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外國文學與語言學研究所

碩士論文

中文移動事件中方向標記之限制及語意探討

**The Distributional Restrictions and the
Semantic Range of Direction Markers in
Mandarin Motion Event**

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Markers in Mandarin Motion Event

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摘要

本研究以 Liu et al. (2012) 所提出的 Proto-motion Event Schema 為本，探討中文移動事件中的方向標記之限制及語意探討。根據 Liu et al. (2012) 一文，中文被視為擁有連動結構 (serial verb construction) 的語言，中文的移動事件更是被進一步探討畫分為 Manner、Route、Direction、Endpoint、Deictic，將前人所謂的 Path 深入細分為 Route、Direction、Endpoint。換句話說，在一個中文移動順序中，動詞可能包含一個或以上的語意成分，而由多重動詞組合而成的移動事件通常會遵循一個由 Manner 到 Route 到 Direction 到 Endpoint 的線性結構。

因此，本研究致力於探究中文移動動詞中方向標記 (面、朝、向、往) 的使用情形。除了從方向標記各自的語法及語意差異深入探討之外，也將其整合 Liu and Chiang (2008) 所提出的「中文動詞語意網」之架構，對方向標記進一步做全面階層性的分類。

本研究的完成提供了方向標記 (面、朝、向、往) 與以往不同的分析，彼此的關係不再只是同義詞，而是各自擁有不同的表現，也對於 Liu et al. (2012) 所提出的 Proto-motion Event Schema 提供了在方向標記上的解釋。

關鍵字：中文、動詞、方向標記

The Distributional Restrictions and the Semantic Range of Direction Markers in Mandarin Motion Event

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Abstract

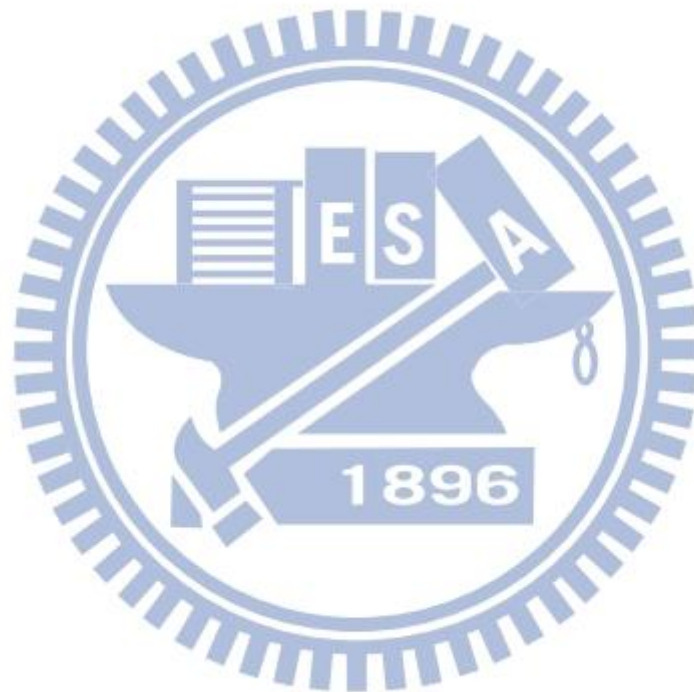
This paper probes into the the issue of Mandarin motion event by investigating the Direction markers in Proto-motion Event Schema proposed by Liu et al. (2012). According to Liu et al. (2012), Mandarin motion event is considered to be in a sequential pattern or so-called a serial verb construction. It is defined by Liu et al. (2012) as having the following sequence: Manner, Route, Direction, Endpoint, and Deictic. The old notion of 'Path' is further categorized in Liu's study into Route, Direction, and Endpoint. That is to say, verbs may encompass one or more of the semantic components in a motion sequence. A multi-morpheme motion event normally follows the linear order from Manner to Route to Direction to Endpoint.

This study aims to investigate the Direction markers *miàn* 面, *cháo* 朝, *xiàng* 向, and *wǎng* 往 in Proto-motion Event Schema proposed by Liu et al. (2012). It also helps to explain the distinct behaviors of each Direction marker in Mandarin by investigating the syntactic and semantic differences and by the incorporating into a frame based analysis using the hierarchical structure proposed by Liu and Chiang (2008).

By offering the syntactic and semantic variations among each Direction marker, the study not only proposes the distinctions of *miàn* 面, *cháo* 朝, *xiàng* 向,

and *wǎng* 往, but also helps to expand the explanation of the behaviors of Direction markers in Proto-motion Event Schema.

Keywords: Mandarin, Motion, Direction, Proto-motion Event Schema



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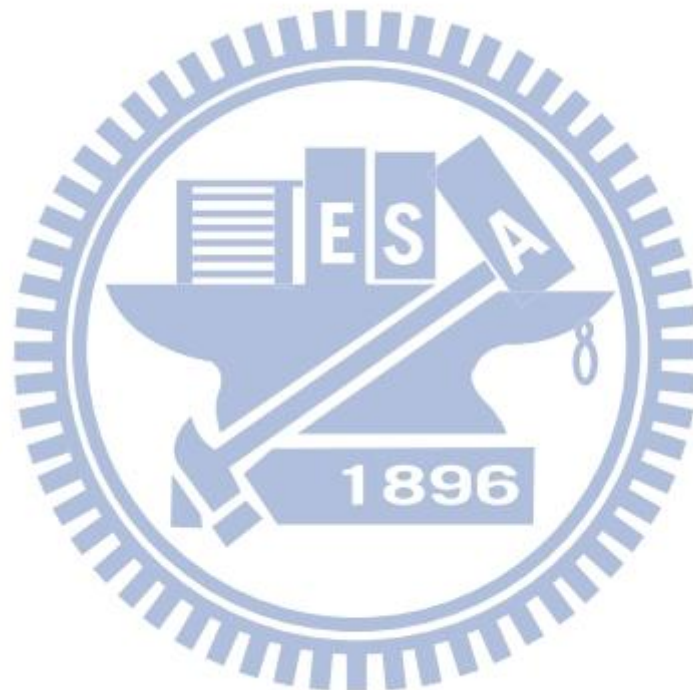
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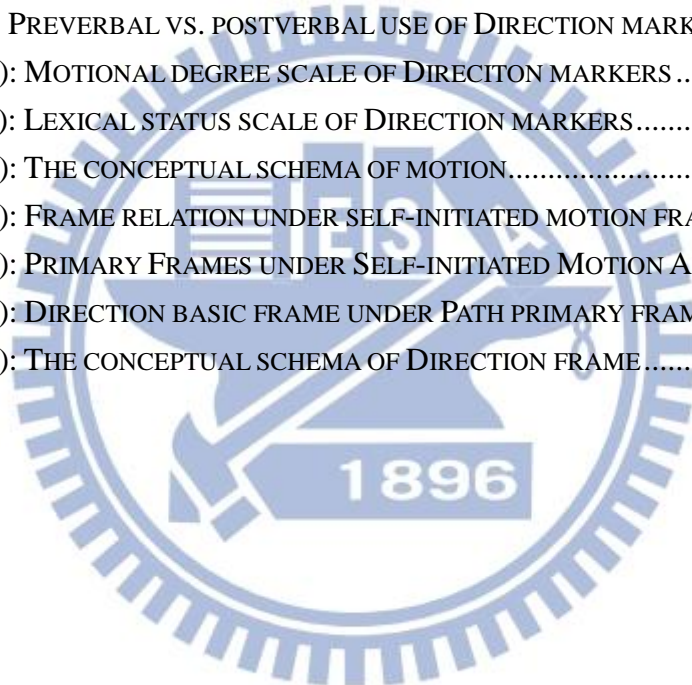
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Chapter 1

Introduction

1.1 Background

The concept of motion has always been widely discussed in Linguistics through many decades. And especially, the issue of motion event in Mandarin has been one of the main focuses of modern linguistic discussion since Mandarin has been considered to be an isolating language because it has relatively simple morphology (Li and Thompson 1981, Norman 1988, among others). In FrameNet, an online dictionary providing evidence for the use of English vocabulary (Fillmore 1976), motion has been defined as:

'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). Alternatively, the Area or Direction in which the Theme moves or the Distance of the movement may be mentioned.'

But in reality studies on motion event in many languages have to cover more than that. There have been plenty of perspectives focusing on the study of motion event and lots of attention has been paid to it. In an earlier study by Talmy (2000), languages around the world can be basically classified into either a satellite-framed language or a verb-framed language. Mandarin, based on Talmy's theory, has been classified into a satellite-framed language. In his discussion of motion event, Talmy argues that the basic motion event consists of four major

components: Motion-Manner, Path, Figure, and Ground.

Motion event in Mandarin has been discussed in great detail in Liu et al. (2012). According to Liu, Mandarin motion event is considered as a sequential pattern and is thus so-called serial verb construction. In Liu et al. (2012), motion is well-defined into such sequence: Manner, Route, Direction, Endpoint, and Deictic. Interestingly, an old notion of ‘Path’ is distinguished in Liu’s study into Route, Direction, and Endpoint. The new and independent meaning for Direction and Endpoint can thus be realized individually in different Mandarin motion events.

In light of the theory of Liu et al. (2012), this study starts with the following research questions: 1) what is the identification of the conceptual component of Direction markers in relation to Mandarin motion event? and 2) how to account for the distributional patterns of each Direction marker based on how they display semantically and syntactically?

1.2 Issue

This paper explores the semantic behavior of Direction markers in the Proto-Motion Event Schema proposed by Liu et al. (2012). The schema integrates and linearizes specific semantic components that are essential for the morphological composition of motion verbs. Based on this conceptual schema, the current study aims to further investigate the distributional patterns in each directional marker.

miàn 面, *xiàng* 向, *wǎng* 往, and *cháo* 朝 are a group of marker modifying directions that are semantically distinguishable but still are connected with

each other. In Mandarin, there are some permissible alternations between different directional markers as long as they are compatible in their meanings. The examples are provided as follows:

- (1) 你看見竿子[*面/朝/往/向]你來了

nǐ kàn jiàn gān zi [miàn/ cháo/ wǎng /xiàng]nǐ lái le*

You see pole face you come ASP.

‘You saw the pole comes toward you.’

- (2) 我由窗邊[*面/朝/往/向]外看

wǒ yóu chuāng biān [miàn/ cháo/ wǎng /xiàng] wài kàn*

I from window-side face outside look

‘I look out through the window.’

- (3) 像往常那樣斜倚著被垛臉[面/朝/*往/*向]門

xiàng wǎng cháng nà yàng xié yǐ zhe bèi duǒ [miàn/ cháo/ wǎng /*xiàng]mén*

Like usual lean ASP stove face face door

‘To lean on the stove and face to the door.’

- (4) 他的頭髮也是[*面/朝/*往/向]上立著的 (Google, 2013/01/19)

*tā de tóu fǎ yě shì [*miàn/ cháo/* wǎng /xiàng]shàng lì zhe de*

3sg hair as-well face up stand ASP DE

‘His hair is standing up as well.’

In addition, among the four markers, only *wǎng* 往 and *xiàng* 向 are allowed to put Manner of verbs in front of them, while Manner of verbs have to

follow *miàn* 面 and *cháo* 朝 as a use of modifier of the location. Meanwhile, only *miàn* 面 has the uniqueness to be followed by the static posture verbs such as *zuò* 坐 and *tǎng* 躺. Examples are given below:

Manner + 往/向, e.g., 飛往/向 locative NP

- (5) 許多夏候鳥正展翅 [飛/Manner] [向/Direction marker] 臺灣

xǔ duō xià hòu niǎo zhèng zhǎn chì fēi xiàng tái wān

Many summer migratory-bird fly face Taiwan

‘Many migratory birds are flying toward Taiwan.’

朝/往/向 locative NP + Manner, e.g., 朝/往/向 locative NP 飛

- (6) 鴿子也成群結隊[往/Direction marker]天空[飛/Manner]

gē zi yě chéng qún jié duì wǎng tiān kōng fēi

Pidgin also gathered go-toward sky fly

‘The pidgins gathers together to fly toward the sky.’

1.3 Scope and Goal

The scope of this study is limited to Direction markers in Proto-motion Event Schema proposed by Liu et al. (2012). It aims at investigating markers that introduce directional NP, including *miàn* 面, *cháo* 朝, *xiàng* 向, and *wǎng* 往. By the observation and investigation, only Direction markers modifying directional NP and the sentence order is in consistence with the motion sequence Manner, Route, Direction, Endpoint, Deictic (Liu et al. 2012) are mainly considered. Only the pure Direction markers which follows the sequence of Proto-motion Event Schema will be further investigated by a frame-based analysis using the hierarchical structure

proposed by Liu and Chiang (2008). The markers in question are *xiàng* 向 and *wǎng* 往 in a postverbal sequence.

The purpose of this paper is to investigate the variation of each Direction marker in Mandarin motion event and provide their syntactic and semantic differences in detail and finally incorporate into a frame-based analysis. The following questions will be discussed:

- 1) What are the distributional patterns of these Direction markers?
- 2) What is the syntactic and semantic difference between those Direction markers?
- 3) How can Direction markers fit into a frame-based analysis?

