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外國語文學系外國文學與語言學碩士班

碩士論文

構詞語序與語意範疇:

指示位移詞與移動動詞的互動關係

The Morphological Sequence and Semantic Range:

Deictic Referencing in Motion Events

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中 華 民 國 一 ○ 二 年 七 月

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摘要

　　本研究以整合詞彙語意與語序的移動事件概念基模為本，探討指示位移詞與移動動詞的互動關係。本文繼承劉美君教授及其團隊所提出的一個典型移動事件的認知架構，用以分析、解釋並對移動動詞內部隱含之語意進行分類。此架構提供從上而下探究移動動詞之認知基礎，我們也進一步從下至上檢視語料庫顯示之詞彙搭配關係是否與之配合。本研究藉由構詞語序與語意範疇分析中文移動動詞與指示位移詞的序列限制，藉以更加明瞭指示位移詞在移動事件中的語意特徵。

　　另外，追循 Fillmore 和 Atkins (1992)所提出的框架語意理論 (Frame Semantics)及 Liu 和 Chiang (2008) 提出的「中文動詞語意網」之架構，本研究也對中文指示位移詞與移動動詞的關係進一步做階層性的分類。藉由觀察中文指示位移詞在實際語料中所呈現的認知概念基模、語法表現、及語意特徵等等，將其由上往下分入「主框架 (Archiframe)」、「首要框架 (Primary frame)」、以及「基本框架 (Basic frame)」之中。

　　綜合以上，本研究深入探討中文移動動詞與指示位移詞的互動關係，藉由移動事件之認知基礎以及語料庫顯示之詞彙搭配關係，進一步闡明指示位移詞在移動事件中的語意特徵。過去的研究並未對移動事件中不同位置的指示位移詞的語意多加著墨。本研究特別提出指示位移詞在不同的語序之中有不同的語意特徵，而不同位置的指示位移詞出現的語境也不盡相同。本研究的成果藉由語法位置與語意關係的互動，顯示語言形式與語意的搭配關係。

關鍵字：中文移動動詞、指示位移詞、構詞語序、語意範疇、框架語意

The Morphological Sequence and Semantic Range:
Deictic Referencing in Motion Events

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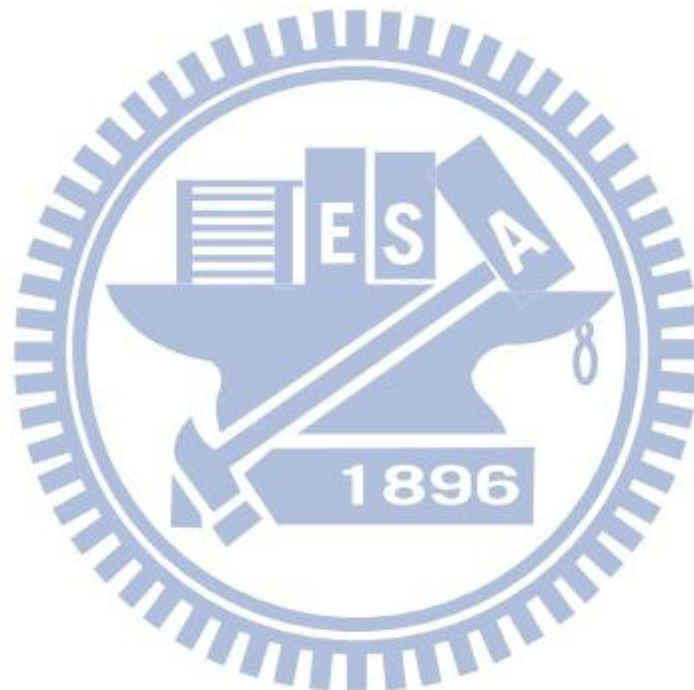**National Chiao Tung University**

Abstract

This paper explores the issues of the morphological sequence and semantic range of deictic referencing in motion events. Based on the Deictic-Incorporated Proto-Motion Event Schema in Mandarin proposed in Liu et al. (2012), we aim to provide a top-down analysis of the conceptual structure of motion with Deictics of Motion and a bottom-up examination of corpus-based collocations. By probing into the proto-motion event with Deictics of Motion, the study ultimately offers an account of the sequencing of Mandarin motion verbs with Deictics of Motion and the possible ranges of deictic meaning.

The Deictics of Motion are also analyzed with a frame-based taxonomy, following the classificational scheme established in Liu and Chiang (2008) with an extendable hierarchy of semantic scopes: Archiframe > Primary frame > Basic frame > Microframe.

Given the analysis above, we investigate the interaction between Mandarin motion verbs and Deictic of Motion. This study manifests the semantic features of Deictic of Motion by looking at the corpus-based collocations with conceptual structure of motion with Deictics of Motion. Since the semantic features of Deictic of Motion in different positions with motion verbs are not fully discussed in previous

studies, we focus on the Deictic of Motion in different positions, namely Pre-Loc Deictic of Motion vs. Post-Loc Deictic of Motion. They show many distinctions in their semantic features and in contexts. Hopefully, this research will contribute to the correlation between form and meaning.

Keywords: Mandarin Motion Verbs, Deictic of Motion, Morphological Sequence, Semantic Range, Frame Semantics

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Chapter 1

Introduction

1.1 The Background

Motion is one of the fundamental and basic cognitive concepts which constitute daily events for human. The concept of motion is widely realized to a variety of spatial activities and also metaphorically extended to non-spatial relations. Some famous studies on motion events include conceptual structure (Langacker 1987), event structure (Jackendoff 1993), typological classification (Talmy 1985, Slobin 2004), lexicalization patterns (Talmy 2000), and scalar structure (Rappaport Hovav and Levin 2010), showing that the issue of motion events has taken an important place in the past decades.

To approach the typological classification of languages, Mandarin Chinese was categorized as a satellite-framed language based on the two-way classification by Talmy (2000). However, Tai (2003) found that Chinese presents a problem for Talmy's typological classification of motion verbs since it appears to be treated as a satellite-framed as well as verb-framed language. Tai indicated that Chinese owns action-result compound in which V1 conflates Motion and Co-event while V2 conflates Motion and Path. Tai argued that V2 in Chinese action-result compound is the center of predication and therefore better treated as a main verb. To be more specific, Slobin (2004) has investigated the lexicalization patterns in Mandarin and proposed the third type of classification to better accommodate Mandarin motion events. He has indicated that Mandarin belongs to the equipollently-framed languages where both components Manner and Path are equally encoded in verbs in a given serial verb construction of motion. In addition to Manner and Path, Chen and Guo

(2009) proposed that the serial verb construction normally allows the order of Manner + Path + Deictic. Moreover, to further analyze the component of Deictic, Lin (2011) suggested that, under the mechanism of the scalar structure from Rappaport Hovav and Levin (2010), the deictic morphemes in Mandarin profile the boundedness and duration of a scale. In addition to the internal features of the deictic components, the incorporation of the Deictics of Motion into the serial verb construction is also discussed in Liu et al. (2012), where several conceptual components lexicalized in Mandarin motion construction has been identified to provide a fine-grained analysis.

1.2 The Issue

In Liu et al. (2012), it is proposed that when the Deictic of Motion co-occurs with a Loc-NP, it can precede or follow the Loc-NP, as the examples below show:

(1) a. 回 [來/去]$_{Deictic}$ [學校]$_{Loc-NP}$

     huí   lái/qù   xuéxiào

     return come/go school

     'come/go back to school'

    b. 回 [學校]$_{Loc-NP}$ [來/去]$_{Deictic}$

     huí   xuéxiào   lái/qù

     return school   come/go

     'come/go back to school'

Besides the different positions that *lái* 來 'come'/ *qù* 去 'go' can fit in, some distributional constraints are also observed in the following examples. Some verbs allow the Deictics of Motion *lái* 來 'come'/ *qù* 去 'go' to occur either before or after the Loc-NP, as in (2), while other verbs only allow *lái* 來 'come'/ *qù* 去 'go' to appear after the Loc-NP as in (3). There are also cases that prefer *lái* 來 'come'/ *qù* 去 'go' to precede the Loc-NP as in (4):

(2) V+ Loc-NP +來/去 & V+來/去+ Loc-NP

    a. 它跳<u>桌上</u>來了！

       tā   tiào zhuōshàng lái   le

       3SG jump table.top come PRF

       'It jumped onto the table.'

       (Google 2012/10/08)

    b. RIO 喜歡跳<u>來</u>桌上看我打電腦，

       RIO xǐhuān tiào-lái   zhuōshàng kàn   wǒ   dǎ   diànnǎo

       NM   like jump-come table.top   watch 1SG play computer

       'RIO likes to jump onto the table to watch me play the computer.'

       (Google 2012/10/08)

    c. 寒風夾雪撲<u>進</u><u>門</u>來，

       hánfēng   jiá   xuě   pū-jìn   mén   lái

       cold-wind   bring snow   flap-enter door come

       'The cold wind bring the snow into the house.'

       (Sinica Corpus)

    d. 外國資本家可以堂而皇之<u>進</u>來<u>大陸</u>，

       wàiguó zīběnjiā   kěyǐ   tangérhuángzhī jìn-lái   dàlù

       foreign capitalist MOD   make.no.secret   enter-come mainland

       'Foreign capitalists can make no secret of their entering into the mainland.'

       (Sinica Corpus)

(3) V+ Loc-NP +來/去 vs. *V+來/去+ Loc-NP

    a. 我<u>到</u><u>中國</u>來已經快一年了，

       wǒ   dào   zhōngguó lái   yǐjīng kuài   yì   nián   le

1SG arrive China come already almost one year PRF

'I have come to China for almost a year.'

(Sinica Corpus)

b. *到來/去中國

dào-lái/qù   zhōngguó

arrive-come/go China

c. 你不往熱鬧流行的地方去，就沒有機會上電視。

nǐ bù wǎng rènào liúxíng de dìfang qù jiù méi

you NEG toward bustling popular REL place go then NEG

yǒu jīhuì shàng diànshì

have chance up TV

'If you don't go to bustling and popular places, you won't have a chance to show up on TV programs.'

(Sinica Corpus)

d. *往來/去熱鬧流行的地方

wǎng-lái/qù   rènào liúxíng de dìfang

toward-come/go bustling popular REL place

(4) ?V+ Loc-NP +來/去 vs. V+來/去+ Loc-NP

a. 其中一次單車的飛起來降來地面後，我單車的後胎又爆了。

qízhōng yí cì dānchē de fēiqǐlái jiàng-lái dìmiàn

among one time bicycle GEN fly.up.come descend-come ground hòu

wǒ dānchē de hòutāi   yòu bào le

after 1SG bicycle GEN back.tire again burst PRF

'Once, after my bicycle flew up and landed, its tire on the back burst again.'

(Google 2012/12/11)

b. ?降地面來/去

jiàng   dìmiàn lái/qù

descend ground come/go

c. 氫氣球用細線牽好，用它的上升力把禮物吊在氣球上，**升去** <u>2 樓</u>。

qīng   qìqiú   yòng xì   xiàn   qiān hǎo   yòng tā   de

hydrogen balloon use   thin thread tie   solid use   3SG NOM

shàngshēnglì   bǎ lǐwù diào zài   qìqiú   shàng shēng-qù èrlóu

rise.ascend.force BA gift hang ZAI balloon above ascend-go two.floor

'Tie the hydrogen balloon with a thin thread and hang the gift on it, so that its

buoyance can take the gift to the second floor.'

(Google 2012/12/11)

d. ?升 <u>2 樓</u>**來/去**

shēng   èrlóu   lái/qù

ascend two.floor come/go

In sum, there are two basic sentence patterns in the above examples: "V+ Loc-NP +來/去" and "V+來/去+ Loc-NP". The difference of the patterns lies in the position of the Deictics of Motion. As we can see, *lái* 來 'come'/ *qù* 去 'go' can precede or follow the Loc-NP. Some motion verbs such as *tiào* 跳 'jump' and *jìn* 進 'enter' fit in both positions, while other motion verbs do not. Verbs such as *dào* 到 'arrive' and *rù* 入 'enter' are incompatible with *lái* 來 'come'/ *qù* 去 'go' following them immediately, and those such as *jiàng* 降 'descend' and *shēng* 升 'ascend' are rarely found in the sentence pattern "V+ Loc-NP +來/去".

From the observations above, there are still some issues to be further investigated:

1) **What are the distributional patterns of the Mandarin Deictics of Motion *lái* 來 'come'/ *qù* 去 'go' with different sequence of motion?**

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2) What are the syntactic and semantic constraints on deictic marking in terms of sequence principles and semantic compatibility?

3) What are the preferred motion sequences with deictic marking? And why?

To account for these issues, this study focuses on the interaction between Mandarin Deictics of Motion and self-motion verbs, attempting to provide a detailed analysis on the sequences.

1.3 Scope and Goal

Within the research, sequences of "V+ Loc-NP +來/去" and "V+來/去+ Loc-NP" will be discussed. In terms of the verbs, we focus on self-initiated motion verbs for the usages of these motion verbs are simpler and involve less participant roles that might complicate the issues we are going to investigate. However, it is highly probable that the analysis can apply to that of other motion verbs in these sequences for future study.

As for the deictic elements *lái* 來 'come'/ *qù* 去 'go', they are used to specify many meanings in real use, such as directional meanings and resultative meanings. Nevertheless, they are limited to the directional meanings in this research, given that the research focuses on the deictic marking in self-initiated motion events. Moreover, the usage of *lái* 來 'come'/ *qù* 去 'go' preceding manner verbs, such as *wǒmen lái/qù pǎobù* 我們來/去跑步 'let's go running', is not included in the research.

In addition, for the Loc-NP here, it is actually an abbreviation of the Locative NP, referring to the destination of a path. However, not all NPs of location we are going to discuss are Loc-NPs. Therefore, we will change the Loc-NP into Locational nouns when necessary.

Within the scope, the goal of this study is to account for the different

distributional patterns and constraints of the Deictics of Motion with self-motion verbs and locational NPs. This study may lead to a better understanding of the semantic range of the Mandarin Deictics of Motion.

1.4 Organization of the Thesis

The thesis is organized as follows: Chapter 1 is the general introduction of the study. Chapter 2 reviews previous works related to studies on the notion of deictic, the sequence of deictic, locational nouns and motion verbs, and semantic roles of the locational nouns after deictic. Chapter 3 describes the database, theoretical framework and methodology applied in this study. Chapter 4 presents the findings. Chapter 5 proposes an analysis of deictic marking in motion events and a frame-based analysis of Mandarin Deictics of Motion. Lastly, Chapter 6 concludes the study and suggests further research topics.

Chapter 2

Literature Review

2.1 The Motion Event

Motion is one of the fundamental domains in human experience. There are two approaches to investigate a motion event. First, studies on lexicalization patterns (e.g., Talmy 2000) and syntax-to-semantics alternation (e.g., Levin 1993, Rappaport Hovav and Levin 2010) look for the semantic components lexicalized in verbs of motion, trying to explore verb-internal lexical features. On the other hand, studies on semantic frames (c.f. Fillmore and Atkins 1992) attempt to identify the frame-specific elements coexisting in a motion event, i.e., verb-external participant roles.

It is proposed in Talmy (2000) that the basic motion event consists of four major components: an object (the Figure) moving with respect to another object (the Ground) along a path (Path) with the motional act Move, which is normally combined with Manner, the way the Figure object moves. The following two examples are given to illustrate these basic semantic components:

(5) a. English:

 The rock slid   down   the hill.   (Talmy 2000:28)

 [Figure] [Move+Manner]   [Path]   [Ground]

 b. Spanish:

 La botella entró   en la cueva   (flotando).   (Talmy 1985:69)

 [Figure]   [Move+Path]   [Ground]   [Manner]

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The above examples show that the four major components are universal in describing motion events.

Besides Talmy's research, there may be another approach to find out more lexical meanings. Fillmore and Atkins (1992) provided a frame-based approach in which 'a word's meaning can be understood only with reference to a structured background of experience, beliefs, or practices, constituting a kind of conceptual prerequisite for understanding the meaning.' In their view, a verb evokes a semantic frame, in which the semantics of the verb is complemented with the participant roles related. The frame-evoking verb is semantically specified with a set of core participant roles. In the current Frame Semantics framework, motion is treated as an abstract and general frame. The motion frame specifies that "some entity (Theme) starts out in one place (Source) and ends up in some other place (Goal), having covered some space between the two (Path)." Thus, the three semantic roles Source, Path, and Goal, together with the Theme, are now four basic frame elements of motion.

The two traditional approaches present two different ways of defining semantic components. For instance, the crucial semantic component PATH receives different treatments in different approaches. It may be lexicalized verb-internally as a semantic attribute in the meaning of the verb *enter*, or it can be specified verb-externally as a frame participant realized in the prepositional phrase [*into*+NP], serving as a core frame element in the structured background.

2.2 Deictic Verbs

There are many studies on deictic verbs, such as the semantics of "come" in Fillmore (1966), the distinction between "come" and "go" in Levinson (1983), and the classification of "come" and "go" in Levin and Rappaport (1992). It is mentioned in

Levinson (1983: 83) that "come" suggests "moving towards the speaker's location at coding time (i.e. the moment of utterance)" while "go" implies "moving away from the speaker's location at coding time." Such deictic concept is widely applied in languages including Mandarin.

In Mandarin, *lái* 來 'come' and *qù* 去 'go' belong to verbs that have built-in deictic components. The semantics of *lái* 來 'come'/ *qù* 去 'go' is investigated in many studies. For instance, it is mentioned in Huang (1982: 145) that they are pure motion verbs and do not have associated with them any notion of means or manner of movement. The means or manner of movement is usually expressed by a verb occuring before the deictic verb, as in the following examples:

(6) 他跑來/去了

    tā pǎo lái/qù le

    3SG run come/go PRF

    'He came/went by running.'

(7) 他走著來/去了

    tā zǒu zhe lái/qù le

    3SG walk DUR come/go PRF

    'He keeps coming/going by walking.'

Within the above examples, the verb *pǎo* 跑 'run' and *zǒu zhe* 走著 'keep walking' indicate repectively the manner and the means with which the movement toward the speaker in the case of *lái* 來 'come', or away from the speaker in the case of *qù* 去 'go'. The similar basic meaning of the deictic verbs, *lái* 來 'come'/ *qù* 去 'go', is also discussed in Tang (1979: 302) and Chao (1980: 234).

Moreover, Liu (1998) provides the definition and the schemas[1] of *lái* 來 'come'/ *qù* 去 'go' as follows:

(8) 來: 表示人或物通過動作向立足點移動[2] (Liu, 1998:51)　　　○ ⟶ X̄

(9) 去: 表示離開立足點向另一處所趨近[3] (Liu, 1998:67)　　X ○ ⟶ ☐

The above schemas further specify the relation between the movement and the speaker. In the schema of *lái* 來 'come', the mover moves toward the location where the speaker stands, while in the schema of *qù* 去 'go', the mover moves away from the speaker and toward another location.

2.3 Deictic Complements

Besides the semantics of *lái* 來 'come'/ *qù* 去 'go', the morphological possible combinations of *lái* 來 'come'/ *qù* 去 'go' and other verbs are also discussed. According to Chao (1980), verbs specifying directions such as *lái* 來 'come', *qù* 去 'go', *shàng* 上 'go up', *xià* 下 'go down', *jìn* 進 'enter', *chū* 出 'exit', *qǐ* 起 'rise', *huí* 回 'return', *guò* 過 'pass', *kāi* 開 'go away', *lǒng* 攏 'gather' may be used as the main verb of a sentence or combined with other verbs to form verb-complement compounds. Therefore, as either a verb or a complement, *lái* 來

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[1] The circle, the arrow, the box, and the cross represent respectively the mover, the direction, the location, and the deictic center.

[2] "Come" represents that a person or a thing moves toward the deictic center through motion.

[3] "Go" represents that a person or a thing moves away from the deictic center and moves toward another location.

