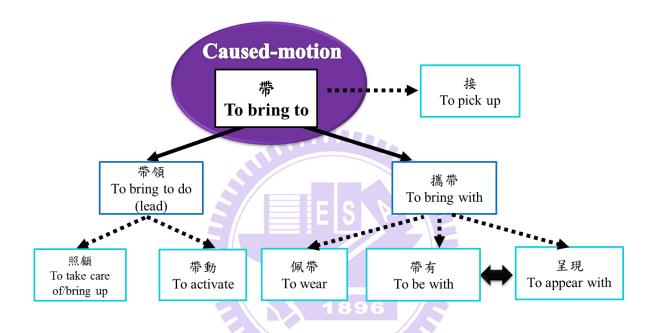


Figure 9. The Hierarchical Structure of the Interrelationships of the Multi-faceted Meanings of dài 帶 'bring'9

#### 5.5 Framed-based Analysis of Caused-motion dài 帶 'bring'

Based on corpus observations, the verb *dài* 帶 'bring' is one of the lexical items under the domain of Mandarin caused-motion verbs. For the Mandarin caused-motion verbs, it can be categorized into specific frames based on the frame-specific elements

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<sup>&</sup>lt;sup>9</sup> The process of sense extensions given in this study is different from the diachronic development of the sense of  $d\grave{a}i \stackrel{\text{\tiny{th}}}{:::}$ , given that the original sense of  $d\grave{a}i \stackrel{\text{\tiny{th}}}{:::}$  is in nominal use that denotes a stripe or belt according to Shuowen Jiezi. However, as the scope of this study is set up within the domain of verbal use and as a synchronic study, the contradicted sense development of  $d\grave{a}i \stackrel{\text{\tiny{th}}}{:::}$  will not be tackled in the present study.

and lexicalization patterns, and which will be analyzed into different layers according to Liu et al (2014) in preparation. In this section, we will introduce each frame under the hierarchical structures of Mandarin caused motion with conceptual schema, definitions, participant roles, defining patterns, and representative lemmas. Section 5.5.1 introduces the conceptual schema for the Archiframe of caused motion. Section 5.5.2 presents the hierarchical structures of the Caused-motion Archiframe, in which different layers of the frame will be introduced. Section 5.5.3 gives an overview of the frame.

#### 5.5.1 Conceptual Schema of Caused-motion Archiframe

According to Liu and Chiang (2008), a Conceptual Schema (CS) illustrates the cognitive background of an event with a set of default role participants, that is, the Frame Elements (FEs). The conceptual schema describes a cognitive basis of a certain frame and the frame-to-frame relationship among its subframes. Reviewing the PMS by Liu et al. (2013), several essential semantic components that are crucial to self-initiated motion have been identified as semantic components encoded in various motion verbs. As a cognitive representation of motion, the PMS has integrated the verb-internal lexical features in verbs of motion together with the verb-external participant roles co-occurring with them. As illustrated by Liu et al. (2013), [Manner], [Route], [Direction], and [Endpoint] are identified as verb-internal components as in (36b). On the other hand, we have verb-external elements in (36a) as *rìběn* 日本 'Japan' specifying Route, *dōng* 東 'east' denoting Direction, and *měiguó* 美國 'America' describing Endpoint.

(36) a. 他 [飛]<sub>Manner</sub> [經日本]<sub>Route</sub> [往東]<sub>Direction</sub> [到美國]<sub>Endpoint</sub> tā fēi jīng rìběn wăng dōng dào měiguó

he fly through Japan toward east arrive America 'He flew east through Japan to America.'

b. 球 [滾]<sub>Manner</sub> [落]<sub>Route</sub> [進]<sub>direction</sub> [到]<sub>Endpoint</sub>洞裡 qiú gǔn luò jìn dào dònglǐ
ball roll fall enter arrive hole
'The ball rolled-fell into the hole.'

(Liu et al. 2013)

As for the caused motion frame, it has been defined in Chapter 4 and 5 that caused motion concerns a motion event co-occurring with the causing event of the Agent and Theme. Thus, incorporated with the PMS proposed by Liu et al. (2013), the essential verb-external participant roles [Mover] and [Moved Entity] are identified as the crucial frame elements for caused-motion frame, as in (37).