1.4 Organization of the Thesis

This paper is sequenced in such a way where the background information will be introduced in the first chapter, then followed by the review of the literature in the second chapter. The third chapter will illustrate the database, theoretical framework and methodology. The distributional patterns of the markers will be presented in the forth chapter, the findings of which are also what motivate this study. The fifth chapter proposes a frame-based analysis to give a closer look into the near-synonymous Direction markers so as to be wrapped up by the last chapter which points out the theoretical limitations for future study.

Chapter 2

Literature Review

2.1 Motion Event

The issue of motion event in Mandarin has been one of the focuses of modern linguistic discussion. According to the definition in FrameNet, it is defined as a situation where some entity (Theme) starts out in one place (Source) and stops at another place (Goal) to create a spatial route between the two places (Path). However, numerous studies on motion event have studied this subject from plenty of perspectives. An earlier study by Talmy (2000) proposed that a language is either a satellite-framed language or a verb-framed language. Mandarin, in his point of view, is classified into a satellite-framed language. There are elements in motion event that can be separated into those within the domain of meaning and those within the domain of surface expression. Talmy argues that the basic motion event consists of four major components: Motion-Manner, Path, Figure, and Ground.

Chen and Guo (2009), adopting from Talmy's work, provided another point of view of the combination from the semantic components in Mandarin:

- (1) Manner: the way in which a figure carries out a motion
- (2) Path: the trajectory over which a figure moves, typically with respect to another reference object (i.e., the ground)
- (3) Deictic: path relative to the speaker

Each of these three components can stand alone or in combination with the

other two elements. Thus, they also proposed the eight possible combinations of patterns with Motion, Path, and Deictic in Mandarin, which are Manner, Path, Deictic, Manner + Path, Manner + Deictic, Path + Deictic, Path + Path, Manner + Path + Deictic. Examples are shown and illustrated below:

Manner	他向樓下走(M) ‘He walked downstairs.’
Path	他到(P)了家 ‘He arrived home.’
Deictic	他來(D)了 ‘He came.’
Manner+Path	他跑(M)下(P)三樓 ‘He ran down to the 3 rd floor.’
Manner+Deictic	他往北跑(M)去(D) ‘He ran to the north.’
Path+Deictic	他出(P)去(D)了 ‘He went out.’
Path+Path	他回(P)到(P)家 ‘He returned home.’
Manner+Path+Deictic	他走(M)過(P)來(D) ‘He walked over here.’

Table (1): Eight possible combinations proposed by Chen and Guo (2009)

Still, a recent study proposed by Rappaport Hovav and Levin (2010) suggests that in the domain of motion events, there is a scale implied in the dimension of a distance, which is from the figure with respect to the ground. A scale consists of a set of contiguous locations forming a path and is instructed with a direction of movement at the same time. The following diagram as proposed by Rappaport Hovav and Levin (2010) classifies the English motion verbs based on the scale structure:

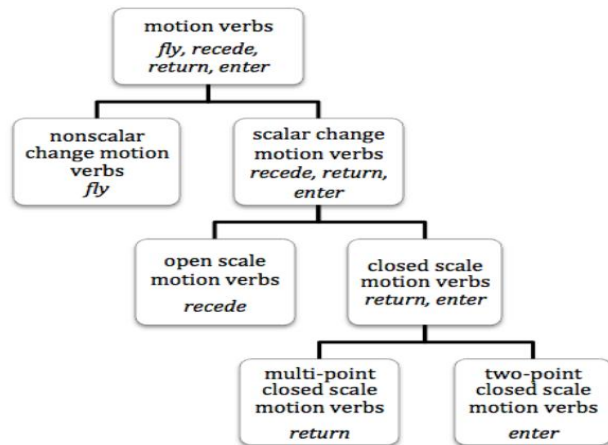


Diagram (1): Scale structure proposed by Rappaport Hovav and Levin (2010)

However, as far as many related studies are concerned, motion in Mandarin is usually considered as a sequential pattern and thus is so-called serial verb construction. Lin (2011) stated that Mandarin allows two or more verbal morphemes to occur together in a sentence as a construction and is commonly expressed as multi-morpheme constructions. For example, in (1), the two verbal morphemes *zǒu* 走 and *huí* 回 occurs together to form the construction *zǒu huí xué xiào* 走回學校.

(1) 我一路茫然地走回學校 (Lin 2011)

wǒ yí lù máng rán de zǒu huí xué xiào

I all-the-way vacantly walk back school

‘I walked back to school vacantly.’

In addition, in Liu et al. (2012), the traditional definition of ‘Path’ in many earlier studies is further discussed and separated into three components: Route (the contour of moving), Direction (spatial orientation), and Endpoint (final point of the contour). Liu proposes that a motion event may be conceptualized into a notion of motional contour or a way of journey. A motion event may consist of a chosen

Manner, via a certain Route, in a given Direction, towards a targeted Endpoint and finally approaches the Destination (or Locus), possibly with a further specification of Deictic orientation. The definitions of components in the Proto-Motion Event Schema are illustrated as follows:

- (1) Manner: the way the motion is carried out
- (2) Route: the contour along which the motion progresses
- (3) Direction: the particular spatial orientation of the path
- (4) Endpoint: the projected final point of the path
- (5) Deictic: specify the speaker-oriented perspective allowed in Mandarin

An old notion of 'Path' is thus distinguished, creating a new and independent meaning for Direction and Endpoint that can be realized individually in different Mandarin motion events.

2.2 Direction Markers

In the recent literatures, the definitions of Direction markers have been treated in many different ways. For example, as many studies have found, many scholars preferred to classify some Direction markers as prepositions (Liu 1996, Xu 1991, Feng 1999). Some others believed that some Direction markers are used as verbs since they believed that all the original meaning starts from verbs (Chao 1968, Wang 2004). Meanwhile, Li and Thompson (1981) provided another explanation for the different behavior of Direction markers as either prepositions or verbs. They are defined as coverbs. Similar to Li and Thompson (1981), in Lu (1999)'s analysis,

cháo 朝, *xiàng* 向, and *wǎng* 往 are classified clearly into two categories. That is, they can all be either a verb or a preposition with different meanings and usages. In the category of verb, *cháo* 朝 is more like *xiàng* 向 which both means *duìzhe* 對著 ‘to face toward’ while *wǎng* 往 is different from the two which means *qù* 去 ‘go’. However, in the category of preposition, all of them tend to share the similar meaning which points out the direction for the movement and collocate with directional noun and locational noun that are used in front of the main verb. The following sections introduce the different point of views from scholars that take Direction markers in a different perspective including prepositions, coverbs, and verbs.

2.2.1 Prepositions

Many studies regard *miàn* 面, *cháo* 朝, *xiàng* 向, and *wǎng* 往 as prepositions. Scholars believed that it is not easy to define prepositions since preposition may contain many different meanings in some cases. Some previous studies choose to take Direction markers as prepositions and provide some classifications based on the behaviors of those markers. First, Chao (1968) argued that *cháo* 朝 and *xiàng* 向 have the characteristics of both verb and preposition while *wǎng* 往 is the same as *wàng* 望 since *wǎng* 往 should be originated from *wàng* 望 in Mainland China Mandarin. In his analysis, he focused more on *cháo* 朝 and *xiàng* 向 in the chapter of prepositions in his book such as *cháo nán zǒu* 朝南走 ‘walk toward south’, *cháo hòu tóu kàn kàn* 朝後頭看看 ‘look backward’, *xiàng yòu kàn* 向右看 ‘look right’, etc.

Second, morphemes denoting Direction may be regarded as prepositions as

Liu et al. (1996) regards *cháo* 朝, *xiàng* 向 and *wǎng* 往 as spatial prepositions. One of the distinctions suggested by Liu is that prepositions are not allowed to be followed by aspectual markers. However, a closer look into corpus data suggests a different story. While **wǎngzhe* 往著 is rarely found, *cháo* 朝 and *xiàng* 向 with aspectual marker *zhe* 著 is found in data. What is more, [向 + 著_{Aspect}] is commonly found and semantically distinguishable from the use of *xiàng* 向 alone in marking a direction. It thus indicates that 朝, *xiàng* 向 and *wǎng* 往, show distinct grammatical and semantic behavior.

Third, the functional differences of *xiàng* 向, *wǎng* 往, and *cháo* 朝 as interpreted by Liu (2007) suggested that they are prepositions and are grammaticalized from verbs. In Liu's point of view, *xiàng* 向, *wǎng* 往, and *cháo* 朝 are a group of preposition modifying directions that are semantically distinguishable but still are connected with each other. In Mandarin, there are some permissible alternations between different directional markers as long as they are compatible in their meanings. For instance, *xiàng* 向, *wǎng* 往, and *cháo* 朝 can be used as modifiers of motion verbs as illustrated in the following examples (Liu 2007):

(2) 默默地往前走 (Liu 2007)

mò mò de wǎng qián zǒu

Silently WANG front walk

'Go forward silently.'

- (3) 朝陳佐千身上細細地灑過了

cháo chén zuǒ qiān shēn shàng xì xì de sǎ guò le

CHAO Chen-Zuoqian body carefully spray ASP.

‘Carefully sprayed toward Chen Zuoqian’s body.’

- (4) 將他向天空扔去

jiāng tā xiàng tiān kōng rēng qù

Jiang 3sg XIANG sky throw Deictic

‘Throw him toward the sky.’

The *wǎng* 往, *cháo* 朝, and *xiàng* 向 in sentences above can be substituted with each other as modifiers of motion verbs. However, only *xiàng* 向 and *cháo* 朝 can modify non-motion verbs but not *wǎng* 往. Examples are shown below (Liu 2007):

- (5) 向上豎著

(Liu 2007)

xiàng shàng shù zhe

XIANG up upright

‘Stand upright.’

- (6) 朝著衛生間喊了一聲

cháo zhe wèi sheng jiān hǎn le yì sheng

CHAO Asp. toilet yell Asp. sound

‘Yell toward the toilet.’

The two prepositions in the above sentences can also be substituted with

each other by modifying non-motion verbs but *wǎng* 往 is not permissible in this case. It can be postulated that the uniqueness of *wǎng* 往 is the fact that *wǎng* 往 inherently encodes some kind of movement. However, in Liu's examples, the definition of motion is unidentified since *sǎ* 灑 'spray' in (3) *cháo chén zuǒ qiān shēn shàng xì xì dì sǎ guò le* 朝陳佐千身上細細地灑過了 'Carefully sprayed toward Chen Zuoqian's body.' may not be understood as a motion event. Still, the study in Liu (2007) pointed out the distinctions worth noticing between these two Direction markers.

Xu (1991) stated that there are five types of prepositions: 1. Temporal Preposition, 2. Locational Preposition, 3. Causal Preposition, 4. Manner Preposition, and 5. Primary and Secondary Preposition. *cháo* 朝, *xiàng* 向, and *wǎng* 往 are included in the second type. The second type of classification includes *zài* 在, *cóng* 從, *dào* 到, *zhí* 直, *zhí dào* 直到, *dào dá* 到達, *shàng* 上, *xià* 下, *dǎ* 打, *dǎ cóng* 打從, *cháo* 朝, *cháo zhe* 朝著, *duì* 對, *duì zhe* 對著, *xiàng* 向, *xiàng zhe* 向著, *chōng* 衝, *shùn* 順, *kào* 靠, *wǎng* 往, *wàng* 望, *tóu* 投, *yán* 沿, *jīng* 經, *jīng guò* 經過, *āi* 挨, *jiē* 接, *jiù* 就, *jiù zài* 就在, *gēn suí* 跟隨, *gēn cóng* 跟從, *suí cóng* 隨從, ...etc. Second, Feng (1999) defined the function of a preposition as introducing a noun or a noun phrase. That is, a preposition is followed closely by a noun. He believed that prepositions share some characteristics of verb. For example, both prepositions and verbs convey actions and both prepositions and verbs carry objects. Such characteristics led prepositions to be called as coverbs. However, Feng chose to simply use the behavior of prepositions and give prepositions four major classifications. Examples are given as follows:

a. 目的、原因介詞	為、替、由於、因
b. 範圍、對象介詞	關於、對、至於、連、把、將、被、叫、讓、給、除、比
c. 時間、方位介詞	當在、自、從、自從、往、到、向、朝
d. 方法、手段介詞	用、拿、依照、按照、遵照、憑、通過、經過

Table (2): Four major classifications of prepositions proposed by Xu (1991)

Feng also believed that the differences between prepositions and verbs are, first, a preposition is not allowed to be with Aspectual markers *le* 了, *zhe* 著, *guò* 過; and second, preposition cannot reduplicate by itself. The difficulty of defining a preposition and a verb as explained by Feng stated that if there is no other verb in a sentence, the preposition becomes a verb. For example, in (1b), the main verb is 去 while *dào* 到 becomes a preposition. While in (1a), there is no other main verb in the sentence, *dào* 到 thus becomes the main verb. Example (2) shows the same pattern.

(7) a. 我到過上海 (Verb) (Xu 1991)

wǒ dào guò shàng hǎi

I arrive Asp. Shanghai

‘I have been to Shanghai.’

b. 我到上海去 (Preposition)

wǒ dào shàng hǎi qù

I arrive Shanghai Deictic

‘I went to Shanghai.’