'come'/ *qù* 去 'go' is included in four types of directional constructions suggested by Chao (1980):

Type (1): verbs or complements: *lái* 來 'come', *qù* 去 'go', eg. *sòng-qù* 送去 'send'

Type (2): verbs or complements: *shàng* 上 'go up', *xià* 下 'go down', *jìn* 進 'enter', *chū* 出 'exit', *qǐ* 起 'rise', *huí* 回 'return', *guò* 過 'pass', *kāi* 開 'go apart', *lǒng* 攏 'gather', eg. *zǒu-kāi* 走開 'walk away'

Type (3): double complements formed with a type 2 followed by a type 1 complement, eg. *rēng-guò-qù* 扔過去 'toss over'

Type (4): verbs which can form single complements but no double complement with type 1, eg. *pèn-dǎo le zhuōzi* 碰倒了桌子 'knock down the table'

From the above, we may conclude that *lái* 來 'come'/ *qù* 去 'go' can be used as directional verbs such as those in type (1) and also as directional complements such as those in type (3) when combined with other directional complements. Moreover, *lái* 來 'come'/ *qù* 去 'go' cannot co-occur with some complements in type (4), such as *dǎo* 倒 'down' in *pèng.dǎo* 碰倒 'knock down' or *fān* 翻 'turn over' in *dǎ.fān* 打翻 'spill'.

The similar point that *lái* 來 'come'/ *qù* 去 'go' can serve as verbs or complements is also held in Lamarre (2009: 6). Verbs such as *zǒu* 走 'walk' belong to co-event verbs, which range from typical *manner verbs* in self-agentive motion sentences (eg. walk, run, hurry, rush, swim, crawl) to verbs expressing a direct cause of motion (eg. call, cheat, meet, get, invite, borrow, rescue...). As for *lái* 來 'come'/ *qù* 去 'go' after the co-event verbs, they fall into a small subset of path verbs expressing path meanings that will be grammaticalized into path directionals (or

satellites) and appear after co-event verbs. The path directionals consist of two components: non-deictic and deictic. Both of the components along with co-event verbs enter three distinct syntactic positions in a fixed order: [Co-event Verb+non-deictic Path Satellite+diectic Path Satellite], as shown in the following table.

Table 1. Mandarin twofold Path Satellites[4]

P_{nd} \ P_d	zero ∅	up shang*	up qi*	down off xia	in jin	out chu	back hui	over, past through guo	to dao**
zero ∅	∅	上 shang	起 qi	下 xia	進 jin	出 chu	回 hui	過 guo	到 dao
lai hither	來 lai	上來 shanglai	起來 qilai	下來 xialai	進來 jinlai	出來 chulai	回來 huilai	過來 guolai	到…來 dao…lai
qu thither	去 qu	上去 shangqu	/	下去 xiaqu	進去 jinqu	出去 chuqu	回去 huiqu	過去 guoqu	到…去 dao…qu
zǒu away	走 zǒu	/	/	/	/	/	/	/	/

Table 1 lists the main path satellites, to show how deictic and nondeictic items combine.

2.4 Deictic Morphemes in the Scale Structure

Lin (2011) adopted the scale structure proposed in Rappaport Hovav and Levin (2010) in distinguishing scalar and non-scalar morphemes. Instead of the traditional two-way classification of motion morphemes into manner-of-motion morphemes and path morphemes (Talmy 2000), Chinese motion morphemes can be further classified into four subtypes based on three features defining a scale, which are the existence of a scale, boundedness, and punctuality. Nonscalar change motion morphemes are equivalent to manner-of-motion morphemes in Talmy (2000), whereas the other three types are subtypes of Talmy's path morphemes, as the figure below shows:

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[4] In the table, P_{nd} refers to non-deictic Path satellites, and P_d refers to deictic satellites.

Figure 1. Four-way classification of English motion verbs
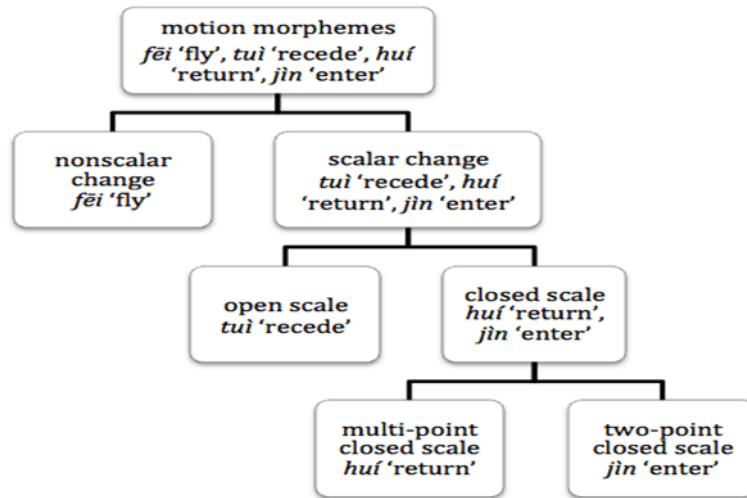
The deictic morphemes *lái* 來 'come'/ *qù* 去 'go' are treated as multi-point closed scale motion morphemes which are durative and bounded. The motion takes place along a scale that has an endpoint (i.e., bounded) and there are multiple points along the scale (i.e., durative).

2.5 The Alternation of Deictic of Motion and Locative NPs

The feature of boundedness in deictics has been elaborate in Lin's research (2011: 133-134). It is proposed that when a ground NP is absent, *lái* 來 'come'/ *qù* 去 'go' must be present. However, when a ground NP is present, they become optional. The following examples illustrate the observation above:

(10)　a. *他回了

　　　tā huí le

　　　he return PRF

　　　b. 他回學校了

　　　tā huí　　xuéxiào le

　　　he return school PRF

　　　'He returned to school.'

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c. 他回來/去了

tā huí-lái/qù le

he return-come/go PRF

'He came/went back.'

d. 他回學校(來/去)了

tā huí xuéxiào lái/qù le

he return school come/go PRF

'He returned to school.'

We can see from the above examples that when the ground NP *xuéxiào* 學校 'school' is absent, *lái* 來 'come'/ *qù* 去 'go' must be present, as in (10c), or the sentence would be ungrammatical, as in (10a). However, when a ground NP is present, as in (10d), *lái* 來 'come'/ *qù* 去 'go' becomes optional.

The reason to account for the observation is that the function of *lái* 來 'come'/ *qù* 去 'go' after the motion morphemes is to satisfy their requirement for ground information. Some morphemes, such as *chū* 出 'exit', *huí* 回 'return', and *jìn* 進 'enter', require explicitly expressed ground in a motion event. Besides direction of motion, the deictic verbs *lái* 來 'come'/ *qù* 去 'go' also lexically specify the ground (the deictic center indicated by *lái* 來 'come'/ *qù* 去 'go').

The same issue has been discussed in Liu et al. (2012) as well. It is proposed that either a Deictic or a Loc-NP can serve as a delimiting Endpoint. The Deictics help to locate a Speaker-centered endpoint.

Moreover, either a Loc-NP or a Deictic may serve as a locational reference. A Deictic marker is not semantically required as an inherently essential component to the motion schema but adds a subjective interpretation by putting the Speaker as a reference point. If a Loc-NP is taken as the objective reference for a motion event, then a Deictic may serve as the subjective reference, which is probably why a Deictic

may alternate with a Loc-NP in marking the delimiting point of motion.

2.6 The Sequencing of Deictic Complements, Locative NPs, and Self-motion Verbs

On top of the combination of *lái* 來 'come'/ *qù* 去 'go' and other directionals, there are also studies on the syntactic sequences of deictic complemenets and locative NPs. According to Lamarre (2009: 11), when all three items co-occur with a locative NP, they are only found in the sequence [Co-event Verb+ non-deictic Path Satellite+ locative NP + diectic Path Satellite] (eg. *fēi-huí běijīng qù* 飛回北京去 'fly back to Beijing'), but not in another sequence (eg. *fēi-huí-qù běijīng* *飛回去北京.) The issue is also tackled in Chao (1980: 233-41), in which *zǒu-chū mén lái* 走出門來 'walk out of the door' is acceptable while *zǒu-chū-lái mén* *走出來門 or *zǒu mén chū-lái* * 走門出來 is not. The idea that locative NPs fall in only one pattern of sequence but not others is mentioned in many studies as well, such as in Zhu (1982: 128), Zhang (1991: 6), Li (2005: 18), Ye (2005: 318), and Cai (2006: 67-68).

However, it is also noted that in some southern Sinitic languages like Taiwanese and Cantonese, the locative NP follows the deictic element of a verb-directional compound. (Lamarre, 2009: 11). Some examples of the locative NP following the deictic element of a verb-directional compound are also found in Cai (2006: 68).

The similar issue that the locative NP may follow the Deictics of Motion is also investigated in Liu (2012). It is said that the concept of Deictic is independent from the notion of motion event but they could be integrated. To take a closer look at Deictic from the following corpus data, we found that Deictic has its own schema which contains two elements, Deictic and Locative NP. Moreover, we may draw the conclusion that the position of Deictic is flexible from the two examples below. It can be placed before or after the Locative NP.

(11) a. 回來/去學校

     huí   *lái/qù*   *xuéxiào*

     return   come/go school

     'to come/go back to the school'

  b. 回學校來/去

     huí   *xuéxiào* *lái/qù*

     return   school   come/go

     'to come/go back to the school'

Therefore, the schema of the Deictic is as the following figure:

Figure 2. The schema of Deictic

[Locative NP] ⬌ | Deictic |

Moreover, Pre-Loc 來/去 often follows a Direction before the Endpoint-marking 到 and Post-Loc 來/去 often follows the Loc-NP. Thus, it is possible to have two Deictics, as exemplified below (Liu et al. 2012):

(12) 樹葉飛落下<u>來</u>到河裡<u>去</u>

shùyè   *fēi* *luò* *xià* <u>*lái*</u> *dào* *hé* *lǐ* <u>*qù*</u>

leaf fly fall go.down come   arrive   river inside   go

'The leaf flew down from the tree and into the river.'

Besides, it is argued that the Deictic is incorporated into a motion event to refer to the speaker-oriented perspective and hence involves its schema in the Proto-Motion Event Schema proposed in Liu et al. (2012). The integration of these two schemas is shown below:

Figure 3. The Deictic-incorporated Proto-Motion Event Schema

Deictic-Incorporated Proto-Motion Event Schema in Mandarin

Path

| Manner | → | Route | → | Direction | → | Endpoint | → | [Locus NP] | ↔ | Deictic |

跑'run'
飛'fly'
跳'jump'
爬'crawl'
滾'roll'

經 'pass'
移 'move'

向/往'face'

到/至'arrive'
入 'enter'

來'come'
去'go'

降'descend'/升'ascend'
退'recede' / 落'fall'
--------------------回 'return'--------------------
上'go up'/下'go down'
進 'enter'/出'exit'
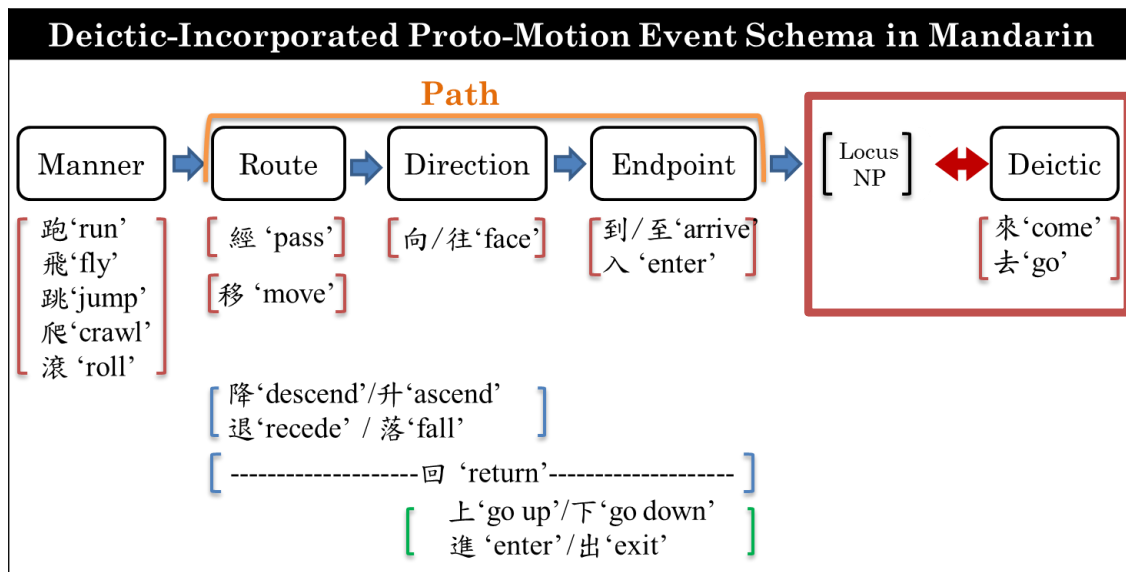
In the schema, we use double-edged arrow to indicate the possible positions of Deictic around the Locative NP. Deictic can occur after or before the Locative NP, as the schema above shows.

2.7 The Semantic Roles of the Locative NPs after Deictic Complements

Besides the acceptable and unacceptable sequences, the semantic role of the NPs following Path verbs is also discussed. It is argued by Lamarre(2009) that the semantic relationship varies between Path verbs and their object Gound NP.

Table 2. Semantic Roles of the object Ground NP following Path verbs

Vnd	SOURCE	ROUTE	GOAL
過	∨(過橋)		
出	∨(出國)	∨(出門)	∨(出洋)
下	∨(下船)	∨(下山)	∨(下海)
上		∨(上山)	∨(上台)
回			∨
到			∨
Vd			
來			∨
去			∨

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From Table 2, we see that deictic verbs *lái* 來 'come'/ *qù* 去 'go' take GOAL NPs as their objects. However, since Lamarre (2009) temporarily leaves out the possibilities of the sequence [Co-event Verb+ non-deictic Path Satellite+ deictic Path Satellite + locative NP], the semantic role of the locative NP following the deictic element of a verb-directional compound is not mentioned.

From what we've discussed above, there are some areas in which we may further investigate. For example, we may look into the reason why *lái* 來 'come'/ *qù* 去 'go' is syntactically or semantically incompatible with some motion verbs, and compare the differences between the sequence "V+ Locational Noun +來/去" and the less discussed sequence "V+來/去+ Locational Noun". For now, this paper will first focus on the relations between *lái* 來 'come'/ *qù* 去 'go' and self-motion verbs.
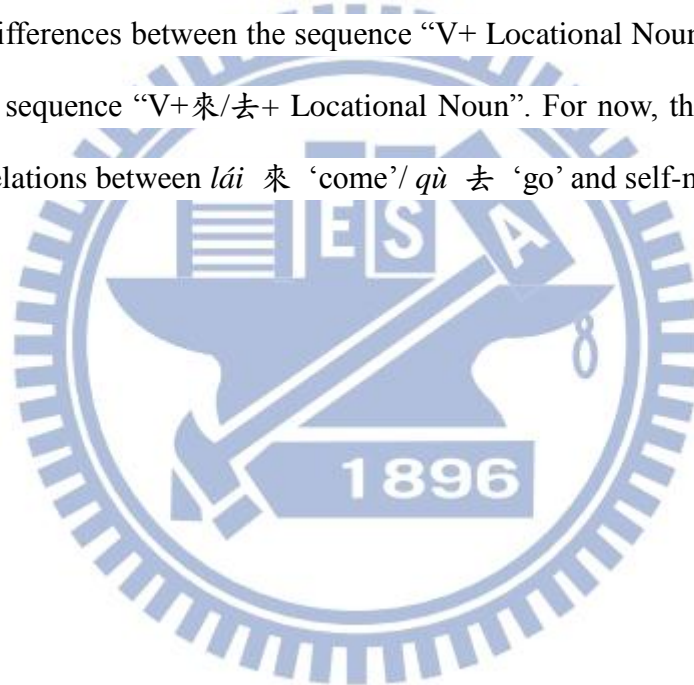
Chapter 3

Database, Theoretical Framework and Methodology

3.1 Database

The corpus data used in this study come from Academic Sinica Balanced Corpus of Modern Chinese (http://dbo.sinica.edu.tw/SinicaCorpus/index.html), which involves numerous texts with topics in society, life, literature, philosophy, science, and art; the Chinese Word Sketch (http://wordsketch.ling.sinica.edu.tw/), which contains grammatical co-occurrence statistics and differences of distribution patterns. Other sources used in this study are the FrameNet (http://framenet.icsi.berkeley.edu/) and the online search engine Google (http://www.google.com/webhp?hl=zh-TW).

3.2 Theoretical Framework

Three theoretical frameworks will be introduced in the following sections.

3.2.1 Frame Semantics

The study is based on corpus observation and adopts Frame Semantics (Fillmore and Atkins 1992) as the research approach.

It is noted by Fillmore and Atkins that meanings of a word can be understood simply with its background frame which motivates the concept of the word. Each frame contains specific core frame elements, and word senses are distinguished by their highlighting different frame elements. Profiling different semantic elements will lead to different syntactic realizations.

3.2.2 Lexicalization Patterns

In search of syntactically relevant lexical components, Talmy maintains that it is possible to 'isolate elements separately within the domain of meaning and within the domain of surface expression' (2000:57).

He proposes that the basic motion event consists of four major components: an object (the Figure) moving with respect to another object (the Ground) along a path (Path) with the motional act Move, which is normally combined with Manner, the way the Figure object moves.

3.2.3 Integration of Verb-external and Verb-internal Approaches

A cognitively-motivated, iconically-structured framework is proposed in Liu et al. (2012) to represent a prototypical motion event. It is called the Proto-motion Event Schema (PMS). This iconic contour may be applied to sequences of sub-motion events as well as sequences of sub-motion morphemes, as shown in the following figure.

Figure 4. Sub-motion events vs. sub-motion morphemes
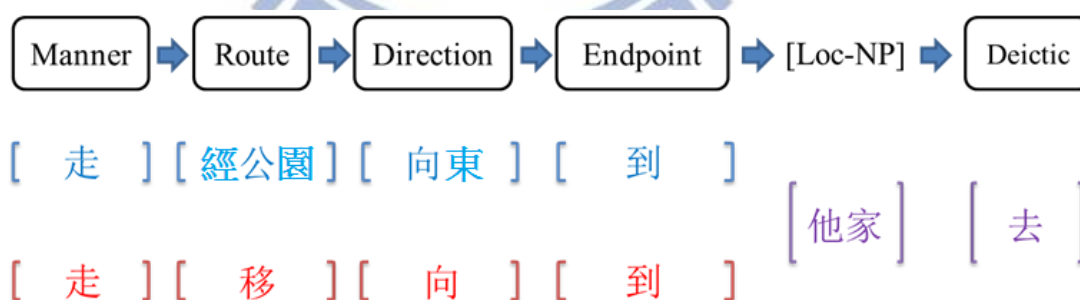
By identifying the semantic components pertaining to a proto-motion event and incorporating them in an iconic sequence, the proposed PMS, as represented below, provides an overarching template to integrate frame-based role components (cf. Fillmore and Atkins 1992) with lexically specified semantic attributes (cf. Talmy

2000).