(37) [我]<sub>Mover</sub>帶[學生]<sub>Moved\_Entity</sub> [跑]<sub>Manner</sub>[到]<sub>Endpoint</sub> [校外]<sub>Locative</sub> [去]<sub>Deictic</sub> wǒ dài xuéshēng pǎo dào xiào.wài qù
I bring students run arrive campus.outside go
'I brought the students to run to the outside of the campus.'

Along the vein, external participants wǒ 我 'I', xuéshēng 學生 'students', xiào.wài 校外 'outside of the campus', along with the rìběn 日本 'Japan', dōng 東 'east', and měiguó 美國 'America' specified in the motion frame are viewed as the essential frame elements specifying the caused motion. We suggest the caused motion is plotted with frame elements: 1) Mover, 2) Moved Entity, 3) Route NP, 4) Directional NP, 5) Locative NP, and 6) Deictic as displayed in the conceptual schema of caused motion as shown below.

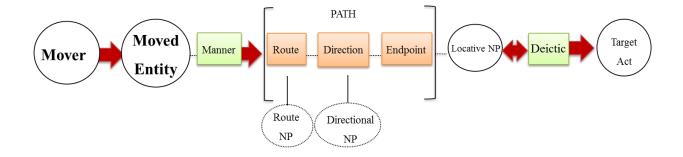


Figure 10. Conceptual Schema for Caused Motion

In the conceptual schema, a Mover causes the movement of the Moved entity in which the Moving entity may adopt a particular way of movement (Manner) and with such a manner of motion, the moving entity decides on the motional contour in which it may pass an immediate point (Route NP) toward a location (Directional NP) and reach its final destination (Locative NP). The speaker-oriented perspective of motion (Deictic) is independently specified in schematizing the motion. Incorporated into Motion, Deictic verbs serve as an optional marker indicating the spatial orientation in relation to the deictic center, the Speaker. Moreover, the notion of Deictic is commonly used to signify the relative position of the Speaker to Locative NP. In this sense, Deictic also helps to locate a Speaker-centered endpoint.

#### 5.5.2 The Hierarchical Structure of the Frame

Following the assumption that meanings of verbs are anchored in semantic frames with profiled lexical elements (Fillmore and Atkins 1992, Goldberg 2005), a frame-based hierarchical taxonomy established by Liu and Chiang (2008) is adopted to analyze and categorize Mandarin caused-motion verbs. A classificational scheme is proposed with a multi-layered structured classification of semantic frames, which will be introduced layer by layer and one by one following the hierarchical semantic scope:

Archiframe > Primary frame > Basic frame > Micro frame. Frames in the higher level denote a broader scope of certain semantic domain with background information. Frames in the lower level inherit from upper frames and provide frame-specific description. The following sections will successively illustrate the Archiframe of Caused Motion, the Primary frame with the focus on the Co-movement primary frame, and the two Basic frames under the Co-movement Primary frame, Bringing to and Bringing with Basic frame by demonstrating the conceptual schema, definitions, participant roles, defining patterns, and representative lemmas. A Figure of the hierarchical structures of the Caused Motion Frame is provided below:

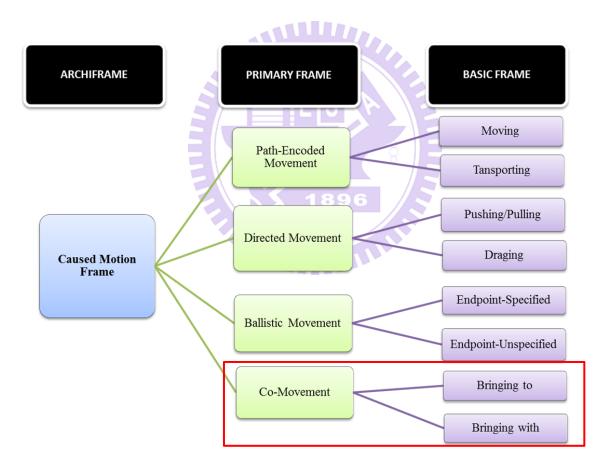


Figure 11. The Hierarchical Structure of Caused Motion Frames

Based on the analysis given in this study, it is obvious that dài 帶 'bring' is a

caused-motion verb that only highlights on the co-movement of the Mover and Moved entity and which is much different from other Mandarin caused-motion verbs, such as the path-encoded caused-motion verbs  $b\bar{a}n$  搬,  $y\hat{u}n$  運,  $y\hat{\iota}$  移 'move,' and etc, directed caused-motion verbs  $tu\bar{\iota}$  推 'push,'  $l\bar{a}$  拉 'pull,' and  $qi\bar{a}n$  牽 'hold,' and ballistic caused-motion verbs tou 投,  $zh\dot{\iota}$  擲,  $di\bar{u}$  丢,  $r\bar{e}ng$  扔 'throw.' Therefore, we propose that  $d\hat{a}i$  带 'bring' on its own belongs to Co-movement Primary Frame, which will be introduced in detail in the following sections. Since the Path-encoded Movement, Directed Movement, and Ballistic Movement Primary frames <sup>10</sup> are not the main concerns in this study, they will not be discussed for the time being.

#### 5.5.2.1 Layer 1: Archiframe (Caused-motion Frame)

According to Liu and Chiang (2008), the Archiframe (AF) is the highest frame in the hierarchical framing system. It points out a unique and independent semantic domain of an event, in this case, the Caused Motion. The archiframe defines an overarching conceptual schema as a semantic prerequisite for illustrating subframes that inherit. The information regarding the Archiframe of Caused Motion is described below:

**Definition:** An Agent (Mover) causes a Theme (Moved Entity) to undergo a certain course of motional path, sometimes with the specification of a particular way of movement (Manner), passing through an intermediate landmark (Route NP) toward a spatial orientation (Directional NP) to arrive at a final destination (Locative NP) with an optional marking of speaker-oriented center (Deictic).

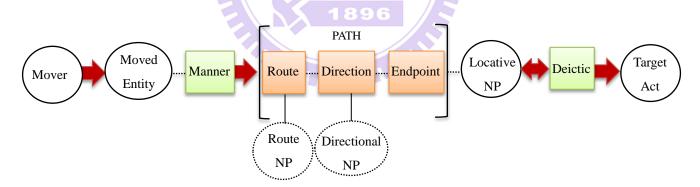
<sup>&</sup>lt;sup>10</sup> Please refer to Hung (2014) for detailed discussions on Directed Movement Primary frame and Li (2014) for Ballistic Movement Primary frame.

**Frame Elements:** Mover, Moved Entity, Manner, Route NP, Directional NP, Locative NP, Deictic

#### **Representative Lemmas:**

bān 搬 'move', yí 移 'move', tái 抬 'lift to move', zài 載 'load', bān yùn 搬運 'move to transport', bān zài 搬載 'move to load', zài yùn 載運 'load to transport', zhuāng zài 裝載 'load', tuī 推 'push', lā 拉 'pull', qiān 牽 'hold', tuō 拖 'drag', gǎn 趕 'rush', chè 撤 'recede', jǔ 舉 'lift', dài 帶 'bring', ling 領 'lead', xī 攜 'carry', dàiling 帶領 'lead', tóu 投 'throw', zhí 擲 'throw', diū 丟 'throw', rēng 扔 'throw', chōng 沖 'flush', chuī 吹 'blow', shè 射 'shoot', shuāi 摔 'fall', pēn 噴 'spray', yā 壓 'press', pāi 拍 'tap'

#### **Conceptual Schema:**



#### **Defining Patterns:**

#### a. Mover [NP] < \* < Moved\_Entity[NP] < {Path} + Locative [NP]

[周俊三/Mover]投[球/Moved\_Entity][進/Direction+Endpoint][籃/Locative] *zhōu jùn sān tóuqiú jìn lán* 

Zhou, Jun-san throw ball enter basket

'Zhou, Jun-san threw the ball into the basket.'