(8) a. 大門朝南 (Verb)

dà mén cháo nán

gate face south

‘The gate faces south.’

b. 大門朝南開 (Preposition)

dà mén cháo nán kāi

gate face south open

‘The gate opens facing south.’

However, not all the preposition can be transferred this way into a verb. The explanation is thus not enough to define and demonstrate such similarity between some unique set of words.

2.2.2 Coverbs

Coverbs are group of words derived from verbs. As Yin (2004) stated that most of such grammaticalization observed in Mandarin are said to be one-directional from the major category—verb to the minor category—preposition. In order to define and distinguish these types of deverbalized words, a new term—coverb was created to refer to them. Even though Chao (1968) mentioned the usage of coverbs such as *cháo* 朝 in two structures, e.g., *zhè wū zi cháo dōng* 這屋子朝東 ‘the house faces east’ and *cháo dōng zǒu* 朝東走 ‘walk toward east’, the definition may still need to be clearly identified. The word coverb can be traced back to Defrancis (1946) as adopted by Chao. Li and Thompson (1981) defined Direction markers

cháo 朝, *xiàng* 向, *wǎng* 往 as coverbs and gave a more detailed explanation to the word coverb. The function of a coverb to introduce a noun phrase and the phrase formed by the coverb plus the fact that the noun phrase precedes the main verb and follows the subject or the topic (Li and Thompson, 1981) is demonstrated here below:

Subject/topic	coverb + noun phrase	verb
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Examples are provided as follows:

(9) 他朝東站著 (Li and Thompson 1981)

tā cháo dōng zhàn zhe

3sg face east stand DUR

‘He is standing facing east.’

(10) 他朝南拜

tā cháo nán bài

3sg facing south worship

‘He worships facing south.’

Coverbs, based on the definition of Li and Thompson (1981), function as prepositions. That is to say, a coverb and the following noun form a phrase to modify the verb of a sentence. This provides a clear distinction between coverbs and prepositions. The reason to call them coverbs rather than prepositions is that coverbs contain words that are partially like verbs and partially like prepositions. The characteristics of coverbs are inseparable with verbs and prepositions since some of the coverbs are derived from verbal usages (Li and Thompson 1981, Xing 2003,

Wang 2004).

2.2.3 Verbs

Wang (2004) regarded *wǎng* 往 as a verb and compared the semantic behavior of *wǎng* 往 with other semantic-related verbs including synonyms such as *zhī* 之, *shì* 適, *rú* 如, and other antonyms in ancient Mandarin. She argued that *wǎng* 往 semantically encodes the meaning of *dào...qù* 到...去 ‘go and arrive at somewhere’. That is, the basic meaning of *wǎng* 往 includes an unspecified destination. What makes *wǎng* 往 different from other synonymous verbs is whether the destination is encoded in the verb. Thus, *wǎng* 往 does not need to be followed by any other destination since it has already been encoded in the verb *wǎng* 往. In addition, *wǎng* 往 emphasizes on the approach from the point near the speaker to the point away from the speaker, while *rú* 如 only emphasize on the destination that follows it.

2.3 Summary

It is believed that *xiàng* 向, *cháo* 朝, *wǎng* 往 have the usage of both verb and preposition according to the above literatures. Following this consideration, the goal of the study aims to explore the following questions: 1) to identify the conceptual component of Direction markers in relation to the motion event in Mandarin; and 2) to account for the distributional patterns of Direction markers based on how they display semantically and syntactically. The following section introduces the data base used in this study, the theoretical frame work, and the methodology adopted in this paper.

Chapter 3

Database, Framework and Methodology

3.1 Data Base

The data used in this study is mainly based on the corpus data from Academia Sinica Balanced Corpus of Modern Mandarin Chinese (Sinica Corpus) (<http://db1x.sinica.edu.tw/kiwi/mkiwi/>). The second database is Chinese Word Sketch (<http://wordsketch.ling.sinica.edu.tw/>), a powerful database providing vast amount of data for researchers to investigate the grammatical behavior of each Direction marker. The third database is Google search (<http://www.google.com.tw/>) and it provides the most up-to-date data that can be found here.

3.2 Theoretical Framework

There are two theoretical frameworks that are adopted in this study. First, Frame Semantics as proposed by Fillmore and Atkins (1992). Second, Deictic-incorporated Proto-motion Event Schema as proposed by Liu et al. (2012). The two theoretical frameworks are adopted to establish a frame-based and corpus-based analysis to the study of Direction markers in Mandarin.

3.2.1 Frame Semantics

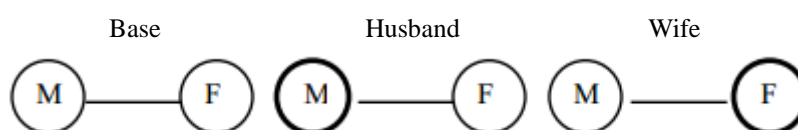
Frame Semantics is a research that emphasizes the representation of a word. Fillmore and Atkins (1992) propose that a word links to a categories of experiences. That is to say, a word activates a semantic frame. The earliest notion of Frame

Semantics can be found in Fillmore (1968). In Fillmore (1968), he proposed a case frame which means that the most important element of a verb is its semantic roles. The famous example provided in Fillmore and Atkins (1992) is the Commercial Transaction Frame. For example, a commercial transaction frame evokes elements including a buyer, a seller, goods, and money. However, not all these elements are core. Verbs in this group of frame including buy, sell, pay, spend, etc. Different verbs activate different elements in a group. For instance, the verb *buy* emphasizes the buyers and the goods while *sell* focuses on the seller and the goods. The concept of Frame Semantics is that knowing a verb of frame means knowing what the elements to take place in a certain situation. That is to say, to describe a verb in an event thoroughly, it is a must to know its grammatical properties, elements of the frame, and which elements are necessary and which are not. Each frame has its own core frame elements and the profiled¹ frame elements to help distinguish the syntactic behavior of each verb. By the observation of the syntactic-semantic correlations, the core meaning of each verb can thus be distinguished.

3.2.2 Deictic-Incorporated Proto-Motion Event Schema

In order to account for the previous concerns, the study mainly adopts the Proto-Motion Event Schema by Liu et al. (2012) as a cognitive basis in identifying the

¹ Langacker (1988) proposes the conceptual different prominences in the same structure with different profiled portion. For example, the following diagram includes the base meaning of husband and wife, the profiled meaning of Husband, and the profiled meaning of Wife. As in the diagram, the base meaning of husband and wife is equally the same with a male and a female. The differences show in both Husband and Wife meanings. Male is profiled in Husband while female is profiled in Wife.



Semantic Structures of HUSBAND and WIFE (Langacker 1988)

semantic range of the directional markers *miàn* 面, *cháo* 朝, *wǎng* 往, *xiàng* 向 in the motion event of Mandarin. The diagram below shows the Proto-Motion Event Schema providing a closer look into the motion event in Mandarin:

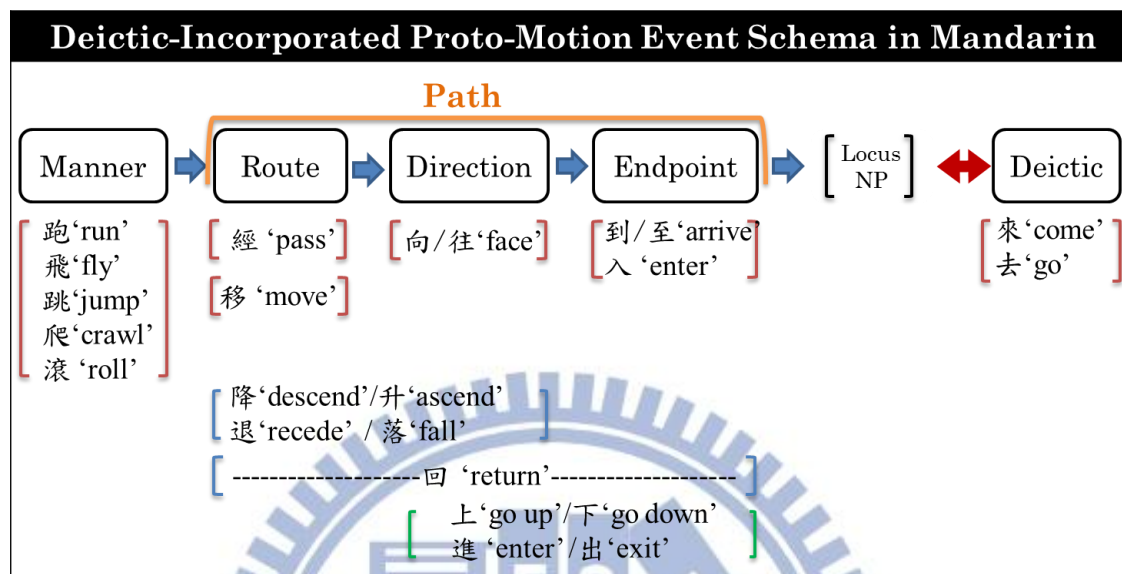


Diagram (2): Deictic-incorporated proto-motion event schema in Mandarin proposed by Liu et al.

(2012)

Based on the diagram above, it is noticeable that the definition of ‘Path’ from Talmy (2000) and Chen and Guo (2009) is further dissected into three semantic components: Path, Direction, and Endpoint. For instance, in Mandarin, the three morpheme of the motion sequence *yí xiàng dào* 移向到 ‘move-toward-to’ thus belong to three separate components—Path, Direction, and Endpoint. However, *yí* 移, *xiàng* 向, and *dào* 到 would be classified into path verbs according to Talmy (2000) and Chen and Guo (2009)’s definitions. Following is an example taken from Liu et al. (2012) showing that there may be three independent semantic components in Mandarin motion event:

(11) 小心翼翼地[移] Path [向] Direction [到] Endpoint 男警察那邊

Xiǎoxīnyì de yí xiàng dào nánjǐngchá nàbiān
carefully de move face arrive male police there

‘(Someone) carefully moved towards and reached the policeman.’

The example shows the necessity of separating each unique component in Mandarin. Meanwhile, based on the differences in grammatical behavior and collocational constraints as mentioned in the previous chapter, it is clear that the Direction markers are different from each other and each of them serves diverse functions between each other. Thus, it is worth further investigating the different conceptual distinctions of Direction markers.

3.3 Methodology

In order to give a distinct classification and clear-cut definition of each near-synonymous marker in Direction, there are five steps that are conducted in this study:

Step 1: Defining and Finding Direction Markers

To figure out what are included in Direction markers, first, the present study defines the distinct behavior of Direction comparing to other components in motion events. Based on the definition of Liu et al. (2012), a Direction marker introduces a spatial orientation. The uniqueness of Direction can be evidenced by a set of Direction markers such as *wǎng* 往 and *xiàng* 向 ‘facing towards’ that take a

directional noun, such as *dōng* 東 /*xī* 西/*nán* 南/*běi* 北/*qián* 前/*hòu* 後/*zuǒ* 左/*yòu* 右/*shàng* 上/*xià* 下, or a specific directional reference, such as *dà lǐ táng* 大禮堂 (Liu et al. 2012). Thus, markers introducing an spatial orientation should be included in Direction.

Step 2: Collecting the Corpus Data

The corpus data is mainly collected from Sinica Corpus, Chinese Word Sketch, and Google Search to search for the target verbs.

Step 3: Observing and Comparing the Distributional Patterns in Direction Markers

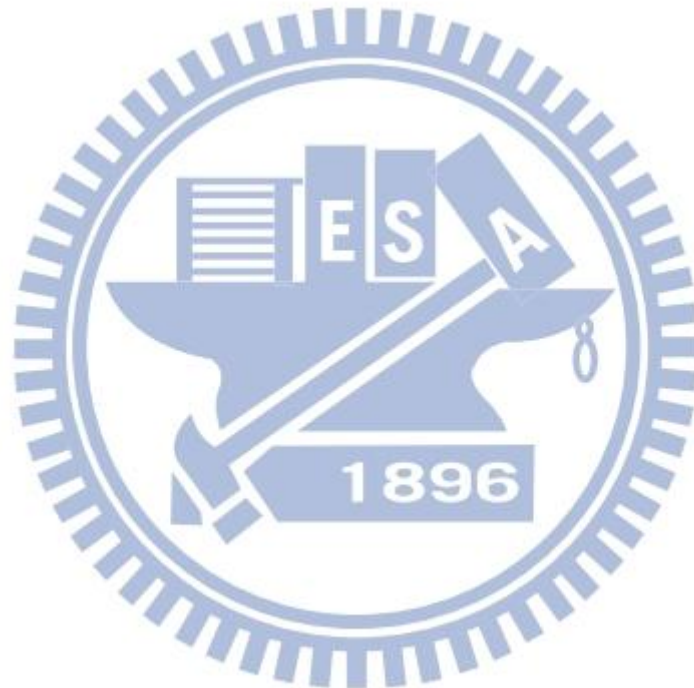
In order to differentiate the core meaning of each Direction marker, the data were under inspection in their 1) distributional patterns, 2) grammatical functions, and 3) semantic range.

Step 4: Analyzing and Classifying the Direction Markers

By utilizing the findings based on the previous investigation, the distinction of each Direction marker is classified by a frame-based analysis adopted from Frame Semantics to figure out the core frame elements and defining pattern of each Direction marker.