Figure 5. The Proto-motion Event Schema in Mandarin
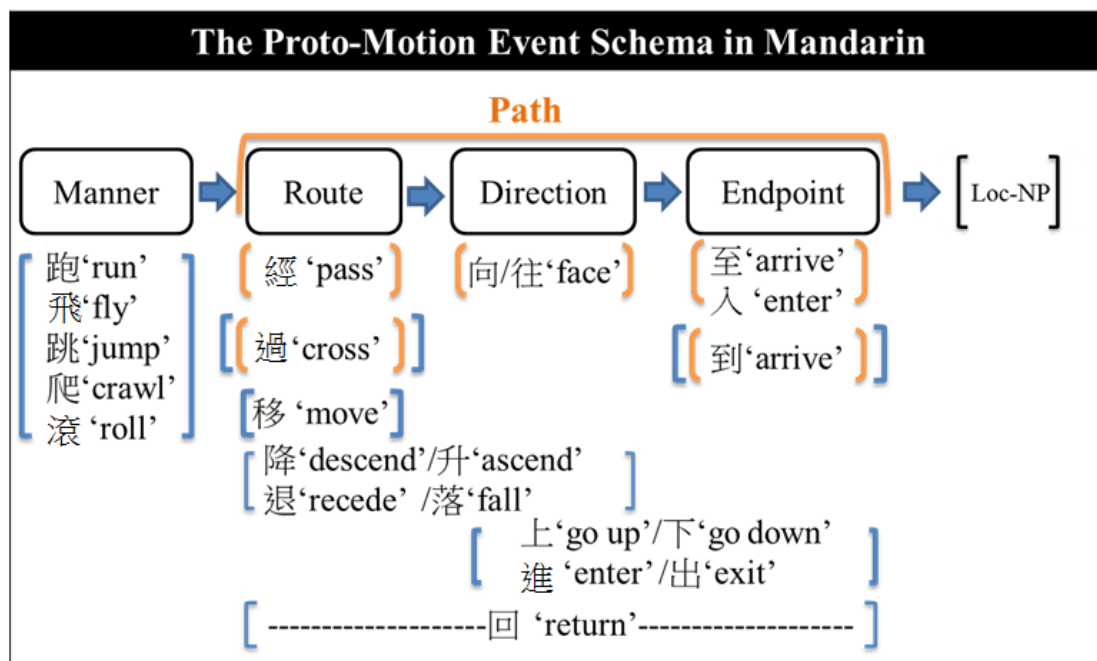
3.3 Methodology

To capture and analyze the distributional patterns and sequential constraints on deictic marking, four steps are taken as follows:

Step 1: Collecting Corpus Data — "V+來/去+ Locational Noun"

We collect the data of the sequence "V+來/去+ Locational Noun". The verb in the sequence refers to the self-motion verbs in Mandarin. We take the self-motion verbs from the Deictic-incorporated Proto-Motion Event Schema in Liu et al. (2012) as lemmas to fill in the sequence and start the search. The lemmas include 20 self-motion verbs, which are *zǒu* 走 'walk', *pǎo* 跑 'run', *pá* 爬 'crawl', *gǔn* 滾 'roll', *tiào* 跳 'jump', *fēi* 飛 'fly', *guò* 過 'pass', *jìn* 進 'enter', *chū* 出 'exit', *shàng* 上 'go up', *xià* 下 'go down', *huí* 回 'return', *luò* 落 'fall', *dào* 到 'arrive', *rù* 入 'enter', *cháo* 朝 'face', *wǎng* 往 'face', *jiàng* 降 'descend', *tuì* 退 'recede', *shēng* 升 'ascend'.

After deciding the lemmas for the verb, we collect the corpus data for the sequence "V+來/去+ Locational Noun". First, we log in the Chinese Word Sketch, where one can search data there from both the Chinese Gigaword and the Sinica Corpus. After we log in, we press the New Query. Then, we press Word Sketch on the top so that we can see the collocations that the Chinese Word Sketch has roughly classified for each word and phrase. We choose the corpus first, such as Sinica or Gigaword. Then, We choose one lemma and combine it with the Deictics of Motion, such as *zǒu lái* 走來 'walk-come', and enter it in the blank called Word Form. The Minimum Frequency below the Word Form is set from 5 to 1 so that we will not miss any collocations occurring with the phrase. After the things above are done, we press the button Show Word Sketch. Many collocations with the phrase *zǒu lái* 走來 'walk-come' would appear, such as the preposition phrases, the modifiers, the subjects, and the objects. Within the collocations, we focus on the objects to see whether there is any locational noun. If there is any, we will click on the data and the whole context will show up. After checking the validity of the data, we may or may not keep it.

Another way we collect the data is through the Google Search Engine. We combine the self-motion verbs with Deictics of Motion and any locational nouns we can think of, such as *zǒu lái cāntīng* 走來餐廳 'walk-come restaurant', *zǒu qù cāntīng* 走去餐廳 'walk-go restaurant', *zǒu lái fángjiān* 走來房間 'walk-come room', *zǒu qù fángjiān* 走去房間 'walk-go room', etc. When we search these phrases, we put them in quotation marks so that the Google will search the exact same phrase.

Step 2: Collecting Corpus Data — "V+ Locational Noun +來/去"

After collecting the data of the sequence "V+來/去+ Locational Noun", we also search for the data of "V+ Locational Noun +來/去". The lemmas used are basically

the same. However, the method of collecting the data is a little different. In the blank of Word Form, we type in the verb alone, such as *zǒu* 走 'walk'. Within the collocations shown, we focus on the objects of the locational nouns as well. After clicking on certain locational noun, such as *shānlù* 山路 'mountain road', we use the button Filter to find the occurences that end with Deictics of Motion. We type in Deictics of Motion in Word Form, such as *lái* 來 'come'/ *qù* 去 'go', and set the Filter in the positive status so that the result will be the occurences WITH the Deictics of Motion. After pressing Filter Concordance below, we get the data of "V+ Locational Noun +來/去".

We also use Google to collect data of the sequence with the same method mentioned above.

Step 3: Examining the Data

We examine the data in syntactic patterns and constraints, the interaction between the self-motion verbs and the Deictics of Motion, the types of the locational nouns co-occurring with Deictics of Motion, and the semantic contribution of the Deictics of Motion.

Step 4: Analyzing the Data

Some distinctions between the two sequences are found from the corpus data. The distinctions are highly related to the self-motion verbs they combine with. The interaction between the self-motion verbs and the Deictics of Motion shed light on the semantics of the Deictics of Motion in different positions. Besides, the locational nouns also play an important role in accounting for the distinction of the two sequences.

Step 5: Incorporating the Analysis into a Frame-based Hierarchical Structure

Following the assumption that meanings of verbs can only be defined in semantic frame with profiled lexical elements (Fillmore and Atkins 1992, Goldberg 2005), Mandarin motion verbs are analyzed and categorized by a frame-based hierarchical taxonomy, by Liu and Chiang (2008) with a multi-layed structured classification of semantic frames: Archiframe > Primary frame > Basic frame > Microframe. 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.

In general, we will provide a corpus-based approach to see the collocational differences of *lái* 來 'come'/ *qù* 去 'go' and offer a frame-based anaylsis on Deictic of Motion.

Chapter 4

Findings

This chapter aims to present and describe the findings obtained in corpus observations. The study examined the syntactic and semantic behaviors of the Deictics of Motion in different positions from a number of aspects: 1) the sentence patterns 2) the interaction between the self-motion verbs and the Deictics of Motion; 3) the types of the locational nouns co-occurring with Deictics of Motion; 4) the semantic con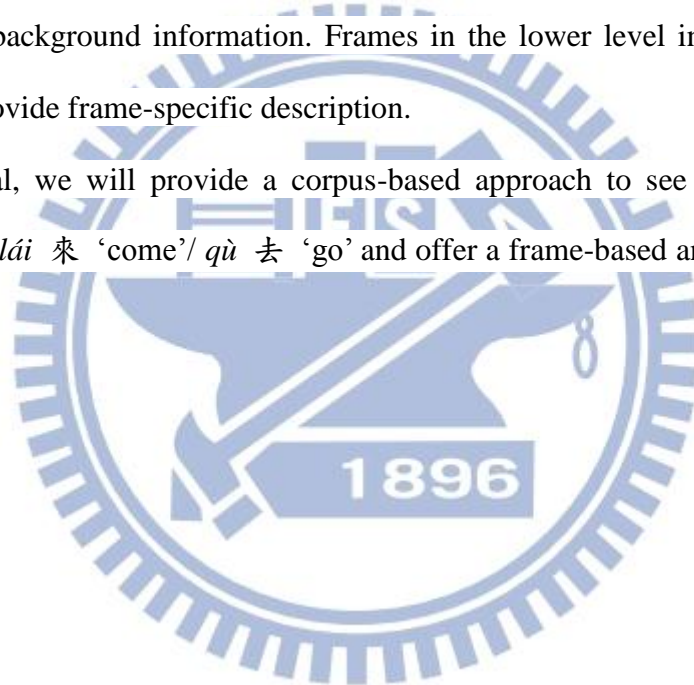tribution of the Deictics of Motion. Based on the findings, the Deictics of Motion in the two sequences can be further analyzed.

4.1 Corpus Observations of Deictics of Motion

Deictics of Motion fit in several sentence patterns. Within the sentence patterns, some elements are often involved. Deictics of Motion often occurs with Figure, Manner verbs, Path verbs, and locational nouns, including Ground, Directional NPs, and Locative NPs.

In the motion events with Deictic of Motion, a moving entity (Figure) adopts a particicular way of movement (Manner verbs) or a particular path of movement (Path verbs). With a certain manner or path of motion, the moving entity decides on the motional contour in which it may move toward a location (Directional NP) and reach its final destination (Locative NP). Also the moving entity may launch a movement without a specific motional contour taking place in a setting (Ground). Incorporated into Motion, Deictics of Motion serve as an optional marker indicating the spatial orientation in relation to the deictic center, the Speaker.

In the Corpus, we observe that most data follow the motion sequence proposed in

Liu et al. (2012) below:

Figure 6. Deictic-Incorporated Proto-Motion Event Schema in Mandarin
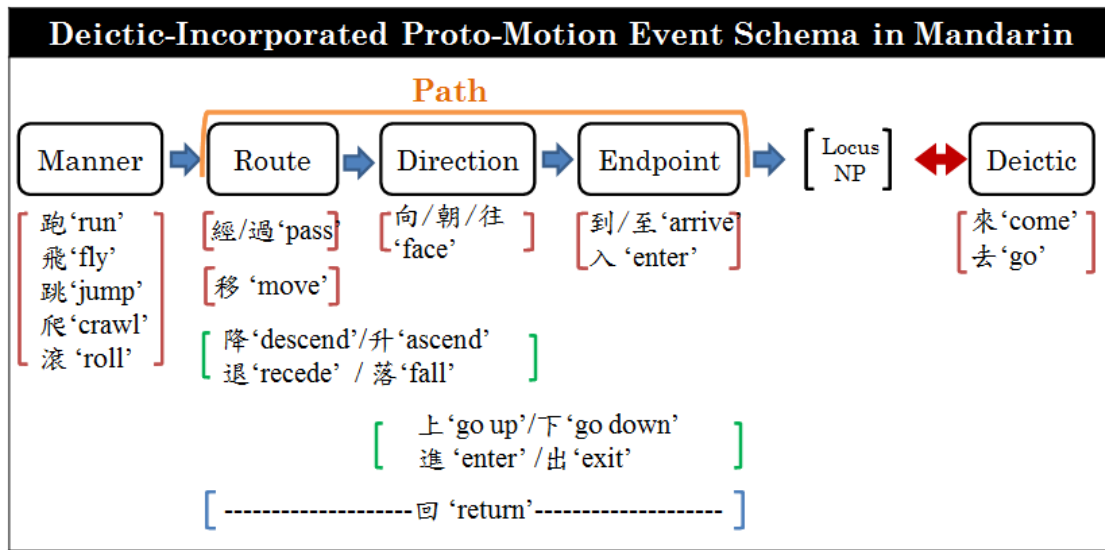
The sentence patterns are shown in the following table:

Table 3. Sentence Patterns of Deictics of Motion

Sentence patterns	Examples
Figure < ＊	[他/figure]來了 *tā　lái　le* 3SG come PRF 'He came.' (Sinica Corpus)
Figure < ＊ < Loc-NP	[我/figure]來[臺灣/ Loc-NP]已經五年多了。 *wǒ　lái　táiwān　yǐjīng wǔ　nián* 1SG come Taiwan already five year *duō　le* more PRF 'I came to Taiwan for more than five years.'

	(Sinica Corpus)
Figure < ＊ < {到} < Loc-NP	[我/figure]來到[台灣/ Loc-NP]了！ *wǒ lái dào táiwān le* 1SG come arrive Taiwan PRF 'I came to Taiwan.'
Figure < V$_{manner}$ < ＊ < Loc-NP	[我/figure][跑/ V$_{manner}$]去[附近的便利商店/ Loc-NP]， *wǒ pǎo-qù fùjìn de* 1SG run-go nearby DE *biànlìshāngdiàn* convenience.store 'I ran to the convenience store nearby.' (Google 2013/03/26)
Figure < V$_{manner}$ < Loc-NP < ＊	[年輕人/figure]都[跑/ V$_{manner}$] [外面/ Loc-NP]去了， *niánqīng rén dōu pǎo wàimiàn qù* young people all run outside go *le* PRF 'Young people all ran outside.' (Sinica Corpus)
Figure < V$_{manner}$ < Ground NP < ＊	[我們/figure] [走/ V$_{manner}$] [古道/ Ground NP]去 *wǒmen zǒu gǔdào qù* 1PL walk old.trail go

	'We went walking at the old trail.' (Google 2013/03/26)
Figure < V_path < ＊< Loc-NP	[她們/figure]每天從醫院[回/ V_path]來 [精舍/ Loc-NP] *tāmén měi tiān cóng yīyuàn* 3PL every day from hospital *huí-lái jīngshè* return-come temple 'They returned to the temple from the hospital every day.' (Chinese Gigaword)
Figure < V_path < Loc-NP< ＊	[所有人/figure]全部[下/ V_path] [一樓/ Loc-NP]去 *suǒyǒu rén quánbù xià* all people all go.down *yīlóu qù* first.floor go 'All people went down to the first floor.' (Google 2013/03/26)
Figure < V_path < ＊	[他/figure] [回/ V_path]去了 *tā huí-qù le* 3SG return-go PRF 'He went back.' (Sinica Corpus)

Figure < {往/朝} < Directional NP< ＊	有[人/figure]往/朝[屋裡/Directional NP]來了 *yǒu rén wǎng/cháo wūlǐ lái* have person toward house.inside come *le* PRF 'There was someone coming toward the house.' (Sinica Corpus)
Figure < V$_{manner}$ < V$_{path}$ < ＊ < Loc-NP	[表姐/figure] [走/ V$_{manner}$] [進/ V$_{path}$]來[房間/ Loc-NP]， *biǎojiě zǒu-jìn-lái fángjiān* cousin walk-enter-come room 'My cousin walked into the room.' (Google 2013/03/26)
Figure < V$_{manner}$ < V$_{path}$ < Loc-NP< ＊	[我/figure]今天要用走的[走/ V$_{manner}$] [回/ V$_{path}$] [家裡/ Loc-NP]去 *wǒ jīntiān yào yòng zǒu de* 1SG today MOD use walk DE *zǒu-huí jiālǐ qù* walk-return home go 'I would walk back home today.' (Google 2013/03/26)
Figure < V$_{manner}$ < V$_{path}$ < ＊	[蚊子/figure]都[跑/ V$_{manner}$] [進/ V$_{path}$]來了

	wénzi dōu pǎo-jìn-lái le
	mosquito all run-enter-come PRF
	'Mosquitoes all came inside.'
	(Google 2013/03/26)

From the data above, there are two major observations.

First, *lái* 來 'come'/ *qù* 去 'go' fits in three main positions, which are Post-Loc position, Pre-Loc position, and Pre-Loc position with *dào* 到 'arrive', as the examples below show:

(13) a. Post-Loc position: 所有人全部下[一樓/ Loc-NP]去

　　b. Pre-Loc position: 她們從醫院回來[精舍/ Loc-NP]

　　c. Pre-Loc position with 到: 我來到[台灣/ Loc-NP]了！

Second, the Loc-NP can be optional when *lái* 來 'come'/ *qù* 去 'go' follows a path verb.

(14) a. 我今天走 [回/ V$_{path}$] (家裡) 去

　　b. 我今天走 [回/ V$_{path}$] 去(家裡)

4.2 The Commonly-found Sequence "V+來/去+ Locational Noun"

Though previously considered unacceptable, as in Chao (1980: 233-41), Zhu (1982: 128), Zhang (1991: 6), Li (2005: 18), Ye (2005: 318), and Cai (2006: 67-68), the sequence "V+來/去+ Locational Noun" is common in Taiwan Mandarin. The following are some corpus data:

(15) 我**爬去床上**睡下了.

　　wǒ   pá-qù   chuángshàng shuìxià   le

　　1SG crawl-go   bed.top   sleep   PRF

　　'I crawled to bed to sleep.'

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(Google 2012/12/11)

(16) RIO 喜歡**跳來桌上**看我打電腦，

RIO xǐhuān tiào-lái　　zhuōshàng　kàn　　wǒ　dǎ　diànnǎo

NM　like　jump-come　table.top　watch　1SG　play　computer

'RIO likes to jump onto the table to watch me play the computer.'

(Google 2012/10/08)

(17) 我當場氣炸,直接**跳去床上**不跟他說話直接睡覺!

wǒ　　dāngchǎng　　qìzhá zhíjiē tiào-qù chuángshàng bù　　gēn tā

1SG　　at.the.scene　　furious directly jump-go　bed.top　　NEG with 3SG

shuōhuà zhíjiē　　shuǐjiào

speak　　directly　sleep

'I was so furious at the scene that I jumped to bed to sleep instead of talking to him.'

(Google 2012/12/11)

(18) 我獨自**飛來美國**~

wǒ　dúzì　fēi-lái　měiguó

1SG alone fly-come　USA

'I came to the USA by plane alone.'

(Google 2012/12/11)

(19) 老妹又**飛去美國**了

lǎomèi　　　yòu　fēi-qù　měiguó le

younger.sister　again　fly-go　USA　PRF

'My younger sister flew to the USA again'

(Google 2012/12/11)

(20) 茶杯自己**滾去地上**

chábēi zìjǐ gǔn-qù dìshàng

tea.cup self roll-go ground

'The tea cup rolled to the ground itself.'

(Google 2012/12/11)

(21) 熊**跑去洞裡**冬眠，

xióng pǎo-qù dònglǐ   dōngmián

bear   run-go cave.inside winter.sleep

'The bear went inside the cave to hibernate.'

(Google 2012/12/11)

(22) 我們**走去山上**拍照，

wǒmén zǒu-qù shānshàng   pāizhào

1PL   walk-go mountain.top take.picture

'We walked to the mountain top to take pictures.'

(Google 2012/12/11)

(23) 她那年就已經**過來台灣**玩了。

tā   nà nián   jiùyǐjīng guò-lái   táiwān wán le

3SG that year   already pass-come Taiwan play PRF

'She has come to Taiwan to play since that year.'

(Google 2012/12/11)

(24) 他希望我和女兒能儘快**過去美國**和他一起生活.

tā   xīwàng wǒ   hé   nǚér   néng   jìnkuài   guò-qù

3SG hope   1SG and daughter MOD as.soon.as.possible   pass-go

měiguó gēn   tā   yìqǐ   shēnghuó

USA   and 3SG together   live

'He hoped that my daughter and I go to the USA to live with him as soon as

possible.'

(Google 2012/12/11)

(25) 外國資本家可以堂而皇之**進來大陸**，

wàiguó zīběnjiā   kěyǐ   tangérhuángzhī   jìn-lái   dàlù

foreign capitalist MOD   make.no.secret   enter-come mainland

'Foreign capitalists can make no secret of their entering into the mainland.'

(Sinica Corpus)

(26) 買了站票的乘客，想**進去餐廳**、

mǎi le   zhànpiào de   chéngkè xiǎng jìn-qù   cāntīng

buy ASP stand.ticket REL passenger want   enter-come restaurant

'Passengers who had bought the ticket wanted to go inside the restaurant.'

(Google 2012/12/11)

(27) 瑞娜珊將自己變回人形，**出來庭院**透透氣，

ruìnàshān jiāng zìjǐ   biànhuí   rénxíng   chū-lái   tíngyuàn

NM   DISP self   change.back human.shape out-come   yard

tòutòuqì

breathe.the.air

'Rinassan transformed back into human and came out to the yard to get some air.'

(Sinica Corpus)

(28) 我們取車時，只看到小女童獨自一人先行**下來停車場**，

wǒmén qǔ   chē   shízhǐ   kàndào xiǎo nǚtóng dúzì   yì   rén

1PL   take car   time just   see   little   girl   alone one person

xiānxíng   xià-lái   tíngchēchǎng

beforehand go.down-come   parking.lot

'When we went to get our car, we saw the little girl come down to the parking lot alone beforehand.'

(Google 2012/12/11)

(29) 王順霞要越過手扶梯維修孔**上去二樓**時，不慎踩空，

wángshùnxiá yào yuè-guò   shǒufútī   wéixiūkǒng   shàng-qù

NM   want go.over-pass escalator   fix.hole   go.up-go

èrlóu   shí   búshèn   cǎikōng

second.floor time careless   slip

'When Wangshunxia wanted to cross over the fix hole of the escalator and go up to the second floor, she slipped out of carelessness.'