### b. Mover [NP]< \* <Moved\_Entity[NP]<Manner<{Path}+Locative [NP]</p> Deictic [VP]

[我/Mover]帶[學生/Moved\_Entity][跑/Manner][到/Endpoint][校外/Locative][去/Deictic]

wǒ dài xuéshēng pǎo dào xiào.wài qù

I bring students run arrive campus.outside go

'I brought the students to run to the outside of the campus.'

#### c. Mover [NP] < \* < Moved\_Entity[NP] < Deictic [VP] < Locative [NP]

[他/Mover]拉[我/Moved\_Entity][去/Deictic][他家/Locative]

tā lā wǒ qù tā jiā

He pull me go his home

'He pulls me to go to his home.'

#### d. Mover [NP] < \* < Moved\_Entity[NP] < {Path} + Locative [NP] < Deictic [VP]

[媽媽/Mover]推[俊和/Moved\_Entity][到/Endpoint][學校/Locative][去/Deictic]

mā mā tuī jùn-hàn dào xuéxiào qù

Mother push Jun-han arrive school go

'Mother pushes Jun-han to the school.'

#### **5.5.2.2** Layer 2: Primary Frame (Co-movement Frame)

As described by Liu and Chiang (2008), **Primary frames (PFs)** are subframes under the Archiframe with a given portion profiled or highlighted. Different primary frames are distinguished from one another by a set of unique core frame elements and syntactic representation. According to the corpus observation, caused-motion verbs can be categorized into several semantic domains: Path-encoded Movement, Directed Movement, Ballistic Movement, and Co-movement based on the highlighted verb-internal semantic portions or verb-external specified motion contour. The

Path-encoded Movement frame specifies the saliency of the Path of motion contour in the movement. The Directed Movement frame describes the directional force in causing the spatial oriented movement. The Ballistic Movement frame depicts the ballistic motion contour of the moving entity towards the endpoint. The last one is the Co-movement frame, where *dài* 带 'bring' belongs, depicting the co-motion of the Mover and the Moved entity completely during the motion. The four primary frames under the Archiframe of Caused Motion can be summarized as follows.

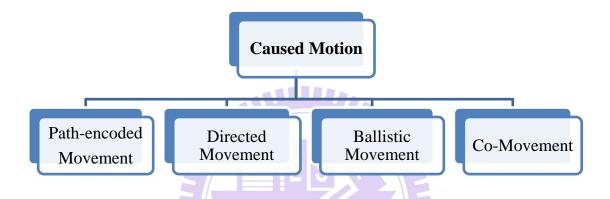


Figure 12. Primary Frames under Caused Motion Archiframe

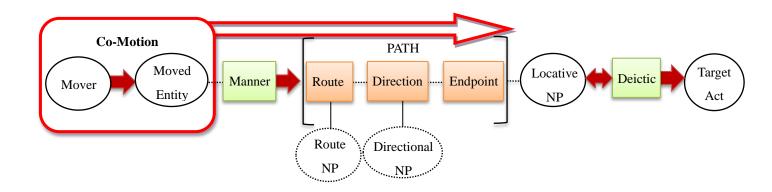
On the basis of the finding and analysis of the present study, the information of the Co-movement Primary frame can be illustrated as below:

**Definition:** This frame describes a co-motion event of the Agent (Mover) and Theme (Moved Entity), in which the Agent (Mover) brings along with the Theme (Moved Entity) completely during the motion event and they finally move towards a spatial destination.

#### **Representative Lemmas:**

dài 帶 'bring', xī 攜 'carry', dàiling 帶領 'lead', shuàiling 率領 'lead', lingdǎo 領導 'lead', xīdài 攜帶 'carry', jiádài 挾帶 'carry'

#### **Conceptual Schema:**



#### **Defining Patterns:**

a. Mover [NP] < \* < Moved\_Entity[NP] < {Path} + Locative [NP] < (Deictic [VP])

[他/Mover]帶[她/Moved\_Entity][到/Endpoint][學校/Locative]([去/Deictic])

wŏ dài tā dào xuéxiào (qù)

he bring her arrive school go

'He brought her to the school.'

b. Mover [NP] < \* < Moved\_Entity[NP] < Deictic [VP] < Locative [NP]

[他/Mover]帶[我/Moved\_Entity][去/Deictic][他家/Locative]

tā dài wǒ qù tā jiā

he bring me go his.home

'He brought me to his home.'