The following section provides some further evidence observed from corpus

data focusing on the distributional patterns of directional markers *miàn* 面, *cháo* 朝, *wǎng* 往, *xiàng* 向. The corpus data mainly come from Academia Sinica Balanced Corpus of Modern Chinese, Chinese Gigaword, and Google search. Some preliminary observation has been analyzed and examined in the next section.



Chapter 4

Findings

This section provides the syntactic criteria for each Direction marker based on corpus data observations. As defined by Liu et al. (2012), ‘Direction refers to the spatial orientation with which the moving entity (the Figure) moves with respect to a referential object or in relation to the location of the speaker’. A pure Direction marker has to precede a directional NP, in order to highlight the actual Direction. Therefore, nothing can interrupt the sequence between the Direction marker and the Directional NP because pure Direction markers require an immediately directional NP without any intervening element.

4.1 Distributional Patterns

As mentioned before, the Proto-Motion Event Schema is proposed to account for the semantic components in Mandarin motion events and they are sequenced as following: Manner, Path, Direction, Endpoint, and Deictic. The uniqueness of Direction marker is taken into account in this study to find out the distributional pattern of Direction markers in Mandarin. For example, Direction markers such as *wǎng* 往 and *xiàng* 向 are normally followed by a directional noun, e.g., *dōng* 東 ‘east’, *xī* 西 ‘west’, *nán* 南 ‘south’, *běi* 北 ‘north’. This section focuses on discussing the distribution pattern of each Direction marker. The materials used for the observations and analyses made in the paper come mainly from Academia Sinica Balanced Corpus of Modern Chinese, Chinese Word Sketch and Google search.

Based on the observations and analyses, four of the Direction markers are allowed to be followed by directional nouns. This uniqueness arouse my interests to figure out the four markers *miàn* 面, *cháo* 朝, *xiàng* 向, and *wǎng* 往 since they are all required to be followed by directional nouns. The distributional patterns of *miàn* 面, *cháo* 朝, *xiàng* 向, and *wǎng* 往 can firstly be divided into three groups: 1) Direction markers used individually, 2) Direction markers used preverbally, and 3) Direction markers used postverbally. Examples are given in the following table:

Direction markers used individually	
1	面[北/directionalNP]的房子
2	瓦斯桶開口一定要朝[外/directional NP]
3	由平直的沙灘漸漸向[上/directional NP]
4	你必須要往[西/directional NP]
Direction markers used preverbally	
1	凱洛琳側身面[牆/locative NP]躺著
2	他朝[東/directional NP]站著
3	向[前/directional NP]奔馳
4	往[車站/locative NP]走去
Direction markers used postverbally	
1	飛向[台灣/locative NP]
2	搬往[雪梨/locative NP]

Table (3): Three groups for the distributional patterns for Direction

Many studies considered that *cháo* 朝, *wǎng* 往, and *xiàng* 向 belong to the same category. However, a closer look into corpus data suggests that *cháo* 朝 and

miàn 面 share some similarities, while *wǎng* 往 and *xiàng* 向 share some others. For example, both *wǎng* 往 and *xiàng* 向 are permitted to follow Manner of motion such as *pǎo* 跑, *fēi* 飛, *zǒu* 走, etc. On the contrary, *cháo* 朝 and *miàn* 面 do not have such disposition. The observations and analyses do support the argument that *miàn* 面 and *cháo* 朝 are considered to be static-like while *wǎng* 往 and *xiàng* 向 tend to be dynamic. For the sake of this study, Direction markers will thus be categorized into two groups. Table (3) shows the distinction and the distributional patterns of *miàn* 面, *cháo* 朝, *wǎng* 往, and *xiàng* 向. A detailed discussion will be held in the next paragraph.

Direction	Preverbal use of Direction	Postverbal use of Direction
Marker	___ + Directional NP + Verb	Verb + ___ + Directional NP
<i>Miàn</i> 面	✓	✗
<i>Cháo</i> 朝	✓	✗
<i>Xiàng</i> 向	✓	✓
<i>Wǎng</i> 往	✓	✓

Table (4): Distinction of preverbal vs. postverbal use of Direction markers

4.2 Collocational Tendency

4.2.1 Preverbal vs. postverbal use of Direction markers

According to the discussion in the previous section, these markers may vary in their distributional patterns. A preverbal structure is allowed to be used with four Direction markers *miàn* 面, *cháo* 朝, *xiàng* 向, and *wǎng* 往. However, only *xiàng* 向 and *wǎng* 往 are available to be used postverbally. The following

sentences illustrate the two semantic tendencies:

a. 往/向 + NP + Manner Verb (Preverbal structure)

(12) 鴿子也成群結隊[往/Direction marker][天空/ NP] [飛/verb]

gē zi yě chéng qún jié duì wǎng tiān kōng fēi

Pigeon in-crowds WANG sky fly

‘Pigeons flew toward the sky as well.’

b. Manner Verb + 往/向 + NP (Postverbal structure)

(13) 許多夏候鳥正展翅 [飛/verb] [向/Direction marker] [臺灣/ NP]

xǔ duō xià hòu niǎo zhèng zhǎn chì fēi xiàng tái wān

Many summer migratory-bird fly toward Taiwan

‘Many migratory birds are flying toward Taiwan.’

Comparing the examples above, as exemplified in (13), the postverbal use in Direction markers does not allow *miàn* 面 and *cháo* 朝 to fit in the sentence. Obviously, *miàn* 面 does not collocate with any motional verb in a sentence. As for *cháo* 朝, in the preverbal structure [Direction marker + NP + Manner Verb], the position of Direction marker is believed to be a coverb as many studies have indicated (Li and Thompson 1981, Huang 1974) since a Direction marker has to be followed by another verb in such structure. Since *miàn* 面, *cháo* 朝, *xiàng* 向, and *wǎng* 往 are all allowed in preverbal structure, as indicated by Li and Thompson (1981), they may be treated as coverbs. But only *xiàng* 向 and *wǎng* 往 can follow a Manner Verb such as *fēi xiàng* 飛向, *fēi wǎng* 飛往, etc., *xiàng* 向, and *wǎng* 往 in this construction may be considered as serial verb constructions. As Yin (2004) mentioned, coverbs are defined in order to explain a new group of words originated

from either serial verb constructions or from other lexical verbs and grammaticalized into a new category—coverb. The core meaning referred to verb should first be identified in order to distinguish those similar markers in Direction. The following section discusses differences of each Direction marker in the two structures.

4.2.1.1 Preverbal use of Direction markers

According to Li and Thompson (1981), Direction markers in the preverbal use structure such as *tā cháo nán bài* 他朝南拜 ‘He worships facing south.’ is defined as a coverb. The use of *miàn* 面, *cháo* 朝, *xiàng* 向, and *wǎng* 往 as Direction markers does fit into such structure. Though they all mark a direction and are followed by a directional noun, they are nevertheless not the same semantically.

All these three Direction markers *wǎng* 往, *cháo* 朝, and *xiàng* 向 while modifying a specific direction, the meaning could be either facing or going toward. To be more specific, *cháo* 朝 and *xiàng* 向 can be either motional or non-motional but *wǎng* 往 tends to be only used as a motional marker. For example, *wǎng* 往 can never be followed by a static verb (such as *tǎng* 躺, *zuò* 坐) without any movement. *Wǎng* 往 tends to collocate with motional Manner verbs such as *zǒu* 走, *pǎo* 跑, *fēi* 飛, etc. Examples are given below:

(14) 往車站的方向走

wǎng chē zhàn de fāng xiàng zǒu

WANG station DE direction walk

‘Go toward the direction of the station.’

The position of *wǎng* 往 in the example above can be replaced by either *cháo* 朝 or *xiàng* 向 without changing the meaning or the structure of the sentences. Comparing to *miàn* 面, the major difference is that *miàn* 面 always collocates with static body postures such as *tǎng* 躺, *zhàn* 站, *zuò* 坐, etc. as shown in the following examples in (15). And if *miàn* 面 is replaced by *wǎng* 往, then the whole sentence becomes rather odd.

- (15) a. 凱洛琳側身面牆躺著 (Static)

kǎi luò lín cè shēn miàn qiáng tang zhe

Caroline a-side face wall lie ASP

‘Caroline lies down and turns the body to face the wall.’

- b. ?凱洛琳側身往牆躺著 (Dynamic)

kǎi luò lín cè shēn wǎng qiáng tang zhe

Caroline a-side go-toward wall lie ASP

The only possibility that *wǎng* 往 can be used with a static body posture is *zhàn* 站 such as *nǐ wǎng zuǒ biān zhàn* 你往左邊站 ‘You move to left.’. Still, semantically it needs to involve a movement since it means that the subject *nǐ* 你 ‘you’ should move toward left instead of simply face toward left.

From above comparison, of all the four markers modifying directions, even though they can all be followed by directional NPs, as mentioned before, only *miàn* 面 cannot collocate with motional verbs. Further evidences are given below with Deictic markers *lái* 來 or *qù* 去:

(16) a. *面這邊來

miàn zhè biān lái

Face here come

b. 颱風將朝台灣來 (Google, 2013,5,11)

tái fēng jiāng cháo tái wān lái

Typhoon will toward Taiwan come

‘The typhoon will head toward Taiwan.’

c. 狼向這邊來了 (Google, 2013,5,11)

láng xiàng zhè biān lái le

Wolf toward this-way come ASP

‘The wolf comes toward here.’

d. 大家往這邊來 (Google, 2013,5,11)

dà jiā wǎng zhè biān lái

Everyone toward here come

‘Everyone comes toward here.’

The above examples again illustrate that the uniqueness of *miàn* 面 is in its static characteristics. It points out an orientation for the entity to face to the inherent landmark without any possibility to collocate with motional verbs. In this case, *miàn* 面 will not be further discussed since the behavior of *miàn* 面 do not fit into the motion event considered in this study.

4.2.1.2 Postverbal use of Direction markers

The postverbal use of Direction markers only allows *xiàng* 向 and *wǎng* 往 to fit in this structure. According to the Deictic-incorporated Proto-motion Event Schema proposed by Liu et al. (2012), only Manner such as *fēi* 飛, *pǎo* 跑, etc. and [Route + Direction] such as *shēng* 升, *tuì* 退, etc. can be followed by Direction markers *xiàng* 向 and *wǎng* 往 in a postverbal use structure. Examples are provided as follows:

(17) 燕子俯身飛向屋簷

yàn zi fǔ shēn fēi xiàng wū yán

Swallow bend fly XIANG eaves

‘The swallow flies toward the eaves.’

(18) 被迫退向海峽

bèi pò tuì xiàng hǎi xiá

Forced recede XIANG channel

‘(Someone) is forced to recede toward the channel.’

4.3 Collocational tendency between *xiàng* 向 and *wǎng* 往

The distinction between *xiàng* 向 and *wǎng* 往 has been a long-debated issue (Fang 2004, Xiao 2006, Chao 2002, etc) since they share so many similarities, for example, 1) both of them introduce a directional NP, 2) they are able to fit into both preverbal and postverbal use of Direction. And in many cases, *xiàng* 向 and

wǎng 往 can be replaced by each other as the examples below show:

(19) 一轉身向山坡上方跑去

yì zhuǎn shēn xiàng shān pō shàng fāng pǎo qù

Turn XIANG mountain run Deictic

‘Turn around and run toward the mountain.’

(20) 我和同伴飛向臺灣

wǒ hé tóng bàn fēi xiàng tái wān

I and companion fly toward Taiwan

‘My companion and I fly toward Taiwan.’

However, though *xiàng* 向 can be replaced by *wǎng* 往 without changing any of the meaning, there are quite some distinct usages between *xiàng* 向 and *wǎng* 往 as demonstrated in the following examples:

(21) a. 往北

wǎng běi

WANG north

‘Toward the north.’

從南往北

cóng nán wǎng běi

From south WANG north

‘From the south toward the north.’

b. 向北

xiàng běi

XIANG north

‘Toward the north.’