(Google 2012/12/11)

(30) 少年仔都**出去外地**打拼，

shàoniánzài dōu chū-qù wàidì   dǎpīn

teenagers   all   exit-go foreign.land strive

35

'Teenagers all went out to other places to make a living.'

(Chinese Gigaword)

(31) 楊文蔚每星期都要從新竹**上來台北**團練一次，

yangwénwèi měi xīngqí dōu yào cóng xīnzhú shàng-lái   táiběi tuánliàn

NM   every week all want from NM   go.up-come NM team.practice

yí   cì

one time

'Yangwenwei came from Hsinchu to Taipei once a week to practice for her

team.'

(Chinese Gigaword)

(32) 兩個人**下去餐廳**叫菜上來三個人分，

liǎng ge rén   xià-qù   cānting jiàocài shàng-lái sān ge   rén

two CL person go.down-go restaurant order go.up-come three CL person

fēn

share

'Two people went down to the restaurant to order some food for three people.'

(Chinese Gigaword)

(33) 她們每天從醫院**回來精舍**，

tāmén měi   tiān cóng yīyuàn huí-lái   jīngshè

3PL   every day from hospital return-come temple

'They returned to the temple from the hospital every day.'

(Chinese Gigaword)

(34) 他還是必須**回去醫院**驗尿作檢查。

tā   háishì bìxū   huí-qù   yīyuàn   yàn   niào zuò jiǎnchá

3SG still   have.to return-go hospital   test   urine do checkup

'He still had to return to the hospital to do checkups by testing the urine.'

(Chinese Gigaword)

The above corpus data show that the sequence "V+來/去+ Loc-NP" is common in Taiwan Mandarin.

4.3 The Sequential Constraints of Deictics of Motion with Motion Verbs

Some distributional constraints of *lái* 來 'come'/ *qù* 去 'go' and self-motion verbs are found as the following table shows. Self-motion verbs are divided into three groups according to their behaviors when combined with Deictics of Motion.
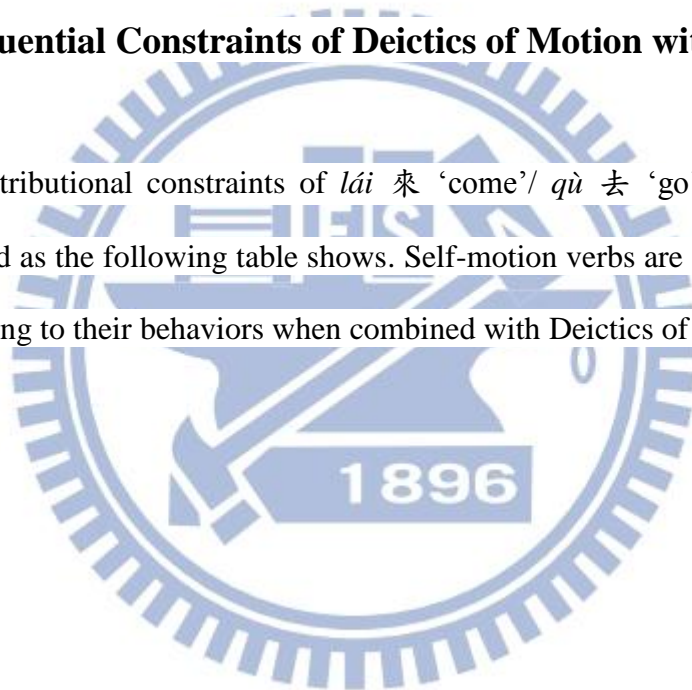
Table 4. Distributional constraints of 來/去 with motion verbs

	Verbs	V+NP+來/去	V+來/去+NP
Group 1	走	我們走山上去	我們走去山上
	跑	人都跑外面來了	人都跑來外面了
	爬	蟑螂爬桌上來	蟑螂爬來桌上
	滾	寶寶滾地上去了	寶寶滾去地上了
	跳	女孩跳地上來	女孩跳來地上
	飛	爸爸飛美國來了	爸爸飛來美國了
	過	她過台灣來	她過來台灣
	進	外國資本家進大陸來	外國資本家進來大陸
	出	瑞娜珊出庭院來	瑞娜珊出來庭院
	上	楊文蔚上台北去	楊文蔚上去台北
	下	小女童下停車場來	小女童下來停車場
	回	她們回精舍去	她們回去精舍
	落	黃葉一片片落地上去	黃葉一片片落去地上
Group 2	到	我到中國來	*我到來中國
	入	油注入孔裡去	*油注入去孔裡
	往	你往熱鬧流行的地方去	*你往去熱鬧流行的地方
	朝	竿子朝你來了	*竿子朝來你了
Group 3	退	?國民黨退台灣來	國民黨退來台灣
	降	?單車降地面來	單車降來地面
	升	?氫氣球升二樓去	氫氣球升去二樓

From Group 1, we see that these verbs appear in both sequences, where *lái* 來 'come'/ *qù* 去 'go' can both precede or follow the locational nouns. The verbs include *zǒu* 走 'walk', *pǎo* 跑 'run', *pá* 爬 'crawl', *gǔn* 滾 'roll', *tiào* 跳 'jump', *fēi* 飛 'fly', *guò* 過 'pass', *jìn* 進 'enter', *chū* 出 'exit', *shàng* 上 'go up', *xià* 下 'go down', *huí* 回 'return', *luò* 落 'fall'.

However, the role of the NPs following them is not the same. In the following table, we see that some verbs take NPs encoding both Endpoint and Ground, while

others take only NPs encoding Enpoint.

Table 5. The Role of the NPs Following Verbs of Group 1

V+NP+來/去	NP = Endpoint	NP = Ground
走古道去	O	O
跑操場去	O	O
爬樹來	O	O
滾地上來	O	O
跳彈簧床去	O	O
飛空中去	O	O
進屋內去	O	X
出戶外去	O	X
上二樓去	O	X
下地下室去	O	X
回老家來	O	X
過馬路去	O	X
落水裡來	O	X

From Group 2, it is clear that *lái* 來 'come'/ *qù* 去 'go' does not directly follow self-motion verbs such as *dào* 到 'arrive', *rù* 入 'enter', *wǎng* 往 'face', and *cháo* 朝 'face'. They only follow the locational nouns behind these verbs. However, in Group 3, *lái* 來 'come'/ *qù* 去 'go' prefers to directly follow self-motion verbs in the cases of *tuì* 退 'recede', *jiàng* 降 'descend' and *shēng* 升 'ascend' instead of following the locational nouns.

With the different distributional patterns, some questions may therefore arise here. In terms of verbs in Group 1, what is the difference between these verbs? Why do they take different NPs? Moreover, what may account for the ungrammatical sentences in Group 2? As for the verbs in Group 3, what may explain the differences between the preferred and the less preferred sequences?

4.4 The Sequential Constraints of Deictics of Motion with NPs of

Location

There are many types of NPs observed from the corpus data, and they interact with *lái* 來 'come'/ *qù* 去 'go' in very different ways. The NPs can be those denoting Endpoint (Loc-NPs) or Ground, or they can be Route and Directional Landmarks (a passing point or a directional noun). Moreover, they can be the NPs that have ambiguous interpretations of Source or Goal (Endpoint). In the following sections, Endpoint-denoting Loc-NPs will be introduced in 4.4.1, Groud-denoting NPs will be discussed in 4.4.2, Route and Directional Landmarks will be mentioned in 4.4.3, while the ambiguous interpretations of Source or Goal will be investigated in 4.4.4. Last, a summary of these NPs will be provided in 4.4.5.

4.4.1 Endpoint-denoting Loc-NPs

In general, Loc-NPs denote the boundaries (ie. the starting point or the destination) of the path of motion. It is common that the Loc-NPs precede or follow Deictics of Motion, as the examples show:

(35) a. 大家都<u>回家鄉去</u>了

　　　dàjiā　　　dōu　huí　jiāxiāng qù le

　　　everybody all　　return country go PRF

　　　'Everybody returned to their countries.'

　　　(Sinica Corpus)

　　　b. 爺爺今天要<u>回去永和</u>了，

　　　yéye　　jīntiān yào　huí-qù　yǒnghé le

　　　grandpa today MOD return-go　NM　PRF

　　　'Grandpa would return to Yonghe today.'

　　　(Sinica Corpus)

(36) a. 所有人全部<u>下一樓去</u>，

suǒyǒu rén   quánbù xià   yǐlóu   qù

all   people all   go.down first.floor go

'All people went down to the first floor.'

(Google 2013/03/26)

b. 他們**下去兒童泳池**嬉水。

tāmen xià-qù   értóng yǒngchí   xīshuǐ

3PL   go.down-go child   pool   play.with.water

'They went down to the children's pool to play.'

(Gigaword)

(37) a. 婆婆已經**上頂樓去**了；

pópo   yǐjīng   shàng dǐnglóu qù le

grandma already go.up top.floor go PRF

'Grandma went up to the top floor.'

(Google 2013/03/26)

b. 你可以購買 7 歐元的門票，然後攀爬 284 階樓梯**上去頂樓**，

nǐ   kěyǐ   gòumǎi qī   ōuyuán   de   ménpiào   ránhòu

2SG MOD buy   seven Europe.dollar DE   ticket   then

pānpá liǎngbǎi   bāshí   sì   jiē   lóutī shàng-qù dǐnglóu

climb   two.hundred eight.ten four floor stair go.up-go   top.floor

'You could buy the ticket of 7 Europe dollars and then climbed 284 stairs to the

top floor.'

(Google 2013/03/26)

(38) a. 女孩從床上**跳地上來**。

nǚhái cóng chuángshàng tiào dìshàng lái

girl   from bed.top   jump ground come

'The girl jumped from the bed to the ground.'

41

(Google 2013/03/18)

b. RIO 喜歡**跳來桌上**看我打電腦，

RIO xǐhuān tiào-lái   zhuōshàng   kàn   wǒ   dǎ   diànnǎo

NM   like   jump-come   table.top   watch   1SG   play   computer

'RIO likes to jump onto the table to watch me play the computer.'

(Google 2012/10/08)

(39) a. 爸爸又**飛美國來**了。

bàba   yòu   fēi měiguó lái le

father again fly America come PRF

'Father flew to America again.'

(Google 2013/03/18)

b. 張欣**飛來杭州**，給阿眉帶來很多東西，

zhāngxīn fēi-lái   hángzhōu gěi āméi dàilái hěnduō dōngxī

NM   fly-come NM   GEI NM bring   many   thing

'Zhangxin flew to Hangzhou and brought Amei many things.'

(Google 2013/03/18)

The above sentences all include Loc-NPs that denote the destination of the path with single Deictic of Motion. On top of that, it is possible that two Deictics of Motion occur with single Loc-NP in one sentence. For example, the following sentences show that there are two Deictics of Motion in one sentence and, moreover, there are some constraints on the distribution of the Deictics of Motion in such sentences:

(40)   a. 電梯升上**來**到屋頂**來**

diàntī   shēng   shàng lái   dào wūdǐng   lái

elevator ascend go.up come arrive roof.top come

''The elevator rose and came to the roof top.'

b. 電梯升上**來**到屋頂**去**

diàntī shēng shàng lái dào wūdǐng qù

elevator ascend go.up come arrive roof.top go

''The elevator rose and went to the roof top.'

c. *電梯升上**去**到屋頂**來**

diàntī shēng shàng qù dào wūdǐng lái

elevator ascend go.up come arrive roof.top go

d. 電梯升上**去**到屋頂**去**

diàntī shēng shàng qù dào wūdǐng qù

elevator ascend go.up come arrive roof.top go

''The elevator rose and went to the roof top.'

We can see from the above that there are two Deictics of Motion in each sentence. However, only sentence (C) is ungrammatical, given *qù* 去 'go' being the first Deictic of Motion and *lái* 來 'come' being the second Deictic of Motion. How do we account for the data?

4.4.2 Ground

The core meaning of Ground NPs specifies the maintenance of a stationary location[5]. Moreover, the Ground NPs are often observed to syntactically precede

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[5] The concept of Ground proposed in Talmy (2000) includes the "locatedness", i.e., maintenance of a stationary location.

Deictics of Motion as the examples below:

(41) 大家都**跑操場去**了，

dàjiā   dōu pǎo cāochǎng qù le

everybody all run field   go PRF

'Everybody went to run at the field.'

(Sinica Corpus)

(42) 大家都把車停在這**走古道去**了

dàjiā   dōu bǎ chē tíng zài zhè zǒu gǔdào   qù le

everybody all BA car stop at here walk old.trail go PRF

'Everybody parked their cars here and went walking at the old trail.'

(Google 2013/03/22)

When the NP refers to the Ground, it is the place where the Figure can perform a durative activity and the Figure does not change from one place to another during the motion. Therefore, we can say that the Figure *dàjiā* 大家 'everybody' goes running on the playground and has been running for ten minutes without changing the location, as the example below shows:

(43) 大家都跑**操場**去了, 已經跑了十分鐘了   (Ground/* Loc-NP)

dàjiā   dōu pǎo cāochǎng qù le   yǐjīng pǎo   le shí fēnzhōng le

everybody all run field   go PRF already run ASP ten minute PRF

'Everybody went to run at the field, and they ran for ten minutes.'

The interpretations of the NP *cāochǎng* 操場 'field' in the sentence can only be a Ground NP.

As a result, a Locational noun can be a Ground NP in two situations. First, when the verb *pǎo* 跑 'run' is used alone with the NP, the NP can only be a Ground NP. Second, when the Deictics of Motion follow the Locational noun, the noun can be a Ground NP. However, if we add the Deictics of Motion preceding the NP, the NP can

only be a Loc-NP. The examples below illustrate the situations:

(44) a. 大家跑<u>操場</u>   (Ground)

dàjiā   pǎo cāochǎng

everybody run field

'Everybody ran at the field.'

b. 大家跑<u>操場</u>去   (Ground/ Loc-NP)

dàjiā   pǎo cāochǎng qù

everybody run field   go

'Everybody went to run at the field/Everybody ran to the field.'

c. 我們都跑去<u>操場</u>了。(Loc-NP)

dàjiā   dōu pǎo qù cāochǎng le

everybody all run go field   PRF

'Everybody ran to the field.'

What intrigues us is that what factors contribute to the different interpretation of the NPs to be Ground NPs or Loc-NPs?

4.4.3 Route and Directional Landmarks

The other two types of NPs with Deictics of Motion are Route and Directional Landmarks. Specifically, Route Landmarks denote the place at any interval points of the path but not the destination, while Directional Landmarks show the direction that the subject is heading to but not the exact destination. They share the same feature that they do not co-occur with Deictics of Motion that follow them immediately. The following examples illustrate the distribution patterns:

(45) *Lái* 來 'come'/ *qù* 去 'go' with Route Landmarks

a. 他過橋來到河的這一邊。

tā   guò qiáo lái dào   hé   de   zhè yìbiān

3SG pass   bridge come arrive river GEN this side

'He passed the bridge to this side of the river.'

b. *他過來橋到河的這一邊。

tā   guò-lái   qiáo   dào   hé   de   zhè yìbiān

3SG pass-come bridge   arrive river GEN   this side

(46) *Lái* 來 'come'/ *qù* 去 'go' with Directional Landmarks

a. 竿子朝你來了，

gānzi cháo   nǐ   lái   le

stick toward 2SG come PRF

'The stick has come toward you.'

b. *竿子朝來你了，

gānzi cháo-lái   nǐ   le

stick toward-come 2SG   PRF

4.4.4 Ambiguous Interpretation: Source/Goal (Endpoint)

According to Lamarre (2009), it is proposed that Deictics of Motion *lái* 來 'come'/ *qù* 去 'go' usually take GOAL NPs[6], as the examples below show:

(47) *Lái* 來 'come'/ *qù* 去 'go' taking GOAL NPs

a. 子彈飛去美國了

zǐdàn fēi-qù měiguó le

bullet fly-go America PRF

'The bullet flew to America.'

(Google 2012/12/22)

b. 他們回去精舍

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[6] The notion GOAL Lamarre proposed is the same as the Enpoint or Loc-NP in the research.

tāmen huí-qù   jīngshè

3PL   return-go temple

'They returned to the temple.'

(Chinese Gigaword)

c. 外國資本家進來大陸

wàiguó zīběnjiā jìn-lái dàlù

foreign capitalist enter-come mainland

'Foreign capitalists entered the mainland.'

(Sinica Corpus)

Similarly, we found that when *lái* 來 'come'/ *qù* 去 'go' is combined with 出, it is often the case that *chū-lái* 出來 'exit-come' and *chū-qù* 出去 'exit-go' take GOAL NPs, such as the examples below from Sinica Corpus:

(48) a. 常常跟朋友出去外面走走

chángcháng gēn péngyǒu chū-qù wàimiàn zǒuzǒu

often   with friend   exit-go outside   walk

'(Someone) often went out with friends.'

b. 室內的樣子平常，像是出去附近購物未回的光景。

shìnèi   de yàngzi píngcháng xiàngshì chū-qù fùjìn   gòuwù wèi huí

room.inside DE look   normal   like   exit-go around shop NEG return

de guāngjǐng

DE scene

'It looked normal inside the house. It's like someone went out shopping and hadn't come back.'

c. 吸血鬼、小精靈和巫婆在萬聖節前夕會出來人間活動，

xīxiěguǐ xiǎojīnglíng hàn wūpó zài wànshèngjié qiánxì huì   chū-lái

vampire elf   and witch at Holloween eve   MOD exit-come

47

rénjiān   huódòng

human.world go.around

'Vampires, elves, and witches would go around in the human's world on the

Holloween Eve.'

d. 瑞娜珊將自己變回人形，出來庭院透透氣，

ruìnàshān jiāng zìjǐ   biànhuí   rénxíng   chū-lái   tíngyuàn

NM   DISP self   change.back human.shape out-come   yard

tòutòuqì

breathe.the.air

'Rinassan transformed back into human and came out to the yard to get some

air.'

e. 他出來外面就是，就不講話了。

tā   chū-lái   wàimiàn jiùshì jiù bù   jiǎnghuà le

3SG exit-come outside   just just NEG talk   PRF

'He came outside and didn't say anything.'

With GOALs as the prominent type of NPs following *chū-lái* 出來 'exit-come'

and *chū-qù* 出去 'exit-go', it is also found that they are capable of taking SOURCEs.

In other words, *chū-lái* 出來 'exit-come' and *chū-qù* 出去 'exit-go' provide two

potential semantic roles for their NPs—either a GOAL or a SOURCE.

The example below, in which the NP *cāntīng* 餐廳 'restaurant' can be a GOAL

or a SOURCE, may further exemplify the two possible interpretations of the NP

following *chū-lái* 出來 'exit-come' and *chū-qù* 出去 'exit-go'.

(49) 出來餐廳，去了趟紫水晶專賣店

chū-lái   cāntīng   qù le tàng zǐshuǐjīng zhuānmàidiàn

exit-come restaurant go ASP CL Amethyst shop

'(Somebody) went out of the restaurant and went to the Amethyst shop /came

48

out to the restaurant and went to the Amethyst shop on the way.'

(Google 2012/04/22)

If it is a GOAL, the sentence means that one goes to the Amethyst shop on his or her way to the restaurant. On the other hand, if it is a SOURCE, the sentence means that one goes to the Amethyst shop after he or she finish eating in the restaurant and leaves the restaurant.

After we observe the corpus data, it is found that *chū-lái* 出來 'exit-come' and *chū-qù* 出去 'exit-go' may take a SOURCE NP or a GOAL NP as in examples (47) and (48), which inevitably leads to the crucial question of how to account for such an ambiguity.

(50) NPs as SOURCE following *chū-lái* 出來 'exit-come' and *chū-qù* 出去'exit-go'

a. 回飯店之後休息了一會~又**出來**飯店玩玩~

huí fàndiàn zhīhòu xiūxí le yìhuǐ yòu chū-lái fàndiàn

return hotel after rest ASP a.while then out-come hotel

wánwán

   play

'After resting for a while in the hotel, we came out of the hotel to play.'

(Google 2012/12/26)

b. 佑佑**出去**房間再進來就是這副蠢樣

yòuyòu chū-qù fángjiān zài jìn-lái jiùshì zhè fù chǔnyàng

Yoyo out-go room then in-come exactly this kind silly.look

'Yoyo went out of the room and came in with this silly look.'