c. Mover [NP] < \* < Moved\_Entity[NP] < Deictic [VP] < Target Act [VP]

[張春玉/Mover]便領著[姑娘們/Moved\_Entity][去/Deictic][查房/Target\_Act]。

zhāng chūn yù biàn lǐng zhe gūniang.men qù cháfang

'Zhang, Chun-yu leads the girls to check the rooms.'

d. Mover [NP]< \*<Moved\_Entity[NP]<{Path}+Locative [NP] <Target Act [VP]

[我/Mover]領著[阿眉/Moved\_Entity][回/Route+Direction+Endpoint][家/Locati

ve][大吃一頓/Target\_Act]。

wǒ ling zhe ā méi huí jiā dà.chī yí.dùn

I lead ASP A-mei recede home big.eat one CL

'I led A-mei to go back to home to have big meal.'

#### 5.5.2.3 Layer 3: Basic Frame

Basic frames are sets of semantically restricted frames under primary frame, denoting a narrower scope of meaning. According to Liu and Chiang (2008), basic frames are "semantically more informative, distributionally more frequent and common, and are associated with foregrounded or backgrounded frame elements within the set of primary-selected elements." (Liu and Chiang 2008:10). To be specific, basic frames are defined by a set of highlighted frame elements inheriting from primary frames as well as distinctive syntactic behaviors. They inherit the defining patterns from the primary frame but develop some unique syntactic patterns of their own, which separate them from one another. In the following section, the two basic frames under the Co-movement Primary frame, namely, Bringing to frame and Bringing with frame will be introduced.

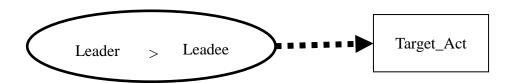
#### **5.5.2.3.1** Bringing to Frame

The information of the Bringing to frame under the Co-movement primary frame can be described as below:

**Definition:** Bringing to frame describes the co-movement of the Mover and Moved Entity, in which the co-action of them in a motion event is highlighted. With the highlighted co-action bringing event, the Mover becomes to be a Leader and Moved Entity becomes a Leadee in which the former performs a leading act on the latter in

doing a certain activity (Target Act), usually with an unspecified motion contour.

#### **Conceptual Schema:**



Lemmas: dài 帶 'bring', ling 領 'lead', dàiling 帶領 'lead', shuàiling 率領 'lead', lingdǎo 領導 'lead'

Core Frame Elements: Leader (Mover), Leadee (Moved Entity), Deictic, Target\_Act

#### **Defining Patterns:**

#### a. Leader [NP]<\*<Leadee [NP]<Target\_Act [VP]

[他/Agent\_Leader]每天帶著[成千的工人/Theme\_Leadee][鑿山洞,造橋樑/Target\_Act]。

tā měitiān dài zhe chéng.qiān de gongrén záo shāndòng zào qiáoliáng
he everyday lead ASP form.thousand DE worker dig mountain hole build bridge
'He leads thousands of workers to dig the mountain holes and build the bridge
every day.'

#### b. Leader [NP]<\*<Leadee [NP]< Deictic [VP]< Target\_Act [VP]

[老師/Leader]帶[小朋友/Leadee][去/Deictic][寫生/Target\_Act]
lǎoshī dài xiǎopéngyǒu qù xiěsheng
teacher bring children go sketch
'The teacher brings/leads the children to do the sketch,'

#### c. Leader [NP]<帶< Leadee[NP]

[他/Agent\_Leader]在帶[班/Theme\_Leadee]

tā zài dài bān

he in lead class

'He is leading the class.'

## **5.5.2.3.2** Bringing with Frame

The information of the Bringing with basic frame under the Co-movement primary frame can be illustrated as below:

**Definition:** Bringing with frame describes the co-motion event of the Mover and the Moved Entity in which the co-existence relationship between them is highlighted. In such a frame, the Mover becomes the Agent Carrier and the Moved Entity becomes the Theme entity and the motional contour in such a frame is usually unspecified.