*從南向北

cóng nán xiàng běi

From south XIANG north

(22) a. 從理工系館往校本部的路上

cóng lǐ gōng xì guǎn wǎng xiào běn bù de lù shàng

From Engineering-Department-building WANG campus DE road

‘The road from the Engineering Department building toward the campus.’

b. 從理工系館向校本部的路上

cóng lǐ gōng xì guǎn xiàng xiào běn bù de lù shàng

From Engineering-Department-building XIANG campus DE road

(23) a. 從德州開車往丹佛

cóng dé zhōu kāi chē wǎng dān fó

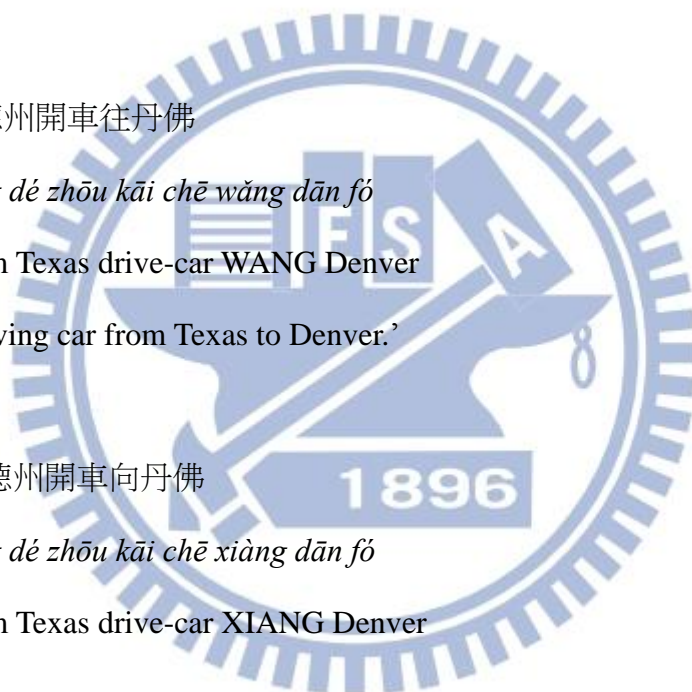
From Texas drive-car WANG Denver

‘Driving car from Texas to Denver.’

b. 從德州開車向丹佛

cóng dé zhōu kāi chē xiàng dān fó

From Texas drive-car XIANG Denver



All these examples indicate that the Direction marker *wǎng* 往 not only can precede a directional NP, it also implies a possible route and thus could collocate with *cóng* 從 by modifying the source. However, *xiàng* 向 may not collocate with the source marker *cóng* 從, and this implies that the basic meaning of *xiàng* 向 does not include a route from the start point to the endpoint. More detailed comparison will be provided in chapter 5.

4.4 Summary

In sum, it is found that the markers *miàn* 面, *cháo* 朝, *xiàng* 向, and *wǎng* 往 can be classified into two structures: 1) [面/朝/向/往 + NP + V], and 2) [V + 向/往 + NP]. The one similarity they all share is that the NP they introduce can all be directional NPs. However, each is different syntactically and semantically. For example, 1) based on the corpus data, *miàn* 面 never collocates with any motional verb, 2) even though *cháo* 朝 does either collocate with motional verbs or non-motional verbs, the only permissible structure for *cháo* 朝 is the preverbal structure [朝 + NP + V], and 3) *wǎng* 往 implies a possible course enabling it to collocate with a source modifying marker *cóng* 從, while *xiàng* 向 may not be able to collocate with *cóng* 從. This indicates that *wǎng* 往 may imply a direction together with a route, which permit the sentences like *cóng nán wǎng běi* 從南往北. But *xiàng* 向 does not imply a route (from source to destination) thus *xiàng* 向 does not collocate with *cóng* 從.

In order to define and sort out what Direction markers are in relation to motion event, a frame-based taxonomy is adopted in the following chapter. And based on the hierarchical structure as established in Liu and Chiang (2008), the frame are hierarchically arranged as Archiframe > Primary frame > Basic frame > Microframe.

Chapter 5

Analysis

Firstly this chapter provides the conceptual schema of Direction markers from the Proto-motion Event Schema and then to be followed by detailed discussion on the similarities and differences between the synonymous set in Direction markers. Section 5.1 demonstrates the differences of the four Direction markers conceptually. Section 5.2 provides the syntactic and semantic comparisons. Section 5.3 deals with the lexical status scale of Direction markers. Section 5.4 incorporates the conceptual schema of self-initiated motion event into a frame-based analysis by adopting a frame-based hierarchical structure proposed from Liu and Chiang (2008).

5.1 Conceptual Schema of Direction Markers

According to Liu et al. (2012), a motion event involves a journey or contour with a certain Manner, passing through a Route, in a given Direction, toward a chosen Endpoint, and finally approaching the Destination with an optional Deictic oriented center. In such motion sequence, the traditional notion of Path is further categorized into Route, Direction, and Endpoint. The whole picture of the conceptual schema starts with a moving entity (Figure) with a chosen way of movement (Manner). The moving entity may have a non-movement event taking place in a place (Ground), or a motion contour the moving entity may adopt to pass an immediate point (Route NP) with a landmark (Directional NP) and finally reaches its final destination (Locative NP). The speaker-oriented perspective (Deictic) may or may not include in the self-initiated motion event. The following section provides further discussion about

the conceptual schema of the four Direction markers *miàn* 面, *cháo* 朝, *xiàng* 向 and *wǎng* 往.

As mentioned in chapter four, *miàn* 面 does not collocate with motional verbs. As shown in the following example, the major difference is that *miàn* 面 always collocates with static body postures such as *tǎng* 躺, *zhàn* 站, *zuò* 坐, etc. And if the static verb is replaced by any other motional verb such as *pǎo* 跑, *fēi* 飛, *zǒu* 走, then the whole sentence becomes rather odd.

- (24) a. 凱洛琳側身面牆躺著
kǎi luò lín cè shēn miàn qiáng tǎng zhe
Caroline a-side face wall lie ASP
'Caroline lies down and turns the body to face the wall.'
- b. ?凱洛琳側身面牆走著
kǎi luò lín cè shēn miàn qiáng zǒu zhe
Caroline a-side face wall lie ASP

Thus, *miàn* 面 itself does not indicate a path. In a commonly used phrase such as 面南, it indicates to face south without any other motional contour. The Figure does not involve any movement as shown below:

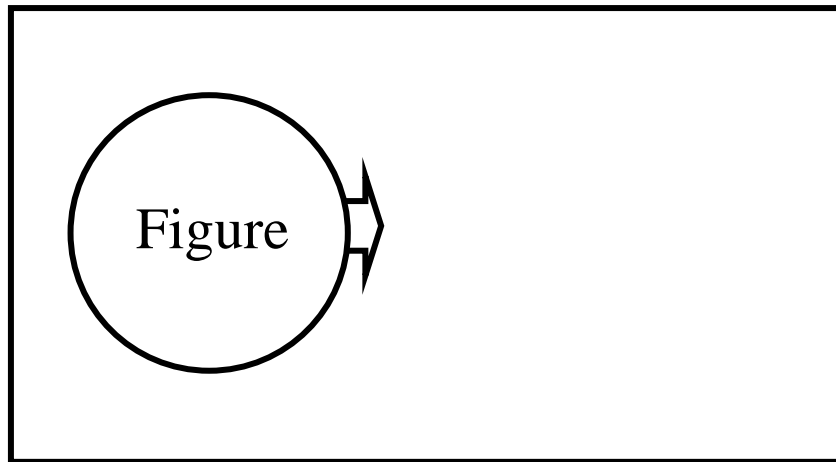


Diagram (3): Conceptual schema of *miàn* 面

In diagram (3), the circle represents the entity, which is the Figure with or without movement and the arrow on the circle represents the orientation. In the case of *miàn* 面, since the Figure does not involve with any movement, there is no any route specified in the schema but only the Figure and its orientation.

As for other Direction markers *cháo* 朝, *xiàng* 向 and *wǎng* 往, it can be found that *cháo* 朝 and *xiàng* 向 can be either motional or non-motional but *wǎng* 往 tends to be only used as a motional marker. The conceptual schema of each of these Direction marker is given below respectively.

Cháo 朝 allows to collocate with not only static body posture verbs which is similar to the usage of *miàn* 面 but also motional verbs as illustrated in the following examples.

(25) 企鵝直挺挺地朝著同樣的方向站著

Qì é zhí tǐng tǐng dì cháo zhe tóng yàng de fāng xiàng zhàn zhe

Penguins straightly face ASP same DE direction stand ASP

‘The penguins are all standing straightly toward the same direction.’

(26) 你看竿子朝你來了

Nǐ kàn gān zǐ cháo nǐ lái le

You see stick toward you come ASP

‘You saw the stick came toward you.’

Thus, in the use of *cháo* 朝, it not only points out the orientation for the Figure, but may also include a possible path leading the Figure to move toward the direction.

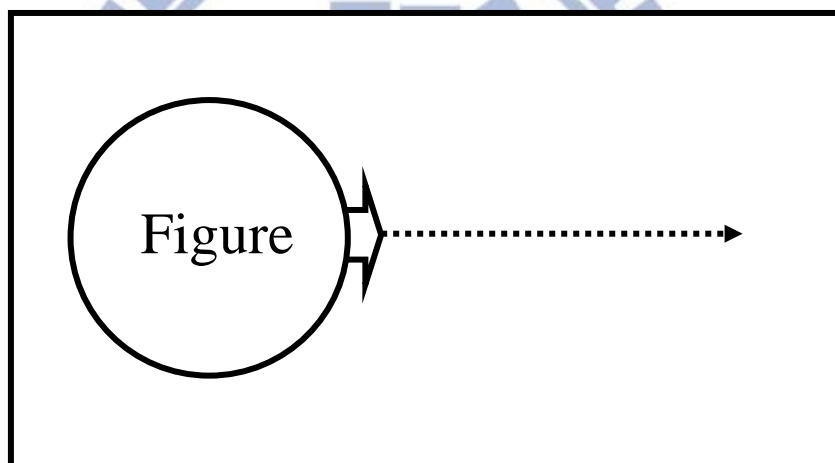


Diagram (4): Conceptual scmemata of *cháo* 朝

In the above diagram, the circle represents the Figure, the arrow on the circle represents the orientation, and the dotted line with arrow indicates the possible moving contour.

Xiàng 向, however, shares some similarities with *cháo* 朝 since both *xiàng* 向 and *cháo* 朝 can either only point to an orientation without movement or they can also lead to the specified direction on the possible path. Examples are given below:

(27) 像個芭蕾舞員向著舞台下的觀眾

Xiàng ge bā lěi wǔ yuán xiàng zhe wǔ tái xià de guān zhòng

Like a balet-dancer face ASP stage down DE audience

‘Like a balet dancer facing the audience down stage.’

(28) 小鳥躍出鳥籠飛向自由天空

Xiǎo niǎo yuè chū niǎo lóng fēi xiàng zì yóu tiān kōng

Little bird jump out bird-cage fly toward free sky

‘The bird flied out to the free sky.’

(29) 大家一起向前跑

Dà jiā yì qǐ xiàng qián pǎo

Everyone together toward front run

‘Everyone runs toward front together.’

As examples above indicate, *xiàng* 向 does not necessarily involve motional verbs. In addition, a huge amount of data suggest that the basic meaning of *xiàng* 向 is target oriented and it would be odd if *xiàng* 向 is replaced by other Direction markers as exemplified below.

(30) a. 男子向父母要錢不成

Nán zi xiàng fù mǔ yào qián bù chéng

Man toward parients ask-for money fail

‘The man failed to ask his parients for money.’

b. ?男子朝父母要錢不成
Nán zi cháo fù mǔ yào qián bù chéng
Man face parients ask-for money fail

c. *男子往父母要錢不成
Nán zi wǎng fù mǔ yào qián bù chéng
Man go-toward parients ask-for money fail

There are more examples below illustrating the target oriented pattern of 向.

In such sentences, *xiàng* 向 can normally be substituted by *duì* 對.

(31) 他看到了我，親切地向我微笑
Tā kàn dào le wǒ , qīn qiē dì xiàng wǒ wēi xiào
3sg see ASP me, nicely to me smile
'He saw me and smiled at me nicely.'

(32) 你向他說話
Nǐ xiàng tā shuō huà
You toward 3sg speak
'You speak to him.'

Thus, the basic function of *xiàng* 向 is to specify the target of the action which is shown by the following diagram.

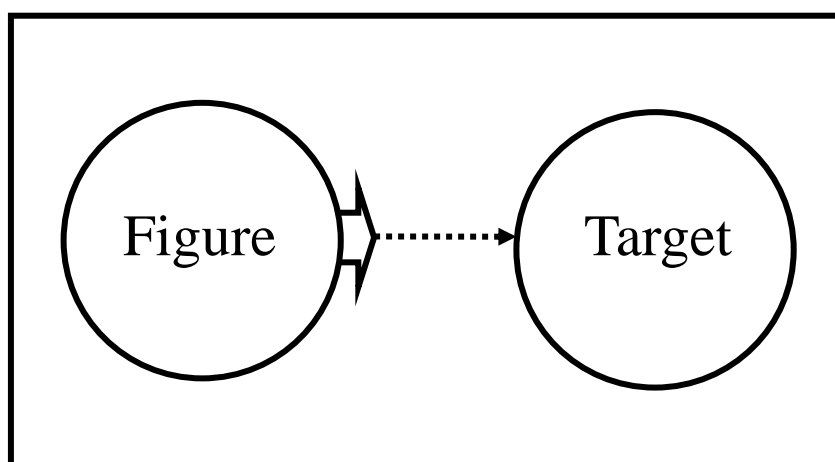


Diagram (5): Conceptual schema of *xiàng* 向

The left circle represents the Figure, the short arrow on the circle is the direction, the dotted line is the possible path, and the right circle is the Target of the Figure's action.

The last Direction marker *wǎng* 往 normally implies a path. In other words, the verbs that collocate with *wǎng* 往 are normally motional and can never be static. Example below shows that the static verb such as *tǎng* 躺 does not collocate with *wǎng* 往 since *wǎng* 往 indicates a path while *tǎng* 躺 does not.

(33) a. 往門口走去

Wǎng mén kǒu zǒu qù

Go-toward gate walk go

‘Go toward the gate.’

b. *往門口躺去

Wǎng mén kǒu tǎng qù

Go-toward gate lie go

Also, the NP after *wǎng* 往 is not only a direction but also a destination in following examples.