(Google 2012/12/26)

(51) NPs as GOAL following *chū-lái* 出來 'exit-come' and *chū-qù* 出去 'exit-go'

    a. 小悦**出來**<u>餐廳</u>吃飯都表現的好乖

    xiǎoyuè chū-lái   cāntīng   chīfàn   dōu   biǎoxiàn   de   hǎo   guāi

    NM   exit-come restaurant   eat.meal all   behave   DE   DEG good

    'Every time we come out to restaurants, Xioyue all behaves very well.'

    (Google 2012/12/26)

    b. 我們真的很少**出去**<u>餐廳</u>吃飯, 都在家裡自己煮!

    wǒmén zhēnde hěnshǎo chū-qù   cāntīng chīfàn dōu   zài jiālǐ   zìjǐ

    1PL   really   seldom   out-go restaurant eat   usually   at home   self

    zhǔ

    cook

   'We seldom went out to restaurants. We usually cooked on our own at

    home.'

    (Google 2012/12/26)

In the serial combination of *chū-lái* 出來 'exit-come' and *chū-qù* 出去 'exit-go', which is the head or main predicate? Is the determining factor syntactic or semantic?

4.4.5 Summary

From the above, we see that the Deictics of Motion interact with many types of NPs observed, which are Endpoint-denoting Loc-NPs, Ground, Route and Directional Landmarks, and Source/Goal. The interactions of each type with the Deictics of Motion shed light on the semantics of the Deictics of Motion. As a result, from the observations above, we may propose the following questions: What do the Deictics of

Motion exactly encode in their meaning? How will the encoded meaning affect the

way the Deictics of Motion interact with other elements.
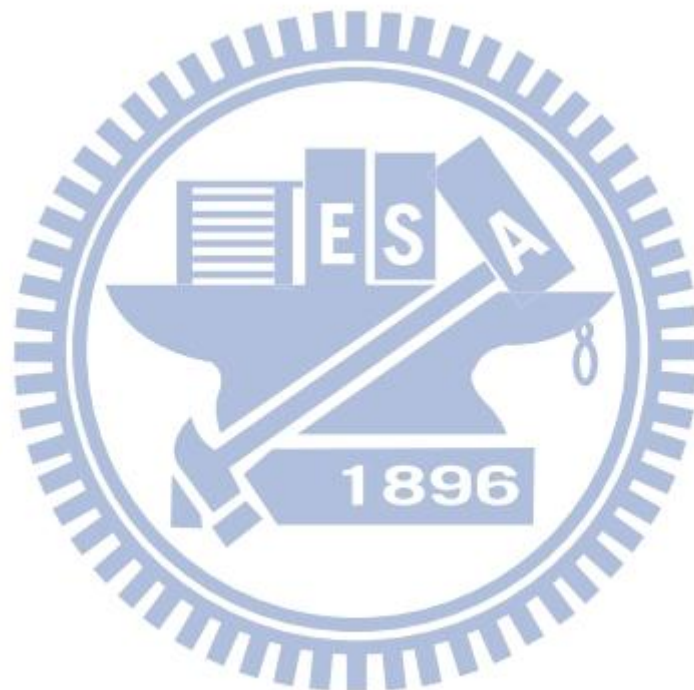
Chapter 5

Analysis

This chapter presents a frame-based analysis of Mandarin Deictics of Motion preliminarily. Section 5.1 describes the distributional patterns of the Mandarin Deictics of Motion with different sequence of motion. The distributional patterns of three groups of motion verbs will be illustrated and accounted for. Section 5.2 presents the syntactic and semantic constraints on locational nouns and Deictic Marking. Deictics of Motion in different positions have different impacts on the locational nouns preceding or following them. Section 5.3 shows the semantic prominence in the interpretation of locative role with the case of *chū-lái* 出來 'exit-come' and *chū-qù* 出去 'exit-go', proposing that semantic prominence may be the key to semantic precedence in selecting the semantic role. Section 5.4 introduces the conceptual schema postulated to capture the cognitive essence of Mandarin Deictics of Motion and the hierarchical structure within the Deictic Frame. An overview of the frames and the frame categorization are also presented.

5.1 The Distributional Patterns of the Mandarin Deictics of Motion with Different Sequence of Motion

As we have seen from Chapter 4, there are three groups of verbs which are classified according to their different distributional patterns with the Deictics of Motion. We will discuss the behaviors of the verbs in these three groups successively in the following sections.

5.1.1 Verbs in Group 1 with Deictics of Motion

For verbs in Group 1, they are grouped together because they all fit in both sequences "V+ Locational Noun +來/去" and "V+來/去+ Locational Noun". Then, what might account for the differences of these verbs?

As mentioned earlier, when the Deictics of Motion precede the NPs of location, the NP can only be Loc-NPs, as the examples show:

(52) a. 只能停在大馬路上, 慢慢的**走去古道**, 走好遠才到古道口...

zhǐ   néng tíng zài dàmǎlù shàng mànmànde zǒu-qù gǔdào   zǒu   hǎoyuǎn cái

only MOD stop at road   surface   slowly   walk-go old.trail walk so.long then

dào   gǔdàokǒu

arrive old.trail.entrance

'(Somebody) could only park the car on the road and walked to the old trail

slowly. It took a long way to the old trail entrance'

(Google 2012/12/11)

b. 下班後**跑去操場**運動,

xiàbān hòu   pǎo-qù cāochǎng yùndòng

off.duty after run-go field   exercise

'(Somebody) ran to the field to exercise after work'

(Google 2012/12/11)

c. 蟑螂會**爬來樹上**?

zhāngláng huì   pá-lái   shùshàng

cockroach MOD crawl-come tree.top

'Would cockroaches crawl onto the trees?'

(Google 2012/12/11)

d. 茶杯自己**滾去地上**

chábēi zìjǐ gǔn-qù dìshàng

53

tea.cup self roll-go ground

'The tea cup rolled to the ground itself.'

(Google 2012/12/11)

e. 小朋友們...**跳去彈簧床的另一邊**了．

xiǎopéngyǒumen tiào-qù tánhuángchuáng de lìngyìbiān le

children   jump-go spring.bed   DE other.side

'Children jumped to the other side of the spring bed.'

(Google 2012/12/11)

f. **飛來空中**的鳥棲息在樹枝上

fēi-lái   kōngzhōng de niǎo   qīxí zài shùzhīshàng

fly-come sky   DE bird   rest at   tree.branch.surface

'Birds that flew to the sky rested on the tree branches.'

(Google 2012/12/11)

g. 四名警員**進去屋內**，

sì   míng jǐngyuán jìn-qù   wūnèi

four CL officer   enter-go house.inside

'Four police offivers entered the house.'

(Gigaword)

h. 可以趁著假期，**出去戶外**走走，

kěyǐ   chèn   zhe   jiàqí   chū-qù   hùwài zǒuzǒu

MOD take.advantage DUR vacation exit-go outdoor walk

'(Somebody) could take advantages of the vacation and went outdoors to relax.'

(Gigaword)

i. 伊露莉喝了一杯啤酒之後**上去二樓**。

yīlòulì hē   le   yì bēi   píjiǔ zhīhòu shàng-qù èrlóu

NM   drink ASP one CL beer   after   go.up-go second.floor

'After Illilu drank a glass of beer, she went up to the second floor.'

(Google 2012/12/11)

j. 我躡手躡腳<u>下去地下室</u>參觀。

wǒ   nièshǒunièjiǎo xià-qù   dìxiàshì   cānguān

1SG quietly   go.down-go basement visit

'I went down to the basement quietly and looked around.'

(Google 2012/12/11)

k. 我剛<u>回來老家</u>了

wǒ   gāng huí lái   lǎojiā le

1SG just   return-come home PRF

'I just came back home.'

(Google 2012/12/11)

l. 我連忙跑過去，扶著老奶奶<u>過來馬路</u>。

wǒ liánmáng pǎo-guò-qù   fú zhe   lǎonǎinai guò-lái   mǎlù

I   hurry   run-pass-go hold DUR old.lady pass-come road

'I hurried over to help the old lady cross the road.'

(Google 2012/12/11)

m. 我的眼淚<u>落來水裡</u>，沒有任何人看見。

wǒ   de yǎnlèi luò-lái   shuǐlǐ méiyǒu rènhé rén   kànjiàn

1SG DE tear   fall-come water no   any   person see

'No one saw my tears fall into the water.'

(Google 2012/12/11)

On the other hand, when the Deictics of Motion follow the NPs with some motion verbs, it is also the case that the NPs can only be Loc-NPs, such as the examples below:

(53) a. 我們<u>進屋內去</u>吧！

wǒmen jìn   wūnèi   qù ba

1PL   enter house.inside go BA

'Let's go inside the house.'

(Google 2012/12/11)

b. 悶了一星期,又不能**出戶外去**...

mēn le   yì xīngqí yòu bùnéng chū hùwài   qù

stuff ASP one week then MOD exit outdoor go

'(Somebody) felt upset for a week and could not go outdoors.'

(Google 2012/12/11)

c. 懶的爬樓梯的朋友還可以偷個懶利用電梯**上二樓去**。

lǎnde pá   lóutī de péngyǒu hái kěyǐ   tōugelǎn lìyòng diàntī shàng èrlóu

lazy climb stair DE friend   still MOD lazy   use   elevator go.up second.floor

qù

go

'People who were too lazy to take the stairs could use the elevator to go up to

the second floor.'

(Google 2012/12/11)

d. 現在，我們**下地下室去**！

xiànzài wǒmen xià   dìxiàshì   qù

now   1PL   go.down basement go

'Now let's go down to the basement.'

(Google 2012/12/11)

e. 寶寶滿月**回老家來**了，

bǎobao mǎnyuè   huí   lǎojiā lái   le

baby   full.moon return home come PRF

'The baby came home when s/he was one month old.'

56

(Google 2012/12/11)

f. 或許真有什麼急事需要立即**過馬路去**，

huòxǔ zhēn   yǒu shénme jíshì   xūyào lìjí   guò mǎlù qù

maybe really have some immergency need instantly pass road go

'Perhaps (Somebody) was really urgent to cross the road right away.'

(Google 2012/12/11)

g. 沒有海盜**落水裡來**

méiyǒu hǎidào luò shuǐlǐ lái

no   pirate   fall water come

'No pirates fall into the water.'

(Sinica Corpus)

The NPs in the above sentences are Loc-NPs denoting the destination of the path.
However, when the Deictics of Motion follow the NPs with the other motion verbs
from Group 1, such as those in the following examples, the NPs can be either Ground
NPs or Loc-NPs.

(54) a. 大家都把車停在這**走古道去**了 (Ground/ Loc-NP)

dàjiā   dōu bǎ chē tíng zài zhè zǒu gǔdào   qù le

everybody all BA car stop at here walk old.trail go PRF

'Everybody parked their cars here and went walking at the old trail / went to the

old trail.'

(Google 2013/03/22)

b. 趕快把 paper 讀完，然後**跑操場去**~ (Ground/ Loc-NP)

gǎnkuài bǎ paper dúwán   ránhòu pǎo cāochǎng qù

hurry   BA paper read.finish then   run   field   go

'I finished the paper quickly and then went running at the field/ran to the field.'

(Google 2013/03/22)

c. 眼睛雖小明又亮，能**爬樹來**能上牆， (Ground/ Loc-NP)

yǎnjīng suī   xiǎo míng yòu liàng   néng   pá shù lái   néng shàng

eye   though small bright and glittering MOD climb tree come MOD climb

qiáng

wall

'(Something) had small bright eyes and could climb (to) trees and walls.'

(Google 2013/03/22)

d. 孩子先滾到沙發上，再翻個身**滾地上來**~ (Ground/ Loc-NP)

háizi xiān gǔn-dào shāfā shàng   zài   fān ge shēn   gǔn dìshàng lái

child first roll-arrive sofa surface then turn CL body roll ground come

'The child rolled on to the sofa first and then rolled on(to) the ground.'

(Google 2013/03/22)

e. 我去**跳彈簧床去**~別攔我~~ (Ground/ Loc-NP)

wǒ qù tiào tánhuángchuáng qù bié lán wǒ

1 SG go jump spring.bed go not stop 1SG

'I went jumping on/jumped to the spring bed and nobody should stop me.'

(Google 2013/03/22)

f. 你帶首長**飛空中去**， (Ground/ Loc-NP)

nǐ dài shǒuzhǎng fēi kōngzhōng qù

2SG take chairman fly sky go

'You flew the chairman in/to the sky.'

(Google 2013/03/22)

To show that these NPs are able to specify Ground, we can add a duration of time to the sentence to show that the activity goes on at the same place for a period of time.

(55) a. 大家走古道去，走了一個小時

dàjiā   zǒu gǔdào qù zǒu le yí ge xiǎoshí

everybody walk old.trail go walk ASP one CL hour

'Everybody went walking at the old trail for an hour.'

b. 大家跑操場去，跑了一個小時

dàjiā   pǎo cāochǎng qù pǎo le yí ge xiǎoshí

everybody run field   go run ASP   one CL hour

'Everybody ran at the field for an hour.'

c. 孩子爬樹來，爬了一個小時

háizi pá   shù lái   pá le yí ge xiǎoshí

child climb tree come climb ASP one CL hour

'The child climbed the tree for an hour.'

d. 孩子滾地上來，滾了一個小時

háizi gǔn dì   lái gǔn le yí ge xiǎoshí

child roll gound come roll ASP one CL hour

'The child rolled on the ground for an hour.'

e. 我跳彈簧床去，跳了一個小時

wǒ tiào tánhuángchuáng qù tiào   le   yí ge xiǎoshí

1SG jump spring.bed   go jump ASP one CL hour

'I jumped on the spring bed for an hour.'

f. 你飛空中去，飛了一個小時

*nǐ   fēi kōngzhōng qù fēi   le   yí   ge xiǎoshí*

2SG fly sky   go fly ASP one CL hour

'You flew in the sky for an hour.'

The grammaticality of the sentences above shows that these NPs can also specify Ground.

The reson why the locational NPs show the dual interpretation of Ground NPs and Loc-NPs lies in the different semantic profiling of the verbs. To account for the observation, we adopt the Proto-Motion Event Schema (PMS) by Liu et al. (2012) as a cognitive basis in identifying the semantic components in *lái* 來 'come'/ *qù* 去 'go' and other self-motion verbs. Mandarin motion verbs in motion events may encode one or several semantic components identified. This schema provided a framework to capture the semantic-to-morphological mapping relation of motion verbs in Mandarin:

Figure 7. The Proto-Motion Event Schema in Mandarin
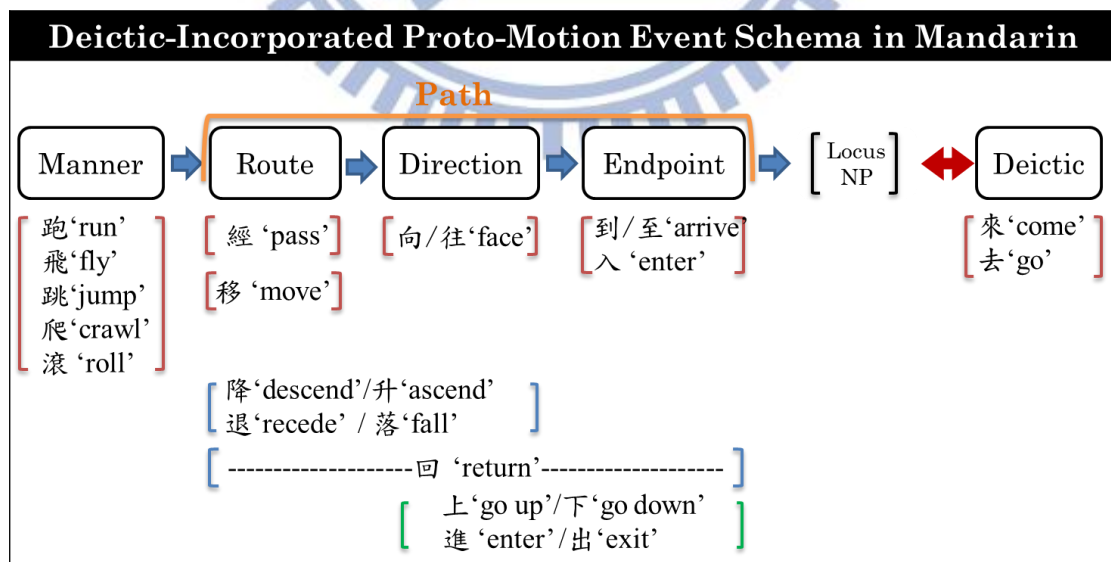
According to Liu et al. (2012), the verbs mentioned above are classified into different categories based on their semantic components. Verbs, such as 走 'walk',

păo 跑 'run', *pá* 爬 'crawl', *gŭn* 滾 'roll', *tiào* 跳 'jump', *fēi* 飛 'fly', belong to Manner verbs of Motion, while verbs, such as *guò* 過 'pass', *jìn* 進 'enter', *chū* 出 'exit', *shàng* 上 'go up', *xià* 下 'go down', *huí* 回 'return', *luò* 落 'fall', belong to Path verbs. Each profiles different semantic components. The following table shows the distribution:

Figure 8. Manner Verbs vs. Path Verbs with the NPs

V+NP+來/去	NP = Endpoint	NP = Ground
Manner Verbs		
走古道去	O	O
跑操場去	O	O
爬樹來	O	O
滾地上來	O	O
跳彈簧床去	O	O
飛空中去	O	O
Path Verbs (Endpoint encoded/implied)		
進屋內去	O	X
出戶外去	O	X
上二樓去	O	X
下地下室去	O	X
回老家來	O	X
過馬路去	O	X
落水裡來	O	X

Since Endpoint-encoded path verbs, such as *jìn* 進 'enter', *chū* 出 'exit', *shàng* 上 'go up', *xià* 下 'go down', *huí* 回 'return', require an Endpoint, they must be followed by a Loc-NP or a Deictic as a path delimiter. Therefore, they cannot take Ground, which cannot serve as a path delimiter.

For the Manner verbs do not encode any components within Path, they do not necessarily take a Loc-NP to specify the destination of a motion. Therefore, the manner verbs can take either a Ground NP or a Loc-NP.

As for verbs *guò* 過 'pass' and *luò* 落 'fall', they have the similar feature with

the Path verbs above, that is, they have an implied endpoint. For the verb *guò* 過 'pass', adding the aspect marker *-le* 了 to it denotes the completion of the motion and suggests that *qiáo* 橋 'bridge' is the endpoint of the path, such as in (56). Compared to the pure Route marker *jīng* 經 'pass' in (57), *guò* 過 'pass' is far more bounded in nature.

(56) 一隻兔子叼著鑰匙過了橋，

yì zhī tùzi diāo zhe yàoshi guò le qiáo

one CL rabbit bite DUR key   pass ASP bridge

'A rabbit crossed the bridge with a key in its mouth.'

(57) *一隻兔子叼著鑰匙經了橋，

yì zhī tùzi diāo zhe yàoshi jīng le qiáo

one CL rabbit bite DUR key   pass ASP bridge

Though *guò* 過 'pass' can be used as the meaning of passing through an intermediate point to the destination, such as *guò qiáo dào duìàn* 過橋到對岸 'pass the bridge to the other shore', we can not deny that *guò* 過 'pass' can also specify an endpoint where the motion ends.

On the other hand, *luò* 落 'fall' can also imply the notion of endpoint. For example, we can say *luò shuǐ* 落水 'fall into water' or *luò dì* 落地 'fall onto a ground', which means that someone or something falls into the water or onto the ground. *shuǐ* 水 'water' and *dì* 地 'ground' here obviously mean the destination of the motion. Though the Loc-NPs that *luò* 落 'fall' can take are mostly nonreferring and quite restricted, we can not deny that *luò* 落 'fall' is able to specify the endpoint of a path.

## 5.1.2 Verbs in Group 2 with Deictics of Motion

For verbs of Group 2, such as *dào* 到 'arrive', *rù* 入 'enter', *cháo* 朝 'face', *wǎng* 往 'face', they are gourped together because they fit in only the sequence "V+ Locational Noun +來/去" but not "V+來/去+ Locational Noun". What might be the reason for such distribution?