**Conceptual Schema:** 

1896

Agent\_Carrier > Theme\_Entity

Lemmas: dài 帶 'bring', xī 攜 'carry', xī dài 攜帶 'carry', jiá dài 挾帶 'carry'

**Core Frame Elements:** Agent\_Carrier (Mover), Theme\_Entity (Moved\_Entity)

### **Defining Pattern:**

a. Agent\_Carrier [NP]<\*<Theme\_Entity [NP]

[我/Agent\_Carrier]帶了[袋子/Theme\_Entity]

wŏ dài le dài zi

I carry ASP bag

'I carried the bag.'

### **5.5.3** Overviews of the Frame

According to the above, Mandarin caused-motion verbs can be categorized into different groups based on the distinct sets of frame elements and the defining patterns. This section gives an overview and summary of the above discussions of Mandarin caused motion frame.



Frame	Frame Elements	Representative Lemmas	Defining Patterns
Archiframe:	Mover, Moved	bān 搬 'move', yí 移 'move', tái 抬 'lift to	a. Mover [NP]< * <moved_entity[np]<{path}+locative [np]<="" td=""></moved_entity[np]<{path}+locative>
Caused Motion	Entity, Manner,	move', zài 載 'load', bān yùn 搬運 'move to	[周俊三/Mover]投[球/Moved_Entity][進/Direction+Endpoint][籃/Locative]
	Route NP,	transport', bān zài 搬載 'move to load', zài yùn	b. Mover [NP]< * <moved_entity[np]<manner<{path}+locative [np]<="" [vp]<="" deictic="" td=""></moved_entity[np]<manner<{path}+locative>
	Directional NP,	載運 'load to transport', zhuāng zài 裝載 'load',	[我/Mover]帶[學生/Moved_Entity][跑/Manner][到/Endpoint][校外/Locative][去 /Deictic]
	Locative NP, Deictic	tuī 推 'push', lā 拉 'pull', qiān 牽 'hold', tuō	c. Mover [NP]< * <moved_entity[np]<deictic [np]<="" [vp]<="" locative="" td=""></moved_entity[np]<deictic>
		拖 'drag', găn 趕 'rush', chè 撤 'recede', jǔ	[他/Mover]拉[我/Moved_Entity][去/Deictic][他家/Locative]
		舉 'lift', dài 带 'bring', ling 領 'lead', xī 攜	d. Mover [NP]< * <moved_entity[np]<{path}+locative <deictic="" [np]="" [vp]<="" td=""></moved_entity[np]<{path}+locative>
		'carry', dàiling 帶領 'lead', tóu 投 'throw', zhí	[媽媽/Mover]推[俊和/Moved_Entity][到/Endpoint][學校/Locative][去/Deictic]
		擲 'throw', diū 丢 'throw', rēng 扔 'throw',	1896
		chōng 沖 'flush', chuī 吹 'blow', shè 射	
		'shoot', shuāi 摔 'fall', <i>pēn</i> 噴 'spray', <i>yā</i> 壓	
		'press', pāi 拍 'tap'	
Primary	Mover, Moved	dài 帶 'bring', xī 攜 'carry', dài ling 帶領 'lead',	a. Mover [NP] < * < Moved_Entity[NP] < {Path} + Locative [NP] < (Deictic [VP])
Frame:	Entity, Manner,	shuài ling 率領 'lead', ling dǎo 領導 'lead', xī dài	[他/Mover]帶[她/Moved_Entity][到/Endpoint][學校/Locative]([去/Deictic])
Co-Movement	Route NP,	攜帶 'carry', jiá dài 挾帶 'carry'	b. Mover [NP]< * <moved_entity[np]<deictic [np]<="" [vp]<="" locative="" td=""></moved_entity[np]<deictic>