(34) 我今晚會飛往泰國

Wǒ jīn wǎn huì fēi wǎng tài guó

I tonight will fly go-toward Thai

‘I will fly to Thai tonight.’

(35) 火車開往新竹

Huǒ chē kāi wǎng xīn zhú

Train drive go-toward Hsinchu

‘The train drives toward Hsinchu.’

The examples above indicate that there would be a Figure that goes toward a destination with a path. Just like the following diagram where the left circle represents the Figure, the arrow on the circle represents the direction, the line between the two circles is the path, and the right circle is the final destination of the movement.

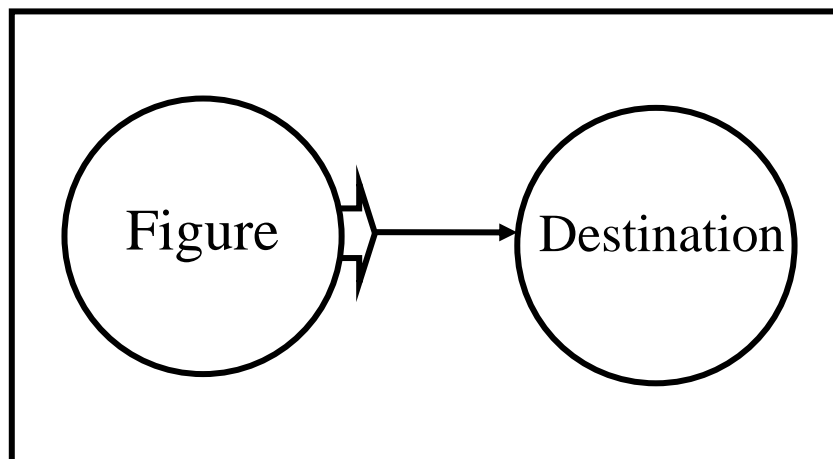


Diagram (6): Conceptual schema of *wǎng* 往

5.2 Synonymous Comparisons

Section 5.2 discusses in detail the similarities and differences between the synonymous set such as in 5.2.1, the differences of [向 + NP] vs. [往 + NP] are discussed; in section 5.2.2, [往 + NP] vs. [到 + NP] is discussed; and section 5.2.3 compares the structure of preverbal use of Direction markers vs. postverbal use of Direction markers.

5.2.1 Distinction of 向 NP vs. 往 NP

This section discusses the distinction of [向 + NP] and [往 + NP], the two seemingly semantic identical structures. In some cases, *xiàng* 向 and *wǎng* 往 indeed can be substitute by each other without changing any of the meaning since both *xiàng* 向 and *wǎng* 往 indicate the direction for the moving entity (Lu 1999, Chang 2000) as the following examples show:

(36) 許多夏候鳥正展翅飛向臺灣

xǔ duō xià hòu niǎo zhèng zhǎn chì fēi xiàng tái wān

Many summer migratory-bird fly face Taiwan

‘Many migratory birds are flying toward Taiwan.’

(37) 走往教室

zǒu wǎng jiào shì

Go go-toward classroom

‘Go toward the classroom.’

There are still some restrictions between the two as demonstrated in the following examples:

- (38) a. 往北 從南往北
wǎng běi *cóng nán wǎng běi*
Go-toward north From south go-toward north
'Toward the north.' 'From the south toward the north.'

- b. 向北 *從南向北
xiàng běi *cóng nán xiàng běi*
face north From south face north
'Toward the north.'

- (39) a. 從理工系館往校本部的路上 1896
cóng lǐ gōng xì guǎn wǎng xiào běn bù de lù shàng
From Engineering-Department-building to-toward campus DE road
'The road from the Engineering Department building toward the campus.'

- b. ?從理工系館向校本部的路上
cóng lǐ gōng xì guǎn xiàng xiào běn bù de lù shàng
From Engineering-Department-building face campus DE road

- (40) a. 從德州開車往丹佛
cóng dé zhōu kāi chē wǎng dān fó
From Texas drive-car go-toward Denver

‘Driving car from Texas to Denver.’

b. 從德州開車向丹佛

cóng dé zhōu kāi chē xiàng dān fó

From Texas drive-car face Denver

By adopting the basic definition of Motion (Talmy 2000, Chen and Guo 2009, Liu et al. 2012), a motion event includes Manner and Path. Semantically, *wǎng* 往 implies both start point and endpoint, which is a general definition of Path. Thus, a source (start point) is permitted to co-exist with an endpoint in a sentence, such as *cóng nán wǎng běi* 從南往北. However, *xiàng* 向 does not necessarily imply a notion of path. It emphasizes only on the direction of a moving entity. The notion of path is incomplete in *xiàng* 向 since *xiàng* 向 lacks the implication of a start point. The start point marker *cóng* 從 thus tends not to fit into the sentence, e.g., **cóng nán xiàng běi* *從南向北. In other words, *wǎng* 往 is a more motion-related Direction marker since *wǎng* 往 not only points out a direction of the moving entity, it also implies a possible path from the start point to the endpoint. Thus, *xiàng* 向 can collocate with many other verbs other than motional verbs while *wǎng* 往 cannot, such as:

(41) a. 向他說話

xiàng tā shuō huà

Face 3sg speak

‘Speak to him.’

b. *往他說話

wǎng tā shuō huà

go-toward 3sg speak

- (42) a. 向他學習 b. *往他學習
xiàng tā xué xí *wǎng tā xué xí*
 Face 3sg learn go-toward 3sg learn
 ‘Learn from him.’
- (43) a. 向南躺 b. *往南躺
xiàng nán tāng *wǎng nán tāng*
 Face south lie go-toward south lie
 ‘Lie down toward south.’

In sum, *xiàng* 向 mainly introduces the direction of the movement while *wǎng* 往 modifies not only the direction but also a possible path for an entity moving toward the endpoint.

5.2.2 Distinction of 往 NP vs. 到 NP

The previous section mentions that *wǎng* 往 indicates a moving contour for the entity, which means that *wǎng* 往 may be collocated with a start point and an endpoint. In other words, the NP of *wǎng* 往 usually denotes the endpoint (Locative NP) for the moving entity to arrive at. For example, in *zhè bān gōng chē wǎng xīn zhú* 這班公車往新竹 ‘the bus goes to Hsinchu’, the NP *xīn zhú* 新竹 ‘Hsinchu’ can be a destination (Locative NP). Since the NP of *wǎng* 往 may be the Locative NP, what makes it different from the Endpoint marker *dào* 到 in the Proto-motion Event Schema?

This section compares the two markers in which the NPs semantically can be a destination of the moving entity. For example, in the following two examples, the

two NPs *jiào shì* 教室 and *péng hú* 澎湖 can be the destination of the moving entity semantically.

(44) 我……走往教室途中

wǒ ... zǒu wǎng jiào shì tú zhōng

I walk go-toward classroom on-the-way

‘On the way when I walking toward the classroom.’

(45) 他母親決定飛到澎湖探望他

tā mǔ qīn jué dìng fēi dào péng hú tàn wàng tā

3sg mother decide fly arrive Penghu visit him

‘His mother decides to fly to Penghu to visit him.’

In order to examine whether the usage of *wǎng* 往 can be separated from *dào* 到 since they share such similar structure in denoting location, an Aspectual marker *le* 了 is added to identify their differences syntactically as shown in the following examples:

(46) a. 學校到了

xué xiào dào le

School arrive LE

‘The school is here.’

b. 到學校了

dào xué xiào le

arrive school LE

‘(Someone) arrives at the school.’

c. 到了

dào le

arrive LE

‘(Someone) arrived.’

d. 到學校去了

dào xué xiào qù le

arrive school go LE

‘(Someone) has already gone to school.’

- (47) a. *學校往了 b. *往學校了

xué xiào wǎng le *wǎng xué xiào le*

School go-toward LE go-toward school LE

- c. *往了 d. 往學校去了

wǎng le *wǎng xué xiào qù le*

Go-toward LE go-toward school go LE

‘(Someone) has already goes toward the school.’

Syntactically, examples (34) and (35) show that there is an aspectual and constructional differences between *wǎng* 往 and *dào* 到 ‘arrive’ even though both *wǎng* 往 ‘go toward’ and *dào* 到 ‘arrive’ can occur precede the Locative NP *xué xiào* 學校 ‘school’. That is to say, *wǎng* 往 ‘go toward’ can neither take the Aspectual marker *le* 了 nor a fronted Locative NP as example (35) provided. The reason for such variation may be due to the fact that *dào* 到 ‘arrive’ is an Endpoint marking verb which marks a destinational location (Locative NP) with respect to the endpoint of a path. In other words, *dào* 到 ‘arrive’ is a verb especially marks an Endpoint. *dào* 到 ‘arrive’ can thus collocate with Aspectual marker *le* 了. However, *wǎng* 往 ‘go toward’ can never exist without its following directional NP. It tends to be more grammaticalized into a marker, as many previous studies called as a ‘coverb’ (Li and Thompson 1981), resulting in the incompatible structure collocating with Aspectual marker *le* 了. To be more specific, *wǎng* 往 ‘go toward’ is more like a Direction marker with a meaning facet² (Ahrens et al. 1998) indicating

² It has been argued that when the same word appears to be more than one meanings, is it eventually resulting from the meaning extensions or meaning differences? Ahrens et al. (1998) provide two

an Endpoint while *dào* 到 ‘arrive’ can be an Endpoint marking verb or an Endpoint marker to mark a destinational location.

Semantically, *wǎng* 往 does not collocate with the Aspectual marker *le* 了, or it may result into certain contradiction of the meaning. That is to say, the basic meaning of *wǎng* 往 includes progression along a path for the moving entity from the start point toward the destination. It implies a shifting motion in the contour. However, the Aspectual marker *le* 了 in many previous studies is defined as a perfect aspect denoting perfective events (Li et al., 1982). Since *wǎng* 往 and *le* 了 denote progressive motion event and perfective events respectively, they are semantically incompatible and thus are not able to collocate with each other. For example, the sentence such as **wǎng xué xiào le* *往學校了 does not exist.

In addition, *wǎng* 往 and *dào* 到 are compared and discussed in Lin (2007) by using the following examples:

(48) 火車開往布拉格

huǒ chē kāi wǎng bù lā gé

Train drive go-toward Prague

‘The train drives toward Prague.’

criteria for the possible explanation:

Meaning extension involves meaning facet which is defined by the three following criteria: 1) more than one meaning facets are permitted to co-exist within the same context, 2) a meaning facet is an extended meaning from a core sense or other meaning facets, and 3) words in the same semantic category will have similar sense extensions and the similar related meaning facets (Ahrens et al. 1998).

(49) 火車開到布拉格

huǒ chē kāi dào bù lā gé

Train drive arrive Prague

‘The train arrives at Prague.’

Lin (2007) states that example (36) focuses on the direction for the train and the destination Prague, which means that the direction for the train is toward Prague and the train will arrive at Prague eventually. While example (37) focuses on the destination, which means that the destination for the train is Prague and must stop at Prague. In other words, *wǎng* 往 profiles the direction and destination for it to be able to be followed by a directional NP such as *dōng* 東, *nán* 南, *xī* 西, or *běi* 北. However, *dào* 到 does not allow such directional NPs *dōng* 東, *nán* 南, *xī* 西, or *běi* 北 to be followed by (e.g., **huǒ chē kāi dào běi* *火車開到北). Based on the above argument, the following diagram is the conceptual schema proposed by Lin (2007) illustrating the different profiled parts in 到 and 往 respectively:

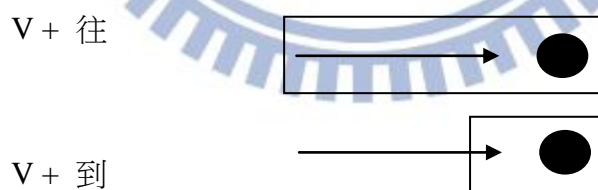


Diagram (7): Conceptual schema of V + 往 and V + 到 (Lin 2007)

The Proto-motion Event Schema (PMS) proposed by Liu et al. (2012) as depicted in Diagram (9) hereunder again states that the NP of the Endpoint marker 到 has to be a Locative NP while the Direction marker 往 follows by a directional NP.

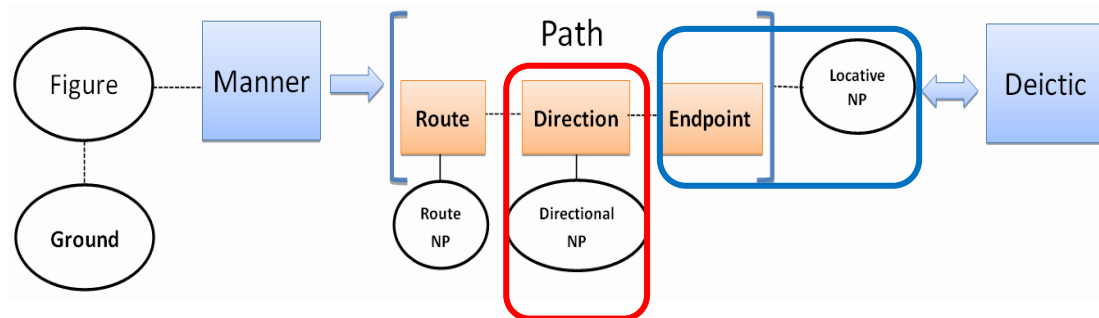


Diagram (8): The conceptual schema of the PMS

Thus, even though the two markers 往 and 到 may include both a path and a destination such as *kāi wǎng bù lā gé* 開往布拉格 and *kāi dào bù lā gé* 開到布拉格, direction and destination are profiled in the used of 往, the Direction marker, while destination is profiled in the use of 到, the Endpoint marker.