Within the schema, both *cháo* 朝 'face' and *wǎng* 往 'face' encode only the semantic component Direction, while both *dào* 到 'arrive' and *rù* 入 'enter' specify only the semantic component Endpoint. Based on the semantic components they encode, the NPs of location that follow them can be quite different. For example, if we look at the following example:

(58) 他 [經 Route] [日本 Route Landmark]

　　 [往 Direction] [東 Directional Landmark]

　　 [到 Endpoint] [美國 Loc-NP]

　　 tā　jīng　rìběn wǎng dōng dào　měiguó

　　 3SG pass NM　face　east arrive America

　　 'He passed Japan, headed toward east, and arrived at America.'

From the above example, verbs encoding only Route, such as *jīng* 經 'pass', are usually followed by Route Landmarks, such as *rìběn* 日本 'Japan', to specify the place at any interval points of the path but not the destination, and Directional Landmarks, such as *dōng* 東 'east', often follow verbs encoding only Direction, such as 往, to show the direction that the subject is heading to. As for Loc-NPs, such as *měiguó* 美國 'America', they usually follow verbs encoding Endpoint, such as *dào* 到 'arrive', to specify the boundaries (ie. the starting point or the destination) of the path of motion. The figure below may better clarify the idea mentioned above.

Figure 9. Semantic Components within Path and the Locational Nouns that Follow
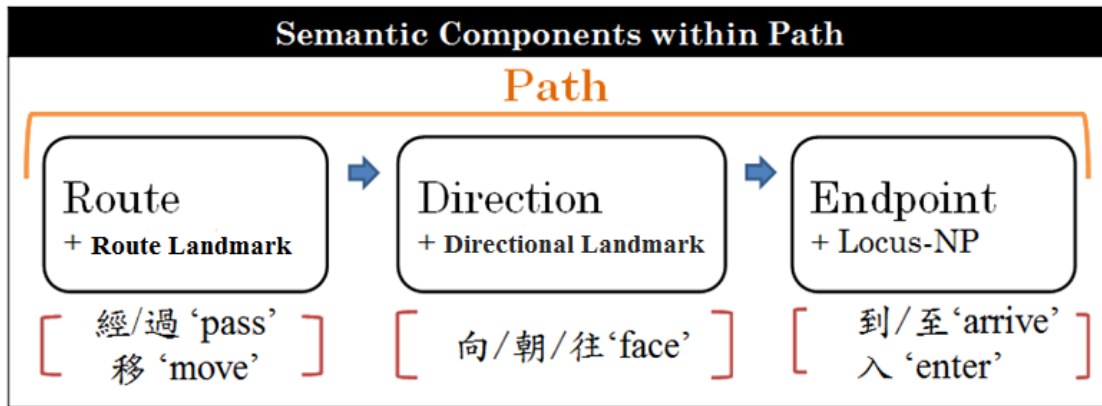
Based on the figure above, *cháo* 朝 'face' and *wǎng* 往 'face' are Directional markers, while *dào* 到 'arrive' and *rù* 入 'enter' are Endpoint markers. Pure markers have to immediately precede their NP, highlighting the location. Therefore, a Deictic cannot occur in between the markers and the following NP, as shown below, because pure marking verbs require an immediately NP without any intervening elements:

(59) a. 我到中國來已經快一年了，

wǒ   dào   zhōngguó lái   yǐjīng   kuài   yì   nián   le

1SG   arrive   China   come   already almost   one   year   PRF

'I have come to China for almost a year.'

(Sinica Corpus)

b. *到來/去中國

dào-lái/qù   zhōngguó

arrive-come/go   China

c. 他倒油的時候，遠遠的像一條線直接注入孔裡去，

tā dào   yóu de shíhòu yuǎn yuǎn de xiàng yì tiáo xiàn   zhíjiē   zhù

he pour oil REL time   far   far   DE like   a CL thread directly inject

64

rù   kǒng   lǐ   qù

enter hole inside go

'When he poured the oil from somewhere far away, it looked like a thread

directly injecting into the hole.'

(Sinica Corpus)

d. *入來/去孔裡[7]

rù-lái/qù   kǒng lǐ

enter-come/go hole inside

(60) a. 你不往熱鬧流行的地方來/去，就沒有機會上電視。

nǐ   bù   wǎng   rènào   liúxíng   de   dìfang   qù   jiù   méi

you NEG toward bustling   popular   REL   place   go   then   NEG

yǒu   jīhuì   shàng diànshì

have chance   up   TV

'If you don't go to bustling and popular places, you won't have a chance to show

up on TV programs.'

(Sinica Corpus)

b. *往來/去熱鬧流行的地方

wǎng-lái/qù   rènào   liúxíng   de   dìfang

toward-come/go bustling   popular   REL   place

---

[7] Another reason that *rù-lái/qù* 入來/去 'enter-come/go' does not occur lies in the
archaic usage of *rù* 入 'enter'. Due to the lexical competition between *rù* 入 'enter'
and *jìn* 進 'enter', *jìn* 進 'enter' has largely replaced *rù* 入 'enter' in daily uses.
The idea is proposed by Professor Cheng, Ying, and we give our special thanks to her
for this inspring idea.

c. 竿子朝你來了，

gānzi cháo   nǐ   lái   le

stick   face   2SG come PRF

'The stick has come toward you.'

d. *竿子朝來/去你了

gānzi cháo-lái/qù   nǐ   le

stick face-come/go   2SG   PRF

On top of the above discussion, it is noteworthy that we can say *lái-dào zhōngguó* 來到中國 'come-arrive China', but not **dào-lái zhōngguó* *到來中國 'arrive-come China'. Because *dào* 到 'arrive' is a pure Endpoint marker (Liu et al. 2012) that has to immediately take the locational NP, *dào* 到 'arrive' and *zhōngguó* 中國 'China' are not separable. If *dào* 到 'arrive' is to co-occur with *lái* 來 'come'/ *qù* 去 'go', *lái* 來 'come'/ *qù* 去 'go' must precede *dào* 到 'arrive'. Therefore, *lái* 來 'come'/ *qù* 去 'go' can only either precede *dào* 到 'arrive', such as *lái-dào zhōngguó* 來到中國 'come-arrive China', or follow *zhōngguó* 中國 'China', such as *dào zhōngguó lái* 到中國來 'arrive China come'.

Furthermore, *dào* 到 'arrive' and *lái* 來 'come'/ *qù* 去 'go' are sometimes very similar in their functions. With manner verbs in presence, *dào* 到 'arrive' is often in a complementary distribution with *lái* 來 'come'/ *qù* 去 'go'. For example, we often say 走來/去學校 or 走到學校. However, it is less preferred to say ?走來/去到學校. This results from the path-delimiting function they both have. Both *dào* 到 'arrive' and *lái* 來 'come'/ *qù* 去 'go' can serve as a delimiting element in a motion event. Therefore, if we use both *dào* 到 'arrive' and *lái* 來 'come'/ *qù* 去 'go' in one sentence, it would result in redundant delimiting.

5.1.3 Verbs in Group 3 with Deictics of Motion

For verbs of Group 3, such as *jiàng* 降 'descend', *tuì* 退 'recede', *shēng* 升 'ascend', they are grouped together because they prefer the sequence "V+來/去+ Locational Noun" to "V+ Locational Noun +來/去". What might be the reason for such preference?

According to PMS, *tuì* 退 'recede', *jiàng* 降 'descend', and *shēng* 升 'ascend' are lexically encoded with Route and Direction. It is found that *tuì* 退 'recede', *jiàng* 降 'descend', and *shēng* 升 'ascend' often occur with Directional Nouns, as the following examples:

(61) a. 三名法官依序退下

　　　sān míng fǎguān yīxù　　　tuì　　xià

　　　three CL judge　in.order recede down

　　　'Three judges left successively.'

　　　(Sinica Corpus)

　　　b. 木屑石塵緩緩降下

　　　mù　　xiè　shí　chén huǎnhuǎn jiàng　　xià

　　　wood piece stone ash　slowly　descend down

　　　'The wood pieces and ash slowly fell down.'

　　　(Sinica Corpus)

　　　c. 耶穌基督升天到父神那裡

　　　yēsūjīdū　　sheng　tiān dào　fùshén nàlǐ

　　　Jesus.Christ ascend sky arrive God　　there

　　　'Jesus Christ rose and went to God.'

　　　(Google 2013/06/01)

In the examples, *xià* 下 'down' or *tiān* 天 'sky' only specifies the direction the

Figure goes toward, not the destination of a path. In contrast, *tuì* 退 'recede', *jiàng* 降 'descend', and *shēng* 升 'ascend' are less found to occur with a following Loc-NP, as the following examples show. The reason why they do not occur with a Loc-NP probably lies in the fact that *tuì* 退 'recede', *jiàng* 降 'descend', and *shēng* 升 'ascend', as verbs encoding Route and Direction, do not require an endpoint, so they do not need a path delimiter, such as a Loc-NP.

(62) a. 當初國民黨退來台灣，帶來一堆外省人，

dāngchū   guómíndǎng   tuì-lái   táiwān dàilái yìduī

at.that.time nationalist.party recede-come NM   bring many

wàisheng   rén

other.province people

'At that time, when the Nationalist Party retreated to Taiwan, it brought a bunch of people from other provinces.'

b. ?**退**台灣**來/去**

tuì   táiwān lái/qù

recede NM   come/go

c. 其中一次單車的飛起來**降來**地面後，我單車的後胎又爆了。

qízhōng yí cì   dānchē de   fēiqǐlái   jiàng-lái   dìmiàn hòu

among   one time bicycle GEN fly.up.come descend-come ground   after

 wǒ dānchē   de   hòutāi   yòu   bào   le

1SG bicycle GEN back.tire again burst PRF

'Once, after my bicycle flew up and landed, its tire on the back burst again.'

(Google 2012/12/11)

d. ?降地面來/去

jiàng   dìmiàn lái/qù

descend ground come/go

e. 氫氣球用細線牽好，用它的上升力把禮物吊在氣球上，**升去**二樓。

qīng   qìqiú   yòng xì xiàn   qiān hǎo   yòng tā   de

hydrogen balloon use   thin thread tie   solid use   3SG NOM

shàngshēnglì   bǎ lǐwù diào zài   qìqiú   shàng shēng-qù

rise.ascend.force BA gift hang ZAI balloon above ascend-go

èrlóu

seconnd.floor

'Tie the hydrogen balloon with a thin thread and hang the gift on it, so that its

buoyance can take the gift to the second floor.'

(Google 2012/12/11)

f. ?升 2 樓來/去

shēng   èrlóu   lái/qù

ascend two.floor come/go

5.1.4 Summary

According to the analysis above, the distributional patterns of the Mandarin

Deictics of Motion with different categories of motion verbs are summarized as the

following table:

Table 6. Mandarin Deictics of Motion with Different Categories of Motion Verbs

Categories	Verbs	V+NP+來／去	V+來／去+NP
Manner Verbs	走	我們走山上去	我們走去山上
	跑	人都跑外面來了	人都跑來外面了
	爬	蟑螂爬桌上來	蟑螂爬來桌上
	滾	寶寶滾地上去了	寶寶滾去地上了
	跳	女孩跳地上來	女孩跳來地上
	飛	爸爸飛美國來了	爸爸飛來美國了
Endpoint-encoded Path Verbs	進	外國資本家進大陸來	外國資本家進來大陸
	出	瑞娜珊出庭院來	瑞娜珊出來庭院
	上	楊文蔚上台北去	楊文蔚上去台北
	下	小女童下停車場來	小女童下來停車場
	回	她們回精舍去	她們回去精舍
Endpoint-implied Path Verbs	落	黃葉一片片落地上去	黃葉一片片落去地上
	過	她過台灣來	她過來台灣
Endpoint Markers	到	我到中國來	*我到來中國
	入	油注入孔裡去	*油注入去孔裡
Direction Markers	往	你往熱鬧流行的地方去	*你往去熱鬧流行的地方
	朝	竿子朝你來了	*竿子朝來你了
Route & Direction-encoded Path Verbs	退	?國民黨退台灣來	國民黨退來台灣
	降	?單車降地面來	單車降來地面
	升	?氫氣球升二樓去	氫氣球升去二樓

Generally speaking, the classifications are motivated by the fact that whether the verbs are compatible with the path-delimiting *lái* 來 'come'／ *qù* 去 'go'. When *lái* 來 'come'／ *qù* 去 'go' comes into being, the endpoint of a path will be highlighted or implied. However, for those verbs that cannot or hardly denote an endpoint, they do not co-occur with the path-delimiting *lái* 來 'come'／ *qù* 去 'go'.

5.2 The Syntactic and Semantic Constraints on NPs of Location and Deictic Marking

The types of NPs co-occuring with Deictics of Motion help illucidate the semantics of the Deictics of Motion in different positions. To begin with, let's look at the following examples:

(63)　a. 大家跑<u>操場</u>　　(Ground)

　　　dàjiā　　pǎo cāochǎng

　　　everybody run field

　　　'Everybody ran at the field.'

　　　b. 大家跑<u>操場</u>去　　(Ground/ Loc-NP)

　　　dàjiā　　pǎo cāochǎng qù

　　　everybody run field　　go

　　　'Everybody went to run at the field/Everybody ran to the field.'

　　　c. 我們都跑<u>去操場</u>了。(Loc-NP)

　　　dàjiā　　dōu pǎo qù cāochǎng le

　　　everybody all run go field　　PRF

　　　'Everybody ran to the field.'

The NP *cāochǎng* 操場 'field' can be either a Ground NP or a Loc-NP in different sequences. Originally, if the verb *pǎo* 跑 'run' occurs with the NP of location itself, the NP would be only a Ground NP. However, when the Deictics of Motion come into being, the status of the NP will change. When the Deictics of Motion follow the NP, they give the NP the alternations to be a Ground NP or a Loc-NP. Nevertheless, when the Deictics of Motion precede the NP, the NP can only be a Loc-NP.

With the examples above, what will account for the change in the NP of location? According to Liu et al. (2012), it is proposed that 來/去 implicates a spatial endpoint

and helps to locate a Speaker-centered endpoint. Therefore, 來/去 can serve as a path delimiter that gives the NP 操場 the role of Endpoint and make it a Loc-NP. However, the difference between *lái* 來 'come'/ *qù* 去 'go' following locational nouns and *lái* 來 'come'/ *qù* 去 'go' preceding locational nouns has never been fully discussed. What is the functional difference between *lái* 來 'come'/ *qù* 去 'go' in different slots? Moreover, in the sentences with two Deictics, such as the examples below, why is it ungrammatical to have *qù* 去 'go' as the first Deictic and *lái* 來 'come' as the second Deictic?

(64) a. 電梯升上**來**到屋頂**來**

    diàntī shēng shàng lái dào wūdǐng lái

    elevator ascend go.up come arrive roof.top come

    ''The elevator rose and came to the roof top.'

    b. 電梯升上**來**到屋頂**去**

    diàntī shēng shàng lái dào wūdǐng qù

    elevator ascend go.up come arrive roof.top go

    ''The elevator rose and went to the roof top.'

    c. *電梯升上**去**到屋頂**來**

    diàntī shēng shàng qù dào wūdǐng lái

    elevator ascend go.up come arrive roof.top go

    d. 電梯升上**去**到屋頂**去**

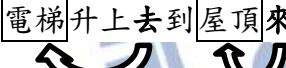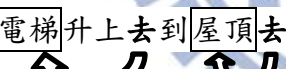   *diàntī shēng shàng qù dào wūdǐng qù*
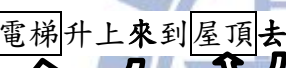
    elevator ascend go.up come arrive roof.top go

    ''The elevator rose and went to the roof top.'

From the data above, we observe that the pre-Loc Deictic of Motion refers to the relative position of the Figure to the speaker. Thus, we refers to this kind of Deictic of Motion as the speaker-figure Deictic of Motion. The speaker and destination are not necessarily located at the same place.

On the other hand, the post-Loc Deictic of Motion denotes the relative position of the location and the speaker. We, therefore, call it the speaker-location Deictic of Motion. Normally, the speaker is located in the proximity of the location.

From the above, we see that the Deictics of Motion denote the relation of the speaker and the NP preceding them, as shown in the following examples:

(65)　a. 電梯升上來到屋頂來

　　　b. 電梯升上來到屋頂去

　　　c. *電梯升上去到屋頂來

　　　d. 電梯升上去到屋頂去

To be more specific, the reason why (65c) is ungrammatical is that the speaker-figure Deictic of Motion *qù* 去 'go' refers to the relation between *diàntī* 電梯 'elevator' and the speaker. The deictic *qù* 去 'go' here specifies that *diàntī* 電梯 'elevator' is away from the speaker. *Diàntī* 電梯 'elevator', therefore, goes up to *wūdǐng* 屋頂 'roof.top' that is away from the speaker. However, the speaker-location Deictic of Motion *lái* 來 'come' denotes that the position of *wūdǐng* 屋頂 'roof.top' is close to the position of the speaker, which contradicts with the implication that the roof top is actually away from the speaker. The figure below may illustrate the meaning more clearly:

Figure 10. The Illustration[8] of *電梯升上去到屋頂來
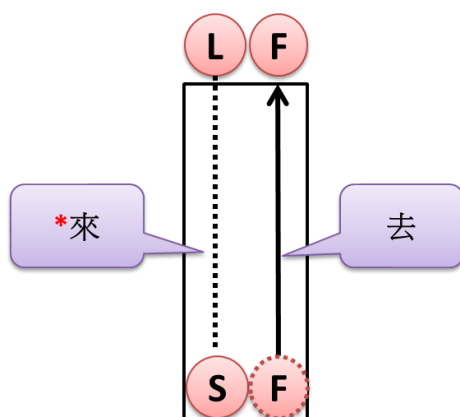
The rest of the examples can also be interpreted in the same way. In (65a), the speaker-figure Deictic of Motion *lái* 來 'come' shows that *diàntī* 電梯 'elevator' goes up to the speaker, and the speaker-location Deictic of Motion *lái* 來 'come' denotes that the position of *wūdǐng* 屋頂 'roof.top' is close to the position of the speaker. Given the relations, the contour would be: the elevator goes up to the position of the speaker and the speaker is on the roof top. The following shows the illustration:

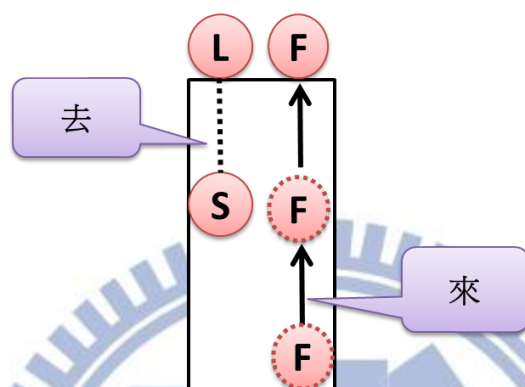**Figure 11. The Illustration of 電梯升上來到屋頂來**
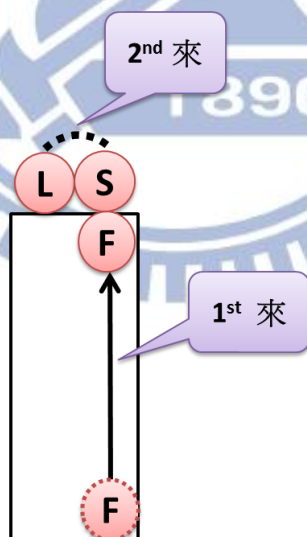
Similarly, in (65b), the speaker-figure Deictic of Motion *lái* 來 'come' shows that *diàntī* 電梯 'elevator' goes up to the speaker, and the speaker-location Deictic of

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[8] L refers to the Loc-NP *wūdǐng* 屋頂 'roof.top', S means the seaker, and F represents the Figure *diàntī* 電梯 'elevator'.

Motion *qù* 去 'go' denotes that the position of *wūdǐng* 屋頂 'roof.top' is away from the position of the speaker. Therefore, it is possible that the elevator goes up to the position of the speaker and end up arriving at the roof top that is far away from the speaker.

Figure 12. The Illustration of 電梯升上來到屋頂去

Last but not least, in (65d), the speaker-figure Deictic of Motion *qù* 去 'go' shows that *diàntī* 電梯 'elevator' goes away from the speaker, and the speaker-location Deictic of Motion *qù* 去 'go' denotes that the position of *wūdǐng* 屋頂 'roof.top' is far away from the position of the speaker. Thus, the elevator goes away from the speaker and goes up to the roof top that is far away from the speaker.