	Directional NP,		[他/Mover]帶[我/Moved_Entity][去/Deictic][他家/Locative]
	Locative NP, Deictic		c. Mover [NP]< * <moved_entity[np]<deictic [vp]<="" act="" target="" td=""></moved_entity[np]<deictic>
			[張春玉/Mover]便領著[姑娘們/Moved_Entity][去/Deictic][查房/Target_Act]。
			d. Mover [NP]< * <moved_entity[np]<{path}+locative <target="" [np]="" [vp]<="" act="" td=""></moved_entity[np]<{path}+locative>
			[我/Mover]領著[阿眉/Moved_Entity][回/Route+Direction+Endpoint][家/Locative][大吃一頓/Target_Act]。
Basic Frame 1:	Leader (Mover),	dài 帶 'bring', ling 領 'lead', dài ling 帶領 'lead',	a. Leader [NP]<* <leadee [np]<target_act="" [vp]<="" td=""></leadee>
Bringing to	Leadee (Moved	shuài ling 率領 'lead', ling dǎo 領導 'lead'	[他/Agent_Leader]每天帶著[成千的工人/Theme_Leadee][鑿山洞,造橋樑/Target_Act]。
	Entity), Deictic,		b. Leader [NP]<* <leadee [np]<="" [vp]<="" deictic="" target_act="" td=""></leadee>
	Target_Act		[老師/Leader]帶[小朋友/Leadee][去/Deictic][寫生/Target_Act]
			c. Leader [NP]<帶< Leadee[NP]
		4411	[他/Agent_Leader]在帶[班/Theme_Leadee]
Basic Frame 2:	Agent_Carrier	dài 帶 'bring', xī 攜 'carry', xī dài 攜帶 'carry', jiá	a. Agent_Carrier [NP]<* <theme_entity [np]<="" td=""></theme_entity>
Bringing with	(Mover),	dài 挾帶 'carry'	[我/Agent_Carrier]帶了[袋子/Theme_Entity]
	Theme_Entity		
	(Moved_Entity)		

**Table 12. Overview of the Caused Motion Frame** 

#### 5.6 Summary

Given the analysis of the Mandarin polysemic verb dài 帶 'bring', this section summarizes the discussions mentioned in the previous subsections. First of all, this study has suggested that dài 帶 'bring' as a caused-motion verb denoting an event of 'bringing to' is defined as the prototypical use and serves as the semantic base for the extensions of other meanings. It is postulated that through semantic profiling of different elements in the prototypical event of dài 帶 'bring', the subtypical uses of dài 帶 'bring' will be carried out as semantically interrelated facets of the base event. With the defined core senses, the semantic relations among other non-central meanings manifested by dài 帶 'bring' can also be accounted for through the extensions of the semantic attributes via the metaphorical transfer. Having proposed a frame-based and constructional account of the semantic interrelationships among the various meanings of dài 帶 'bring', the last part of this study further elaborates on the possible frame hierarchy of verb classes to categorize Mandarin caused-motion verbs into the multi-layered frames with frame-specific semantic components and representative syntactic patterns, following the framed-based taxonomy proposed by Liu and Chiang (2008)

# Chapter 6

### **Conclusion**

#### **6.1 Conclusion**

This thesis probes into the issue of the polysemy verb dài 帶 'bring' in Mandarin. By a close investigation of the corpus data, this study firstly aims to solve the issue as to how we can distinguish and thus categorize different senses underlying multi-faceted meanings of dài 帶 'bring' based on their corpus distributions. Through a thorough inspection on how different lexical meanings of dài 帶 'bring' manifested in different syntactic realizations, this study aims at identifying and clarifying the semantic correlations underlining the various uses of dài 帶 'bring'. The observations on the distributional frequency, collocational patterns, and semantic attributes manifested in different uses of dài 带 'bring' help to account for the following concern: what are the semantic criteria underlying each semantic class according to the syntactic behaviors? Adopting Frame Semantics (Fillmore and Atkins 1992) and Construction Grammar (Goldberg 1995), this study suggests that different senses of dài 帶 'bring' are associated with different sets of frame elements and through the integration of constructional patterns, the meaning distinctions of dài 帶 'bring' can be established.

With the defined semantic extensions of dài 帶 'bring' supported with corpus evidence, this study finally aims to disclose the semantic-to-syntactic correlations among the various meanings profiled by dài 帶 'bring'. Based on its grammatical distributions in relation to the various sense distinctions, it has shown that dài 帶 'bring' manifests a prototypical verb in the semantic category that falls into the caused-motion domain. On the basis of the semantic profile proposed by Langacker (1987), it is argued that two predominant meanings of dài 帶 'bring', lead and bring with, can be taken as a conceptual transfer from co-motion to co-action, pertaining to

the semantic configuration realized in the caused-motion conceptual domain. The resulatative state of co-motion can also be highlighted to derive the sense of co-existence. Based on the prototypical cases, it is postulated that other non-central meanings of  $d\hat{a}i$  "bring' can be accounted as semantically associating with co-motion through the extension of the semantic roles, evidenced with the colloconstructional variations.