5.2.3 Distinction of preverbal vs. postverbal use of Direction markers

This section discusses the distinctions of preverbal and postverbal use of each Direction marker. The following diagram illustrates that Direction markers may be used either as in preverbal structure or postverbal structure. 面 is not included in the present discussion about the motion event since none of the motional verb can be used with 面. In this section, the analysis is separated into two parts. First, the syntactical distinctions of Direction markers are presented to illustrate the functions of Direction markers in different structures. Second, providing the semantic evidences to examine the postverbal use of Direction markers tend to be in the serial verb construction which is in consistence with the Proto-motion Event Schema proposed by Liu et al. (2012), while Direction markers in the other one may tend to be used as coverbs.

Direction	Preverbal	Postverbal
Marker	___ + Directional NP + Verb	Verb + ___ + Directional NP
面	✓	✗
朝	✓	✗
向	✓	✓
往	✓	✓

Diagram (9): Preverbal vs. postverbal use of Direction markers

Syntactically, the Direction markers may be divided into two structures: 1) preverbal use of Direction markers as in 朝/向/往家裡跑 and 2) postverbal use of Direction markers as in 飛向/往台灣. As shown in the above diagram, only 朝 does not fit into postverbal construction. In many previous studies (Li and Thompson 1981), the Direction marker 朝 in such structure is defined as a coverb. As suggests by the sequence of Proto-motion Event Schema proposed by Liu et al. (2012), such postverbal construction may be exactly the serial verb construction. Liu et al states that ‘if the postverbal pattern is taken to be similar to a serial verb construction, then the marker occurring postverbally can be seen as part of the serial motion event and appears to be less grammaticalized than those that only occur preverbally.’ (Liu et al. 2012).

In addition, the [Manner + Direction] serial verb combinations such as 飛往 or 飛向 do allow aspectual marker 了 to follow Direction markers, while the Direction markers in preverbal use such as 向天空飛 is not permitted to say *向了天空飛 as demonstrated in the following examples:

(50) a. 一隻鷹飛向了天空

yì zhī yīng fēi xiàng le tiān kōng

CL eagle fly face LE sky

‘An eagle flies toward the sky.’

b. *一隻鷹向了天空飛

yì zhī yīng xiàng le tiān kōng fēi

CL eagle face LE sky fly

(51) a. 燕子飛往了遙遠的北方

yàn zi fēi wǎng le yáo yuǎn de běi fāng

Swallow fly go-toward LE far-away north

‘The swallow flies toward the far-away north.’

b. *燕子往了遙遠的北方飛

yàn zi wǎng le yáo yuǎn de běi fāng fēi

Swallow go-toward LE far-away north fly

Usually a Direction marker must be closely together with its directional NP such as *zhè bān chē wǎng xīn zhú* 這班車往新竹 rather than *zhè bān chē wǎng le xīn zhú* *這班車往了新竹. However, when a Direction marker follows a Manner of verb, the aspectual *le* 了 is permitted such as in (50a) and (51a). This again proves that the use of postverbal Direction markers is in consistence with the sequence in the Proto-motion Event Schema. The [Manner + Direction] sequence becomes serial

verb construction allowing the existence of the aspectual *le* 了. While the preverbal use of Direction markers may be more like a coverb (Li and Thompson 1981).

Semantically, the two structures may encode differently in their NPs. Based on the Proto-motion Event Schema, there would normally be only one NP—Locative NP in a sentence such as 火車開往[新竹/Locative NP]. Thus, the NP in the postverbal structure should be a Locative NP by default. On the contrary, in the preverbal structure, there may be more than one NPs in a sentence. The first NP tends to be Directional NP while the second NP has the tendency to be Locative NP. The following table demonstrates the tendencies for NPs in the two structures:

	NP = Locative NP	NP = Directional NP
a. [V 往/向 NP]	85.7 % (24/28)	14.3 % (4/28)
b. [往/向 NP V]	14.1 % (20/142)	85.9 % (122/142)

Table (5): Tendencies of NPs in preverbal vs. postverbal structure

In the above table, structure (a) is the postverbal use of Direction marker structure. In such structure, the NP has the tendency to be a Locative NP such as *pín dōng* 屏東/*fēi lǜ bīn* 菲律賓/*tái wān* 台灣 as demonstrated in the following examples:

(52) 許多夏候鳥正展翅飛向[臺灣/Locative NP]，打算在此繁殖

xǔ duō xià hòu niǎo zhèng zhǎn chì fēi xiàng tái wān dǎ suàn zài cǐ fán zhí

Many summer migratory-bird are fly face Taiwan, planning in here giving-birth

‘Many migratory birds are flying toward Taiwan, planning to breed here.’

(53) 蝙蝠飛往客廳

Biǎn fú fēi wǎng kè tīng

Bat fly go-toward living-room

‘The bat flew toward the living room.’

In structure (b), the NP tends to be a Directional NP such as *shàng* 上/ *xià* 下/ *zuǒ* 左/ *yòu* 右/ *dōng* 東/ *xī* 西/ *nán* 南/ *běi* 北 such as in the following examples:

(54) 蝸牛沿著牆角向上爬

Guā niú yán zhe qiáng jiǎo xiàng shàng pá

Snail along wall-corner face up climb

‘The snail climbed up along the wall.’

(55) 野狼往[前/Directional NP]跑

yě láng wǎng qián pǎo

Wolf go-toward front run

‘The wolf runs toward the front.’

Moreover, only structure (b) allows two NPs to co-exist in the same sentence. In this case, it does not matter if the first NP is directional noun (e.g., *dōng*

東/ *xī* 西/ *nán* 南/ *běi* 北) or referential noun (e.g., *chē zhàn* 車站/*xīn zhú* 新竹/*tái wān* 台灣), the first NP denotes its direction while the second denotes its destination.

Examples are given below:

- (56) ...往[車站/Directional Noun]走，到上次很喜歡吃的[一蘭拉麵/Loc NP]回味一下

wǎng chē zhàn zǒu dào shàng cì hěn xǐ huān chī de yì lán lā miàn huí wèi yí xià

...go-toward station walk, arrive last-time Deg like eat DE Yilan noodle recall-the -memory

‘...go toward the direction of the station to the Yilan noodle which I like a lot.’

- (57) ...往[山上/Directional Noun]走，到[紅葉溫泉/Loc NP]再泡一次湯

wǎng shān shàng zǒu dào hóng yè wēn quán zài pào yí cì tāng

...go-toward mountain-top walk, arrive Hongyie hot-spring again dip hot-spring

‘...go toward the direction of the mountain to the Hongyie hot spring to enjoy again.’

- (58) 再往[山上/Directional Noun]走，到此慕名已久的[錫安山/Loc NP]

zài wǎng shān shàng zǒu dào cǐ mù míng yǐ jiǔ de xī ān shān

Again go-toward mountain walk, arrive here famous De Xian mountain

‘go further toward the direction of the mountain, to the famous mountain Xian.’

- (59) 他...直往[岸上/Directional Noun]跑；他一直奔到[家裡/Loc NP]

tā zhí wǎng àn shàng pǎo tā yì zhí bēn dào jiā lǐ

3sg...straight go-toward shore run, 3sg run arrive home

‘He...runs toward shore to home.’

5.3 Lexical Status of Direction Markers

The distinctions among the Direction markers can be dealt with in the discussion of the motional degree and the lexical status in this section. First, let us begin by examining the motional degree. Examples are as follows.

- (60) a. 這房間面海可看美麗的日出

zhè fáng jiān miàn hǎi kě kàn měi lì de rì chū

this room face sea able watch beautiful sunrise

‘The room faces the sea and you can watch the beautiful sunrise in this room.’

- b. *這房間往海可看美麗的日出

zhè fáng jiān wǎng hǎi kě kàn měi lì de rì chū

this room go-toward sea able watch beautiful sunrise

- (61) a. 向日葵永遠朝太陽

xiàngrikuí yǒngyuǎn cháo tài yáng

Sunflower always face sun

‘The sunflowers always face the sun.’

- b. *向日葵永遠往太陽

xiàngrikuí yǒng yuǎn wǎng tài yáng

Sunflower always go-toward sun

(62) a. 我的窗戶向南
wǒ de chuāng hù xiàng nán
 1sg DE window face south
 ‘My window faces south.’

b. *我的窗戶往南
wǒ de chuāng hù wǎng nán
 1sg DE window go-toward south

From the three pairs of examples above, it is clear that only *wǎng* 往 tends to be more motional than others. Examples show that it is allowed for *miàn* 面, *cháo* 朝, and *xiàng* 向 to be used non-motional (static), while *wǎng* 往 normally do not. This indicates that *miàn* 面 *cháo* 朝 and *xiàng* 向 denote a static orientation but *wǎng* 往 usually denotes the motional direction. Thus, the scale is shown below:

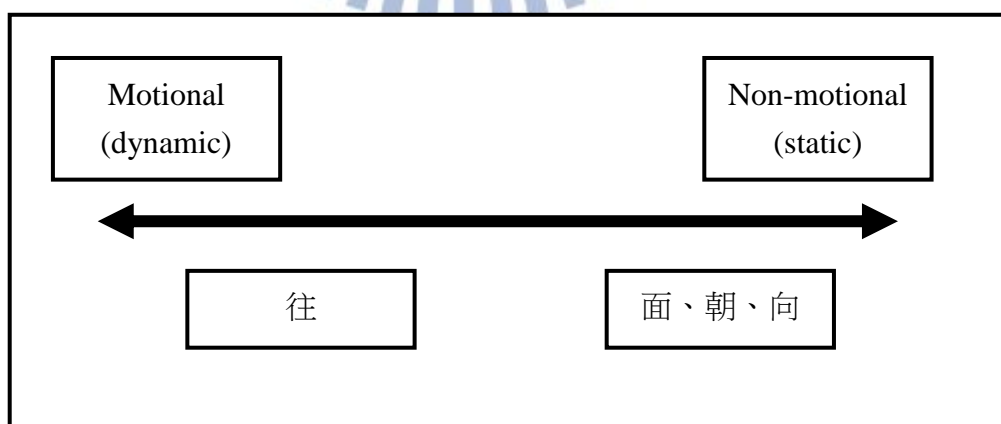


Diagram (10): Motional degree scale of Direction markers

Next, in order to distinguish the lexical status among *miàn* 面 *cháo* 朝 *xiàng* 向 and *wǎng* 往, the preverbal and postverbal pattern discussed in chapter four is considered. In chapter four, it has been observed that *miàn* 面 and *cháo* 朝 can only be used in the preverbal pattern instead of postverbal pattern (e.g., *cháo nán fēi* 朝南飛 vs. *fēi cháo nán* *飛朝南). This explains the ungrammaticality of example (63b) as given below:

(63) a. 許多夏候鳥正展翅飛向/往臺灣

xǔ duō xià hòu niǎo zhèng zhǎn chì fēi xiàng/wǎng tái wān

Many summer migratory-bird fly toward Taiwan

‘Many migratory birds are flying toward Taiwan.’

b. *許多夏候鳥正展翅飛面/朝臺灣

xǔ duō xià hòu niǎo zhèng zhǎn chì fēi miàn / cháo tái wān

Many summer migratory-bird fly face Taiwan

The Direction marker in preverbal pattern is also called a coverb in many studies (Li and Thompson 1981) and the verbal usage is thus reduced. This helps to separate *miàn* 面 and *cháo* 朝 from *xiàng* 向 and *wǎng* 往. The lexical status scale is as follows:

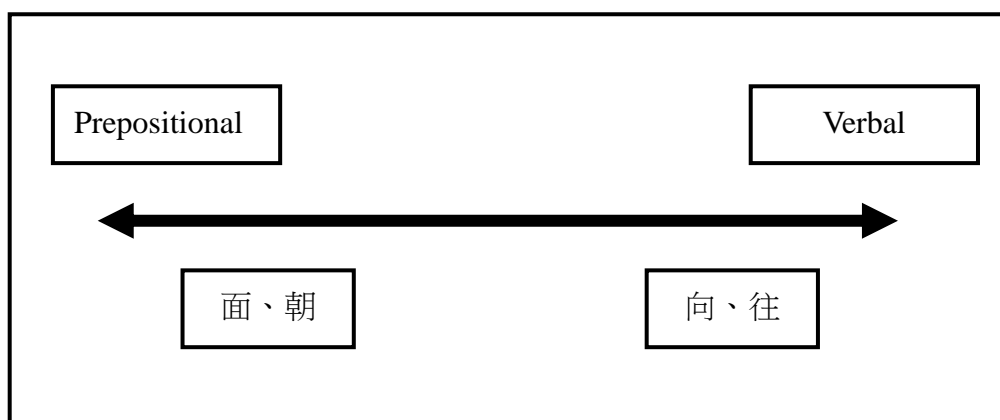


Diagram (11): Lexical status scale of Direction markers

The next section incorporates the Direction markers into a frame-based analysis and provides a hierarchical structure in relation to the conceptual schema in the motion event of Mandarin.