Figure 13. The Illustration of 電梯升上去到屋頂去
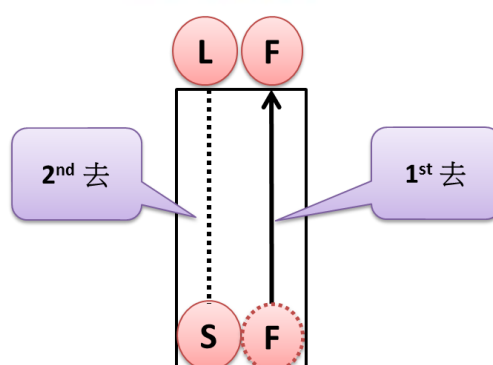
From the data above, we propose that the Deictics of Motion in different positions specify relative positions of different referents and the speaker. The pre-Loc Deictics of Motion (i.e., the speaker-figure Deictics of Motion) denote the relative

position of the Figure to the speaker, while post-Loc Deictics of Motion (i.e., the speaker-location Deictics of Motion) suggest the relative position of the speaker and the location. The analysis also helps to account for the difference in the following data.

(66) a. 大家跑來/去操場 (Loc-NP)

dàjiā   pǎo lái/qù   cāochǎng

everybody run come/go field

'Everybody ran to the field.'

b. 大家跑操場來/去   (Ground/ Loc-NP)

dàjiā   pǎo cāochǎng lái/qù

everybody run field   come/go

'Everybody went to run at the field/Everybody ran to the field.'

In (66a), the speaker-figure Deictics of Motion denote the relative position of the Figure *dàjiā* 大家 'everybody' and the speaker, while in (66b), the speaker-location Deictics of Motion suggest the relative position of the Locational noun *cāochǎng* 操場 'field' and the speaker.

In the usage of the speaker-figure Deictics of Motion, if the Figure moves toward the speaker, *lái* 來 'come' is used. When the Figure moves away from the speaker, *qù* 去 'go' is used.

On the other hand, in the usage of the speaker-location Deictics of Motion, if the distance of the speaker and the location is short, *lái* 來 'come' is used. While the distance is long, *qù* 去 'go' is used.

If we consider the following example, we may get a better understanding of this distinction.

Suppose I, the speaker, am in Tainan. I have a friend who has come back to his hometown Hsinchu from the USA. Both Tainan and Hsinchu are located in Taiwan, but Tainan is in the sothern part while Hsinchu is in the northern part. Now, we have the speaker—I, the Figure—my friend, and the location—Hsinchu. Which of the following sentence will we choose to illustrate his return?

(67) a. 他回來新竹了

　　　 tā　　huí-lái　　　xīnzhú le

　　　 3SG return-come NOM PRF

　　　 'He came back to Hsinchu.'

　　　 b. 他回新竹來了

　　　 tā　　huí　xīnzhú lái　le

　　　 3SG return NOM come PRF

　　　 'He came back to Hsinchu.'

We will choose (67a) but not (67b). Why? As mentioned above, the pre-Loc Deictics of Motion (i.e., the speaker-figure Deictics of Motion) denote the relative position of the Figure to the speaker. In (67a), *lái* 來 'come' shows that the Figure *tā* 他 'he' moves toward the location of the speaker, Taiwan. Given the fact that the Figure moves from the USA to Hsinchu in Taiwan, the sentence is contextually correct.

However, the post-Loc Deictics of Motion (i.e., the speaker-location Deictics of Motion) suggest the relative position of the speaker and the location. That is to say, *lái* 來 'come' in (67b) denotes that the speaker is close to the location, Hsinchu. This is contextually incorrect, becuase the speaker is actually in Tainan, not Hsinchu.

The concept can also explain the only interpretation of Loc-NP in the pre-Loc pattern and the alternatives of Ground and Loc-NP in the post-Loc pattern as the examples below show:

(68) a. 大家跑來/去操場 (Loc-NP)

　　　dàjiā　　pǎo lái/qù　　cāochǎng

　　　everybody run come/go field

　　　'Everybody ran to the field.'

　　　b. 大家跑操場來/去　 (Ground/ Loc-NP)

　　　dàjiā　　pǎo cāochǎng lái/qù

　　　everybody run field　　 come/go

　　　'Everybody went to run at the field/Everybody ran to the field.'

In (68a), the position of the speaker is fixed and whether we should use *lái* 來 'come' or *qù* 去 'go' depends on whether the Figure moves toward or away from the speaker. The fixed position of the speaker here may therefore function as a boundary (i.e., a starting point or an endpoint) of the path which the Figure takes. As a result, the implied concept of the boundedness in the speaker-figure Deictics of Motion coerces the following locational nouns to be Loc-NPs denoting the destination.

On the other hand, in the usage of the speaker-location Deictics of Motion, what is marked is the distance of the speaker and the locational noun, so the interpretation of the NP is flexible (Ground or Loc-NP). As a result, although the speaker-location Deictics of Motion do contribute the concept of implied endpoint to the locational noun preceding them and give it the alternative of a Loc-NP, such as in the case of *pǎo cāochǎng lái/qù* 跑操場來/去 'went to run at the field/ ran to the field', they do not necessarily coerce the NP to be a Loc-NP.

5.3 Semantic Prominence in the Interpretation of Locative Role: the Case of *chū-lái* and *chū-qù*

When we see that *chū-lái* 出來 'exit-come' and *chū-qù* 出去 'exit-go' may take a SOURCE NP or a GOAL NP, it inevitably leads to the crucial question of how to account for such an ambiguity. In the serial combination of *chū-lái* 出來 'exit-come' and *chū-qù* 出去 'exit-go', which is the head or main predicate?

It has been observed by Lamarre (2009) that in isolation, both *lái* 來 'come' and *qù* 去 'go' only take GOAL NPs, but *chū* can take three kinds of roles: SOURCE (eg. *chūguó* 出國 'exit-country'), ROUTE (eg. *chūmén* 出門 'exit-door'), or GOAL (eg. *chūyáng* 出洋 'exit-(to) foreign country'). To verify Lamarre's analysis with corpus data (Sinica Corpus), we examined the first 100 occurrences of the three verbs followed by a locative NP and found that while *lái* 來 'come' and *qù* 去 'go' indeed take a GOAL NP, the NPs following *chū* 出 'exit' are clearly skewed toward a locative SOURCE (75%). 75 out of 100 instances of *chū* 出 'exit' take a SOURCE NP; only 8 tokens of GOAL NPs are found (7 of which are the same *chū-shèhuì* 出社會 'exit-society'). It clearly suggests that *chū* 出 'exit' + SOURCE is predominent in use:

Table 7. Semantic Roles of Loc-NPs following 出/來/去

	chū 出 + Locative NP	*lái* 來 + Locative NP	*qù* 去 + Locative NP
SOURCE	75% (75/100)	0% (0/100)	0% (0/100)
GOAL	8% (8/100)	100% (100/100)	100% (100/100)
ROUTE	17% (17/100)	0% (0/100)	0% (0/100)

Based on the corpus findings that *chū* 出 'exit' prefers SOURCE and *lái* 來 'come'/ *qù* 去 'go' only takes GOAL, we propose that the interpretation of the locative NP depends on the semantic prominence of the verbs in real use. When

combined as serial verbs, either the directional *chū* 出 'exit' or the deictic *lái* 來 'come'/ *qù* 去 'go' can serve as the semantic head, taking on the semantic prominence as the main predicate and hence selecting the appropriate locative role in the following NP. Specifically, when *chū* 出 'exit' is semantically more prominent, SOURCE is profiled. In contrast, when *lái* 來 'come'/ *qù* 去 'go' takes on semantic prominance, GOAL is preferred. The differences in semantic head and subsequent profiling of locative role can be illustrated by the repeated examples of (50) and (51) in (69) and (70) as well as schematic representations adopted and modified from Liu (1998:7):
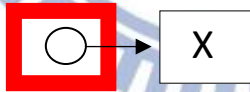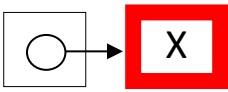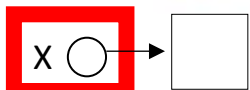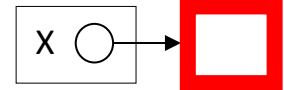
(69) NPs as SOURCE following *chū-lái* 出來'exit-come' and *chū-qù* 出去'exit-go'

　　a. 回飯店之後休息了一會~又**出來**飯店玩玩~

　　b. 佑佑**出去**房間再進來就是這副蠢樣

(70) NPs as GOAL following *chū-lái* 出來 'exit-come' and *chū-qù* 出去 'exit-go'

　　a. 小悅**出來**餐廳吃飯都表現的好乖啊~

　　b. 我們真的很少**出去**餐廳吃飯, 都在家裡自己煮!

Table 8. Schematic Representations of *chū-lái* +NP and *chū-qù*+NP

(O = moving entity, X= deictic center, →=ROUTE, □ = backgrounded Loc-NP, ▬ = profiled Loc-NP)

The dual role interpretation exhibited in the serial motion verbs bears significant theoretical implication to the long-debated issue in identifying the main predicate in Mandarin serial verb construction. It shows that semantic prominence may be the key to determinining which verb takes precedence in selecting the semantic role of the

locative NP. Moreover, in some cases, the context seems to be the key of determining which verb takes the semantic prominence.

As we can see, Mandarin is a serial-verb language in which each verb in the series is morphologically unmarked and monosyllabic. The data above raise a problem for Talmy's treatment of path verbs as satellites in serial-verb languages (1985). Mandarin Chinese has been categorized as an S-language by Talmy. Talmy considers the manner verb to be the main verb and the path verb to be a satellite, because path verbs often do not function as full verbs and because there is a small, closed set of path verbs.

However, path verbs such as *chū* 出 'exit' and *lái* 來 'come'/ *qù* 去 'go' alone, or *chū-lái* 出來 'exit-come' and *chū-qù* 出去 'exit-go' are options used to express path. Moreover, because the path verbs can occur alone, they cannot be regarded as satellites, which are verb particles and affixes that do not occur alone. Therefore, the analysis of the dual role interpretation supports the typological classification argued in Slobin (2004) that a third typological category— Equipollently-framed languages— should be added. Equipollently-framed languages include serial-verb languages and other types of languages in which manner and path are expressed by "equipollent" elements—that is, elements that are equal in formal linguistic terms and appear to be equal in force or significance.

That the path verbs can occur alone is also observed in Tai (2003). He proposes that the cognitive component PATH *guò* 過 'pass' can be used independently as a verb, and this is evidenced by the fact that it can be affixed with the aspect maker "-le", as illustrated below:

(71) 約翰過了英吉利海峽

yuēhàn guò le   yīngjílì hǎixiá

NM   pass ASP English Channel

'John passed the English Channel.'

In contrast, the verb *fēi* 飛 'fly' cannot occur alone without *guò* 過 'pass' in this context, as illustrate below:

(72) *約翰飛了英吉利海峽

yuēhàn fēi le   yīngjílì hǎixiá

NM   fly ASP English Channel

The above shows that *guò* 過 'pass' is a verb incorporating PATH and is the center of predication in the verb compound *fēi-guò* 飛過 'fly-pass'. Based on the analysis, we may treat *chū-lái* 出來 'exit-come' and *chū-qù* 出去 'exit-go' as compounds consisting of two verbs incorporating PATH and either can be the center of predication.

5.4 A Frame-based Analysis of Mandarin Deictic of Motion

Based on the corpus observation, Mandarin motion verbs can be categorized into specific frames, which will be analyzed into different layers. In this section, we will introduce each frame under the hierarchical structures with conceptual schema, definitions, participant roles, defining patterns, and representative lemmas. Section 5.4.1 introduces the Archiframe of Self-initiated Motion. Section 5.4.2 presents primary frames with a focus on the Deictic primary frame. Section 5.4.3 will focus on two basic frames under the Deictic primary frame.

5.4.1 Conceptual Schema of Self-initiated 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. (2012), 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, PMS has integrated the verb-internal lexical features in verbs of motion together with the verb-external participant roles co-ocurring with them. As illustrated by Liu et al. (2013)[9], [Manner], [Route], [Direction], and [Endpoint] are identified as verb-internal components as in (73b). On the other hand, we have verb-external elements in (73a) as *rìběn* 日本 'Japan' specifying Route, *dōng* 東 'east' denoting Direction, and *měiguó* 美國 'America' describing Endpoint.

(73) a. 他 [飛]Manner　[經日本]Route　[往東]Direction　[到美國]Endpoint

　　　　tā　　*fēi*　　　*jīng rìběn*　　*wǎng dōng*　　*dào měiguó*

　　　　he　　fly　　　through Japan　　toward east　　arrive　America

　　　　'He flew east through Japan to America.'

　　b. 球　　[滾]Manner　　[落]Route　　[進]direction　　[到]Endpoint 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)

　　Along the vein, external participants *rìběn* 日本 'Japan', *dōng* 東 'east', and *měiguó* 美國 'America' can be recognized as frame elements specifying the self-initiated motion. We therefore suggests the self-initiated motion is plotted with frame elements such as 1) Figure, 2) Ground, 3) Route NP, 4) Directional NP, 5)

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[9] Liu, Meichun, Chia-yin Hu, Hsin-shan Tsai, Shu-ping Chou. 2013. The Proto-Motion Event Schema: Integrating Lexical Semantics and Morphological Sequencing, Paper submitted to *Journal of Chinese Linguistics*.

Locative NP, and 6) Deictic. The conceptual schema of self-initiate motion can be

displayed as below:

**Figure 14. Conceptual Schema of Self-initiated Motion**
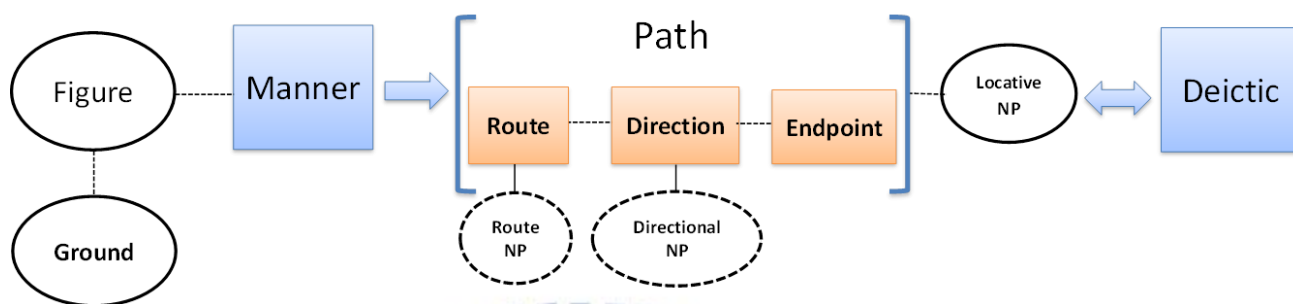
In the conceptual schema, a moving entity (Figure) adopts a particicular way of

movement (Manner). With a certain 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). Also the

moving entity may launch a movement without a specific motional contour taking

place in a setting (Ground). The speaker-oriented perspective in describing a motion

(Deictic) is independently specified in schematizing the self-initiated 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

NPs. In this sense, Deictic also helps to locate a Speaker-centered endpoint.

5.4.2 The Hierarchical Structure of the Frame

The following sections will successively illustrate the Archiframe of

Self-initiated Motion, the Deictic Primary frame, and the two basic frames under the

Deictic Primary frame. A Figure of the hierarchical structures of the above frames is

provided below:

Figure 15. The Hierarchical Structures of the Frames
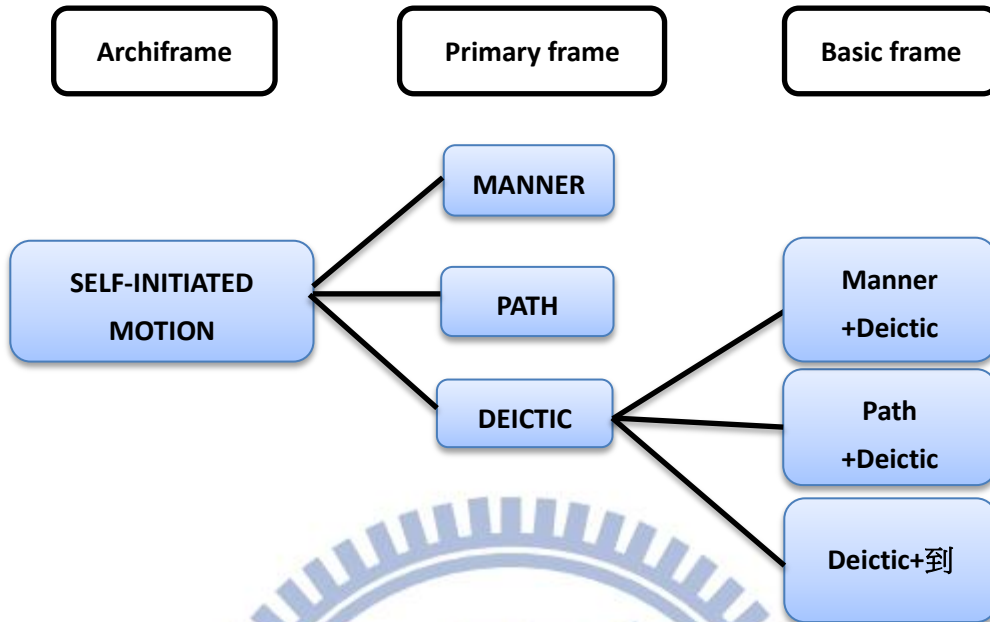
From the analysis in the research so far, it is obvious that Deictics of Motion behave very differently from Manner verbs and Path verbs, and, therefore, we feel necessary to separate the Deictic Primary Frame from the other two Primary Frames.

## 5.4.2.1 Layer 1: Archiframe (Self-initiated 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 Self-initiated Motion. The archiframe defines an overarching conceptual schema as a semantic prerequisite for illustrating subframes that inherit. The information regarding the Archiframe of Self-initiated Motion is described below:

Definition: A conceptually moving entitiy (Figure) moves by adopting a particular way of movement (Manner) on a stationary site (Ground) or a certain course of motional path, passing an intermediate landmark (Route NP) toward a spatial orientation (Directional NP) to arrive at a final destination (Locative NP) in relation to an optional marking of speaker-oriented center (Deictic).

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Representitive lemma: *fēi* 飛 'fly', *zǒu* 走 'walk', *guò* 過 'pass', *yuè* 越 'go over', *xiàng* 向 'face', *wǎng* 往 'face', *sheng* 升 'ascend', *jiàng* 降 'descend', *shàng* 上 'go up', *xià* 下 'go down', *jìn* 進 'enter', *huí* 回 'return', *jiàng-luò* 降落 'descend to fall', *luò-jiàng* 落降 'fall to descend', *shàng-sheng* 上升 'go up to ascend', *shàng-sheng* 升上 'ascend to go up', *tuì-huí* 退回 'recede to return', *huí-tuì* 回退 'return to recede', *lái* 來 'come', *qù* 去 'go'

Frame Elements: Figure, Ground, Route NP, Directional NP, Locative NP, Deictic

Conceptual Schema:
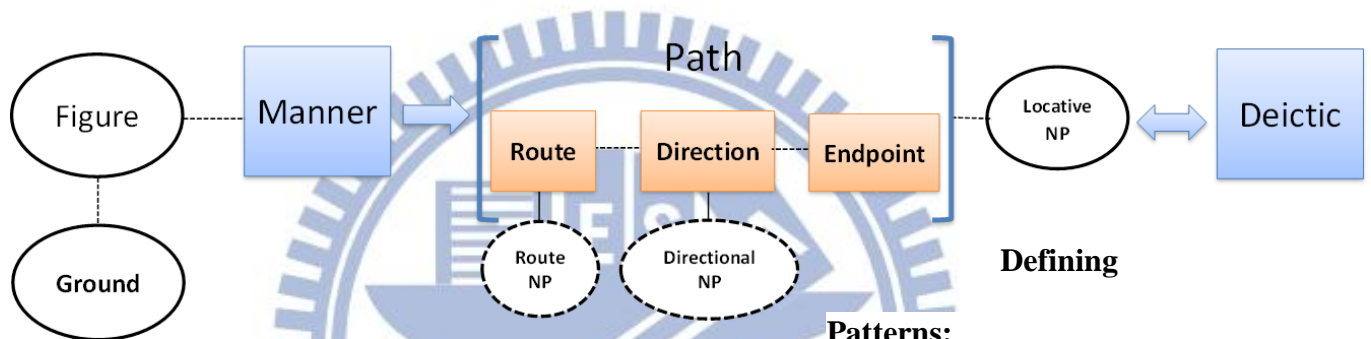
Defining Patterns:

a. Figure [NP] < * < Locative [NP] < Deictic [VP]

[大雁/Figure]都[飛/Self-initiated Motion][美國/Locative][來/Deictic]了

dà yàn   dōu fēi měiguó   lái   le

big swallow all fly   America come PRF

'Big swallows all flew to America.'

b. Figure [NP] < * < {到} + Locative [NP] < Deictic [VP]

[我/Figure]就[走 Self-initiated Motion]到[一樓/Locative] [去/Deictic] 。

wǒ   jiù   zǒu   dào   yìlóu   qù

1SG then walk arrive first.floor go

'Then I walked to the first floor.'

c. Figure [NP] < * < Deictic [VP] < Locative [NP]

[我們全體/Figure]都[跑/Self-initiated Motion]去[操場/Locative]了

*women quántǐ   dōu pǎo qù   cāochǎng   le*

we　　　everyone　all　　run　go　　sports ground　PRF

'We all ran to the sports ground.'