Based on both semantic and syntactic observations on Mandarin verb dài 帶 'bring', this study has proved that the multi-faceted nature of dài 帶 'bring' is the consequence of semantic profile and semantic extensions from the most central meaning of dài 帶 'bring' as a caused-motion verb. It is shown that the interrelationships among the various uses are distinguished and correlated via the syntactic and semantic connections with the central domain and sub-domains of dài 帶 'bring'. With the support of frame-based and constructional-based accounts, the present study postulates a principled and systematic way to account for the multi-faceted meanings of dài 帶 'bring'— underlying the domain of caused-motion.

Finally, with the bottom-up analysis of the caused-motion verb *dài* 帶 'bring' in Mandarin, this thesis further incorporates the hierarchical taxonomy proposed by Liu and Chiang (2008) in an attempt to propose a top-down frame-based categorization of Mandarin caused motion verbs. Based on the prototypical Conceptual Schema of caused-motion event, Mandarin caused motion verbs are analyzed and categorized into different layers of frames, in which *dài* 带 'bring' belongs to the Co-movement Primary frame with the highlighted frame elements. Two other basic frames *Bringing to* and *Bringing wi*th are formed with the unique patterns foregrounding certain frame-specific elements.

This study has shed light on the widely discussed issue of verbal semantics with the focus on the polysemous verb dài 帶 'bring' in Mandarin. It provides a new

perspective in the investigation of verbal semantics by adopting the frame-based lexical constructional approach in delimiting semantically salient features pertaining to different lexical frames of *dài* 帶 'bring'. Moreover, this study also incorporates a constructional account that captures the form-meaning mapping correlations. Within such a framework, the analysis proposed in this study is well-substantiated with a detailed corpus analysis of colloconstructional variations. Therefore, we may conclude that this study indeed provides a clear case study that demonstrates the close interaction between semantics and syntax, lexicon and construction and also, cognition and language.

#### **6.2 Future Research**

Based on the result of the investigation on Mandarin verb dài 帶 'bring', there are still some potential issues that are worth for future explorations. First of all, due to that the scope of the study on Mandarin dài 帶 'bring' is only limited to a single lexeme, the possible combination of other lexeme with dài 帶 'bring', such as those V-V compounds as dàiyǒu 帶有, dàiling 帶領, xīdài 攜帶, pèidài 佩帶 or V-R compounds, as dàiqǐ 帶起, dàidòng 帶動, dàihǎo 帶好, are also worth discussing in terms of their semantic frames with respect to their syntactic and semantic behaviors and their comparison with the single lexical verb dài 帶 'bring' in terms of syntax and semantics. Second, since dài 帶 'bring' manifests multi-faceted meanings in nature, it will be interesting to make a synonym study on dài 帶 'bring' with its corresponded synonym forms, such as dài 帶 vs. ling 領 vs. shuài 'to lead', dài 帶 vs. xī 攜 vs. xiá 挾 'to bring with', or dài 帶 vs. hányǒu 帶有 'to be with.' Last but not the least, the contrast study on the Mandarin bringing verb dài 帶 'bring' with other languages is also an interesting issue to be tackled with for the future study.

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# **Website Resources**

Academic Sinica Balanced Corpus of Modern Chinese.

http://db1x.sinica.edu.tw/kiwi/mkiwi/

Chinese Word Sketch

http://wordsketch.ling.sinica.edu.tw/

FrameNet

http://www.icsi.berkeley.edu/~framenet/

Mandarin Verbnet

http://verbnet.nctu.edu.tw/verbnet/website/

Sinica BOW:

http://bow.sinica.edu.tw/ont/

Chinese WordNet:

http://lope.linguistics.ntu.edu.tw/cwn/