5.4.2.2　Layer 2: Primary Frame (Deictic 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. As Liu et al. (2012) suggested, self-initiated motion includes several semantically essential subportions: Manner, Path, and Deicitc. The Manner frame specifies the various ways of movement. The Path frame describes the course of motion with three subcategories: Route as specifying unique motional contour, Direction as specifying directional orientation of the movement, and Endpoint as specifying the arrival of final destination. The last one is the Deictic frame depicting the speaker-oriented relation in motion as toward or away from the speaker. The three primary frames under the Archiframe of Self-initiated Motion can be summarized as follows.

Figure 16. Primary Frames under Self-initiated Motion Archiframe
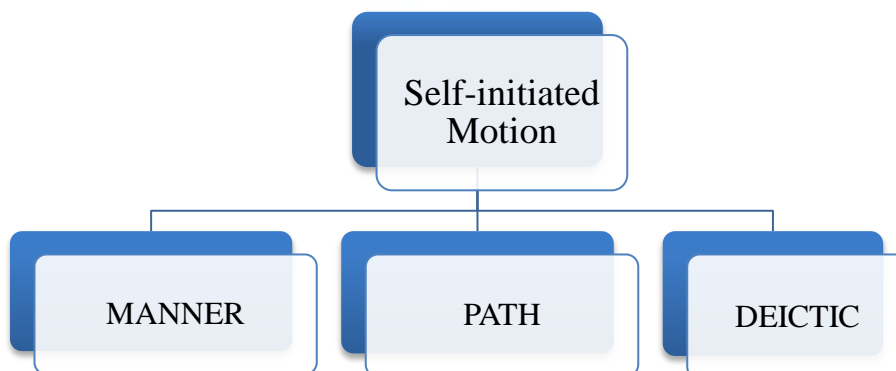
Information of Deictic primary frame is illustrated below:

Conceptual Schema:
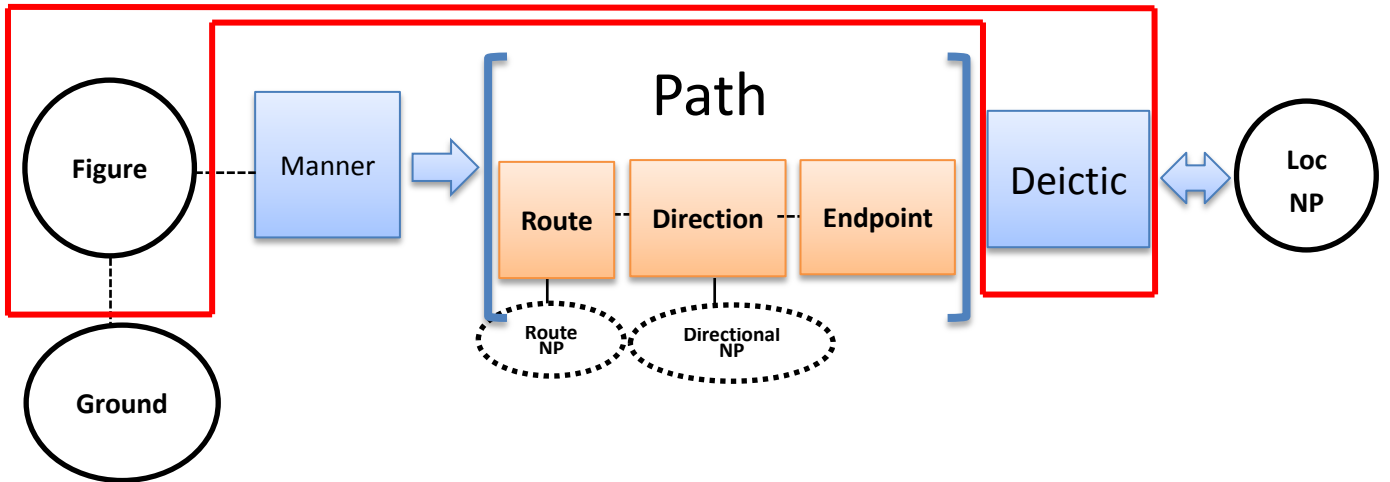
Definition: The interaction between the Figure and the Speaker is specified by the Deictic marking in a motion event, in which the Figure performs a certain motion.

Frame Elements: Figure, Deictic

Lemma: *lái* 來 'come', *qù* 去 'go', *pǎo.lái* 跑來 'run.come', *pǎo.qù* 跑去 'run.go', *fēi.lái* 飛來 'fly.come', *fēi.qù* 飛去 'fly.go', *tiào.lái* 跳來 'jump.come', *tiào qù* 跳去 'jump.go', *pá.lái* 爬來 'crawl.come', *pá.qù* 爬去 'crawl.go', *gǔn.lái* 滾來 'roll.come', *gǔn.qù* 滾去 'roll.go', *guò.lái* 過來 'cross.come', *guò.qù* 過去 'cross.go', *jiàng.lái* 降來 'descend.come', *jiàng.qù* 降去 'descend.go', *sheng.lái* 升來 'ascend.come', *sheng.qù* 升去 'ascend.go', *tuì.lái* 退來 'recede.come', *tuì.qù* 退去 'recede.go', *luò.lái* 落來 'fall.come', *luò.qù* 落去 'fall.go', *huí.lái* 回來 'return.come', *huí.qù* 回去 'return.go', *shàng.lái* 上來 'go up.come', *shàng.qù* 上去 'go up.go', *xià.lái* 下來 'go down.come', *xià.qù* 下去 'go down.go', *jìn.lái* 進來 'enter.come', *jìn.qù* 進去 'enter.go', *chū.lái* 出來 'exit.come', *chū.qù* 出去 'exit.go'

Defining Patterns:

a. Figure < ＊ < Loc-NP

[四名警員/figure]**進去**[屋內/ Loc-NP]，只逗留了五分鐘就離開。

sì míng jǐngyuán jìn-qù wū   nèi   zhǐ dòuliú le   wǔ fēnzhōng jiù   líkāi

four CL officer enter-go house inside just stay ASP five minute   then leave

'Four police officers entered the house and stayed for only five minutes before they

left.'

b. Figure < V$_{path}$ < Loc-NP < ＊

[所有人/figure]全部[下/ V$_{path}$] [一樓/ Loc-NP]去，

suǒyǒu rén   quánbù xià   yīlóu   qù

all   people all   go.down first.floor go

'All people went down to the first floor.'

d. Figure < V$_{manner}$ < Loc-NP < ＊

[年輕人/figure]都[跑/ V$_{manner}$] [外面/ Loc-NP]去了，

niánqīng rén   dōu pǎo wàimiàn qù le

young   people all   run outside   go PRF
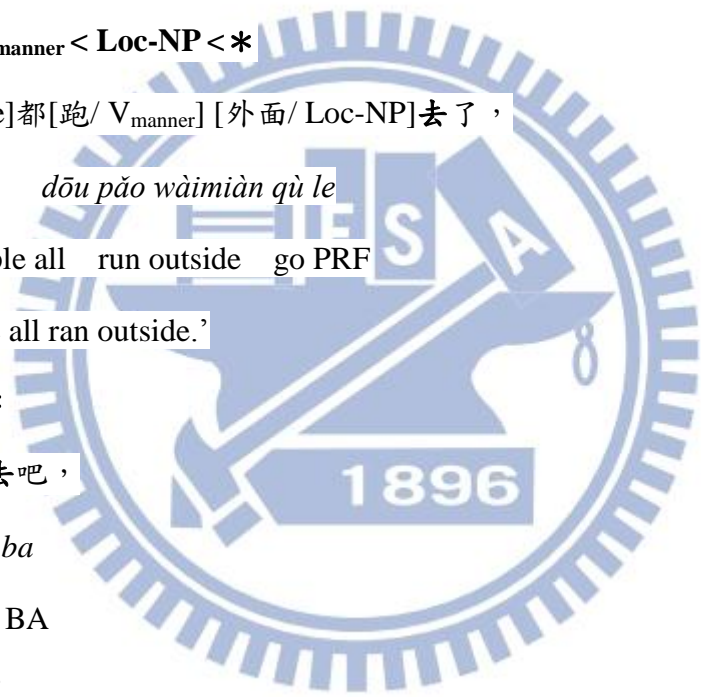
'Young people all ran outside.'

e. Figure < ＊

[你/figure]回去吧，

nǐ   huí-qù   ba

2SG return-go BA

'You go back.'

5.4.2.3   Layer 3: Basic Frame

Basic Frames are semantically more restricted frames under each primary frame.

Each one of them specifies 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)

In other words, different basic frames highlight different frame elements with distinctive syntactic representations. For basic frames under the same primary frame, they inherit the defining patterns from the primary frame but develop some unique syntactic patterns of their own, which separate them from one another.

The following sections are the introductions of the two basic frames named Manner+Deictic Frame and Path+Deictic Frame.

5.4.2.3.1 Manner+Deictic Frame

Definition: The Deictics of Motion are combined with Manner of Motion to form lexicons. The Loc-NP has to be overt to specify the destination.

Frame Elements: Figure, Locative NP

Lemma: *pǎo.lái* 跑來 'run.come', *pǎo.qù* 跑去 'run.go', *fēi.lái* 飛來 'fly.come', *fēi.qù* 飛去 'fly.go', *tiào.lái* 跳來 'jump.come', *tiào qù* 跳去 'jump.go', *pá.lái* 爬來 'crawl.come', *pá.qù* 爬去 'crawl.go', *gǔn.lái* 滾來 'roll.come', *gǔn.qù* 滾去 'roll.go'

Defining Patterns:

a. Figure < ＊ < Loc-NP

[老妹 Figure]又**飛去**[美國/Loc-NP]了

lǎomèi   yòu   fēi-qù   měiguó le

younger.sister   again   fly-go   USA   PRF

'My younger sister flew to the USA again'

5.4.2.3.2 Path+Deictic Frame

Definition: The Deictics of Motion are combined with Path to form lexicons. The Loc-NP does not have to be overt to specify the destination because the Deictics serve as the path delimiters.

Frame Elements: Figure

Lemma: *lái* 來 'come', *qù* 去 'go', *guò.lái* 過來 'cross.come', *guò.qù* 過去 'cross.go', *jiàng.lái* 降來 'descend.come', *jiàng.qù* 降去 'descend.go', *sheng.lái* 升來 'ascend.come', *sheng.qù* 升去 'ascend.go', *tuì.lái* 退來 'recede.come', *tuì.qù* 退去 'recede.go', *luò.lái* 落來 'fall.come', *luò.qù* 落去 'fall.go', *huí.lái* 回來 'return.come', *huí.qù* 回去 'return.go', *shàng.lái* 上來 'go up.come', *shàng.qù* 上去 'go up.go', *xià.lái* 下來 'go down.come', *xià.qù* 下去 'go down.go', *jìn.lái* 進來 'enter.come', *jìn.qù* 進去 'enter.go', *chū.lái* 出來 'exit.come', *chū.qù* 出去 'exit.go'

Defining Patterns:

a. Figure < ＊ < Loc-NP

[四名警員/figure]**進去**[屋內/ Loc-NP]，只逗留了五分鐘就離開。

sì míng jǐngyuán jìn-qù wū   nèi   zhǐ dòuliú le   wǔ fēnzhōng jiù   líkāi

four CL officer enter-go house inside just stay ASP five minute   then leave

'Four police officers entered the house and stayed for only five minutes before they left.'

b. Figure < ＊

[你/figure]**回去**吧，

nǐ   huí.qù   ba

2SG return.go BA

'You go back.'

5.4.2.3.3 Deictic+ *dào* 到 'arrive' Frame

Definition: The Deictics of Motion are combined with *dào* 到 'arrive' to form lexicons. The Loc-NP has to be overt to specify the destination because the endpoint

marker *dào* 到 'arrive' requires an immediate overt Loc-NP.

Frame Elements: Figure, Locative NP

Lemma: *lái.dào* 來到 'come.arrive', *qù.dào* 去到 'go.arrive'

Defining Patterns:

a. Figure < ＊ < Loc-NP

 [你 Figure] 將要**去到** [那裡/Loc-NP]

nǐ   jiāngyào qù.dào   nàlǐ

2SG MOD   go.arrive there

'You would go there.'

b. Figure < ＊ < Loc-NP < Deictic

只要克服煩惱，[真正的快樂/figure] 就會**來到** [你身邊/ Loc-NP] [來/ Deictic]

zhǐyào kèfú   fánnǎo zhēnzhèng de kuàilè   jiùhuì   lái.dào   nǐ   shēnbiān lái

just conquer worry   real   DE happiness MOD come.arrive 2SG side   come

'As long as you got over your worries, true happiness would come to your side.'

5.4.3   Overview of the Frames

This section summarizes the frames introduced in previous sections.

Table 9. The Overview of the Frames

Frames	**Frame Elements**	**Defining Patterns**
Archiframe (Self-initiated Motion frame)	Figure, Ground, Route NP, Directional NP, Locative NP, Deictic	**a. Figure [NP] < * < Locative [NP] < Deictic [VP]** [大雁/Figure]都[飛 /Self-initiated Motion][美國 /Locative][來/Deictic] 了

		b. Figure [NP] < * < {到} + Locative [NP] < Deictic [VP] [我/Figure]就[走 Self-initiated Motion]到[一樓/Locative] [去/Deictic] 。 **c. Figure [NP] < * < Deictic [VP] < Locative [NP]** [我們全體/Figure]都[跑/Self-initiated Motion]去[操場/Locative]了
Primary Frame (Deictic Frame)	Figure, Deictic	**a. Figure < V_{path} < ✳ < Loc-NP** [四名警員/figure] [進/ V_{path}]去[屋內/ Loc-NP],只逗留了五分鐘就離開。 **b. Figure < V_{manner} < ✳ < Loc-NP** [我/figure][跑/ V_{manner}]去[附近的便利商店/ Loc-NP], **c. Figure < V_{path} < Loc-NP < ✳** [所有人/figure]全部[下/ V_{path}] [一樓/ Loc-NP]去, **d. Figure < V_{manner} <**

		Loc-NP < ＊
		[年輕人/figure]都[跑/ V_manner] [外面/ Loc-NP]去 了,
		e. Figure < V_path < ＊
		[你/figure] [回/ V_path]去吧,
Basic Frame (Manner+Deictic Frame)	Figure, Locative NP	**a. Figure < ＊ < Loc-NP** [老妹 Figure]又**飛去[**美國 /Loc-NP]了 *lǎomèi yòu fēi-qù měiguó le* younger.sister again fly-go USA PRF 'My younger sister flew to the USA again'
Basic Frame (Path+Deictic Frame)	Figure	**a. Figure < ＊ < Loc-NP** [四名警員/figure]**進去[**屋內 / Loc-NP],只逗留了五分鐘 就離開。 *sì míng jǐngyuán jìn-qù wū nèi zhǐ dòuliú le wǔ fēnzhōng jiù líkāi* four CL officer enter-go house inside just stay ASP five minute then leave

		'Four police officers entered the house and stayed for only five minutes before they left.' **b. Figure < ＊** [你/figure]**回去**吧， *nǐ huí.qù ba* 2SG return.go BA 'You go back.'
Basic Frame (Deictic+*dào* 到 'arrive' Frame)	Figure, Locative NP	**a. Figure < ＊ < Loc-NP** [你 Figure] 將要**去到** [那裡/Loc-NP] *nǐ jiāngyào qù.dào nàlǐ* 2SG MOD go.arrive there 'You would go there.' **b. Figure < ＊ < Loc-NP < Deictic** 只要克服煩惱，[真正的快樂/figure] 就會**來到** [你身邊/Loc-NP] [來/ Deictic] *zhǐyào kèfú fánnǎo zhēnzhèng de kuàilè jiùhuì lái.dào nǐ shēnbiān lái* just conquer worry real DE happiness MOD

		come.arrive 2SG side
		come
		'As long as you got over your worries, true happiness would come to your side.'

5.5 Summary

This section summarizes the discussions introduced in the previous sections. First, the interactions of motion verbs and Deictics of Motion are illustrated and accounted for. Motion verbs of different semantic profiling behave differently when combined with Deictics of Motion. Second, the interaction of locational nouns and Deictics of Motion is described and explained. Deictics of Motion in different positions focus on relations between the speaker and different referents. Third, it is proposed that semantic prominence may be the key to determinining which verb takes precedence in selecting the semantic role of the locative NP. Last but not least, the frame analysis based on corpus observations is provided.

Chapter 6

Conclusion

6.1 Conclusion

In this research, we have seen that *lái* 來 'come'/ *qù* 去'go' can serve as the main predicate that assigns the semantic role to its Loc-NPs, and the analysis has shed light on the long-debated issue about which is the main verb in Mandarin serial verb construction and the typological feature of encoding motion in Mandarin. On the other hand, we have discussed what the semantic features are in *lái* 來 'come'/ *qù* 去 'go' and how the semantic range in *lái* 來 'come'/ *qù* 去 'go' affect the relation with other self-motion verbs and with NPs specifying locations.

In terms of the distributional patterns of the Mandarin Deictics of Motion *lái* 來 'come'/ *qù* 去'go' with different sequence of motion, we first divide the motion verbs into three groups according to their different distribution in the two sequences "V+ Locational Noun +來/去" and "V+來/去+ Locational Noun". In general, the distributions are motivated by the fact that whether the verbs are compatible with the path-delimiting *lái* 來 'come'/ *qù* 去'go'. When *lái* 來 'come'/ *qù* 去'go' appears in a sentence, the endpoint of a path will be highlighted or implied. However, for those verbs that cannot or scarcely denote an endpoint, they do not co-occur with the path-delimiting *lái* 來 'come'/ *qù* 去'go'.

Besides, we also observe the constraints among Figure, locational nouns and Deictics of Motion. From the observation, we discover the distinctions between the two sequences "V+來/去+ Locational Noun" and "V+ Locational Noun +來/去". In

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the former sequence "V+來/去+ Locational Noun", the Deictics always denote the relative position of the Figure and the speaker, and, therefore, we name such Deictics as speaker-figure Deictics of Motion. In the latter sequence "V+ Locational Noun +來/去", the Deictics always specify the relative position of the speaker and the locational nouns, so we term such Deictics as speaker-location Deictics of Motion.

The focus of the differences in Deictics of Motion in different positions has not been fully discussed in previous studies. The distinctions of Pre-Loc Deictic of Motion (i.e., speaker-figure Deictics of Motion) and Post-Loc Deictic of Motion (i.e., speaker-location Deictics of Motion) are illustrated and manifested in this paper in hope that the distinction of Deictics of Motion may shed light on the correlation between form and meaning.

6.2 Future Research

Although this research has shed some light on the semantic range of the deictic marking in motion events, there is still room for further investigation. For example, what are the distributional patterns of deictic marking and other-initiated motion verbs? And how does the concept of speaker and location orientation in the directional deictic apply to other deictic uses (e.g., the resultative deictic)? Hopefully the research would arouse more interests and give some inspiration to the studies concerning deictic marking.

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