5.4 Frame-based hierarchical structure

This section provides a frame-based analysis in relation to the conceptual schema in the motion event of Mandarin. Section 5.4.1 introduces the layer 1—Archiframe of self-initiated motion event. Section 5.4.2 discusses the primary frames under the Archiframe. Section 5.4.3 presents the basic frames mainly focusing on components of Direction.

According to Liu et al. (2012), conceptually a motion event involves a journey or contour with a certain Manner, passing through a Route, in a given Direction, toward a chosen Endpoint, finally approaching the Destination with an optional Deictic oriented center. Diagram (3) illustrates the conceptual schema based on Liu et al. (2012) to exhibit the correlation of the internal components and external elements in motion events.

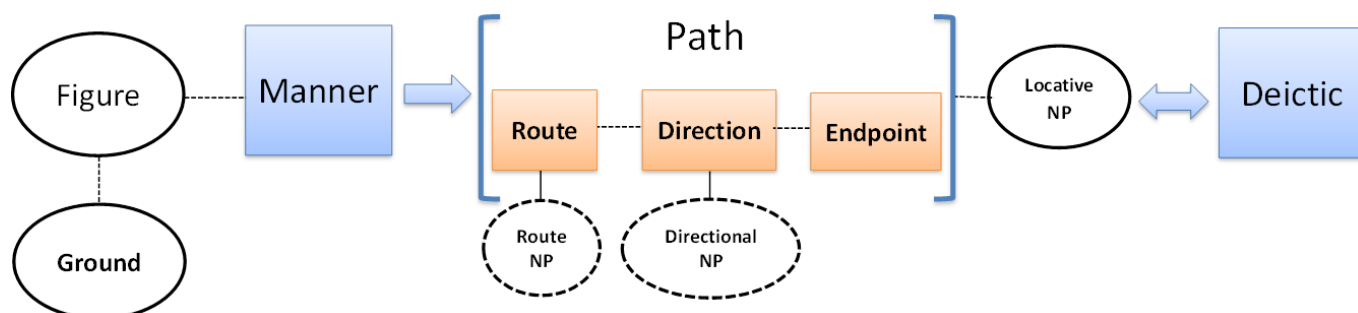


Diagram (12): The conceptual schema of motion

In the motion sequence proposed by Liu et al. (2012), the traditional notion of Path is further distinguished into three subcategory components—Route, Direction, and Endpoint. The whole picture of the conceptual schema starts with a moving entity (Figure) with a chosen way of movement (Manner). The moving entity may have a non-movement event taking place in a place (Ground), or a motion contour the moving entity may adopt to pass an immediate point (Route NP) with a landmark (Directional NP) and finally reaches its final destination (Locative NP). The speaker-oriented perspective (Deictic) may or may not include in the self-initiated motion event.

This paper aims to provide a thorough investigation in the component of Direction and its directional NP. By adopting Liu and Chiang (2008) which propose a frame-to-frame hierarchy based on Frame Semantics, the four types of frame are grouped according to their semantic scope and their distinct lemma. An **Archiframe** is a relatively broad semantic domain that provides the maximal scope of background information for a unique event type. It is at the top of the semantic hierarchy. A **Primary Frame** is more focused on a major relational subpart of an Archiframe and point out the profiled portion of the conceptual schema. A unique set of core frame elements constitute a distinctive Primary Frame. A **Basic Frame** highlights a particular frame element or relation within a Primary Frame. A Basic Frame can be divided into a **Microframe** which is distinguished based on role-internal features of frame elements.

Under such assumption, Mandarin motion events are analyzed and re-constructed with a frame-based analysis. Following the hierarchy established in

Liu and Chiang (2008), the hierarchical structure of Mandarin motion events is illustrated in the following diagram.

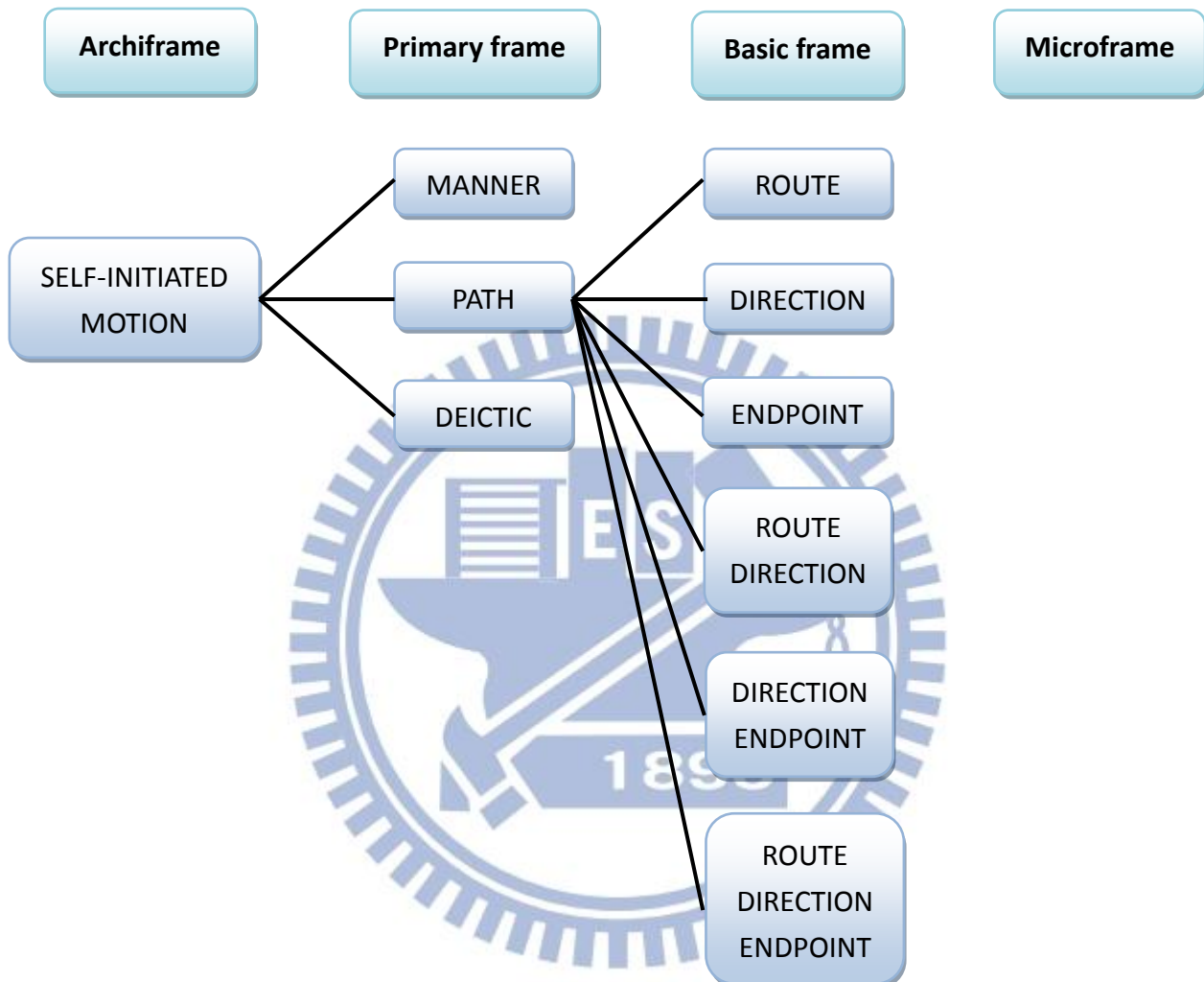


Diagram (13): Frame relation under self-initiated motion frame

The primary focus of this study is mainly on the components of Direction under the basic frame. The upcoming section demonstrates the crucial distinctions of Direction markers based on a frame-based hierarchical analysis of each Direction marker.

5.4.1 Layer 1: Archiframe (Self-initiated Motion Frame)

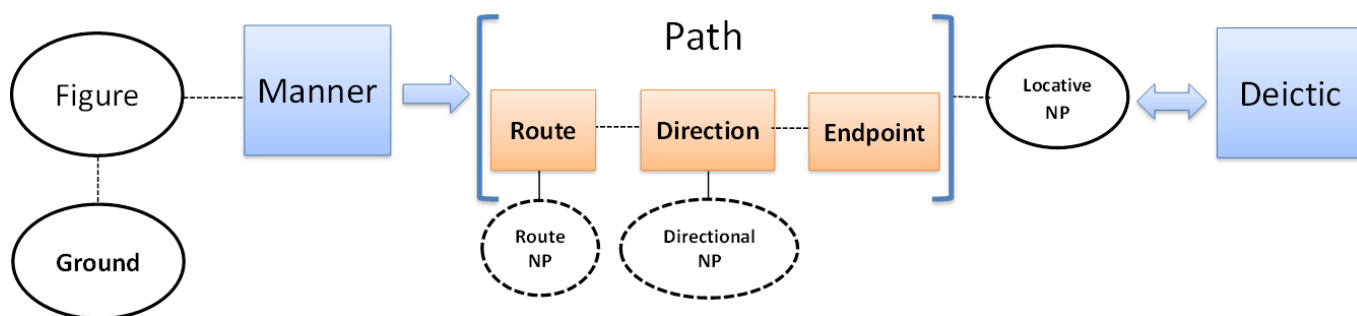
According to Liu and Chiang (2008), Archiframe is defined as the highest frame in the semantic hierarchy system. It is the widest range of semantics in the self-initiated motion domain. The information of Self-initiated Motion archiframe is given below:

Definition: A conceptually moving entity (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).

Representitive lemma: *fēi* 飛 ‘fly’, *zǒu* 走 ‘walk’, *guò* 過 ‘pass’, *yuè* 越 ‘go over’, *xiàng* 向 ‘face’, *wǎng* 往 ‘go toward’, *shēng* 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-shēng* 上升 ‘go up to ascend’, *shàng-shàng* 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] < *

可惜[煮熟的鴨子/Figure][飛/Self-initiated Motion]啦！

kěxí zhǔshóu de yāzi fēi lā

pity cooked de dock fly la

‘The cooked dock has flew away.’

- b. Figure [NP] < * < Locative [NP] < Deictic [VP]

[台灣失明流浪犬/Figure][飛/Self-initiated Motion][美國/Locative]找新家

táiwān shīmíng liúlàngquǎn fēi měiguó zhǎoxīn jiā

Taiwan blind stray.dog fly America seek new family

‘A blind stray dog comes all the way from Taiwan to US for a new family.’

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

[妻子/Figure]從二樓[走/Self-initiated Motion]到[一樓客廳/Locative]，

qīzi cóngèr lóu zǒu dào yì lóu kètīng

wife fromNum stair walkarrive Num stair living room

‘My wife went downstairs from the second floor to the living room at the ground floor.’

- d. 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 cāochǎngle

we everyone all run go sports ground PRF

‘We all ran to the sports ground.’

5.4.2 Layer 2: Primary frame

As described previously, Primary Frames, as defined by Liu and Chiang (2008) are one layer below the archiframe in which a given portion of the conceptual schema is specified. Each primary frame contains distinctive and unique set of core frame elements that are defined with syntactic representations. Based on the previous section, there are three primary frames under self-initiated motion archiframe based on Liu et al. (2012). In Liu et al. (2012), the basic structure of self-initiated motion includes Manner, Path, and Deictic. The Manner frame focuses on the various ways of movement. The Path frame emphasizes the course of motion which includes Route specifying a motion contour, Direction specifying a directional orientation, and Endpoint specifying a final destination. The last is the Deictic frame specifies the speaker-oriented relation. The following diagram provides the hierarchical structure based on the three primary frames under the Archiframe of Self-initiated Motion:

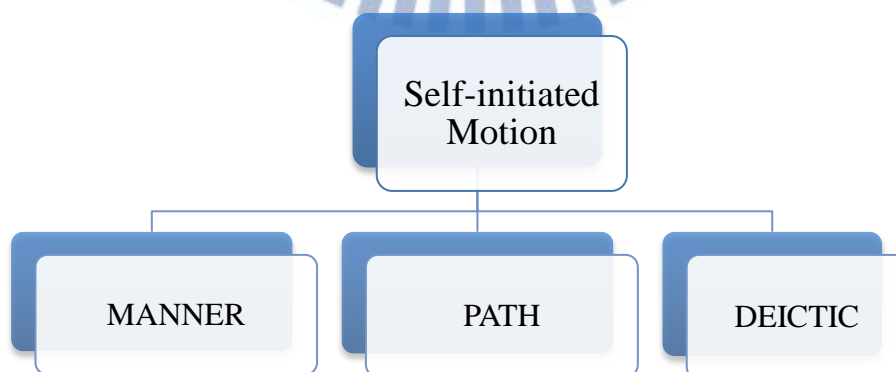


Diagram (14): Primary Frames under Self-initiated Motion Archiframe

Discussion of Path primary frame will be given in the following section. Due to the fact that the other two primary frames Manner Frame and Deictic Frame

are not the main concern of the present study, they will not be discussed for the time being.

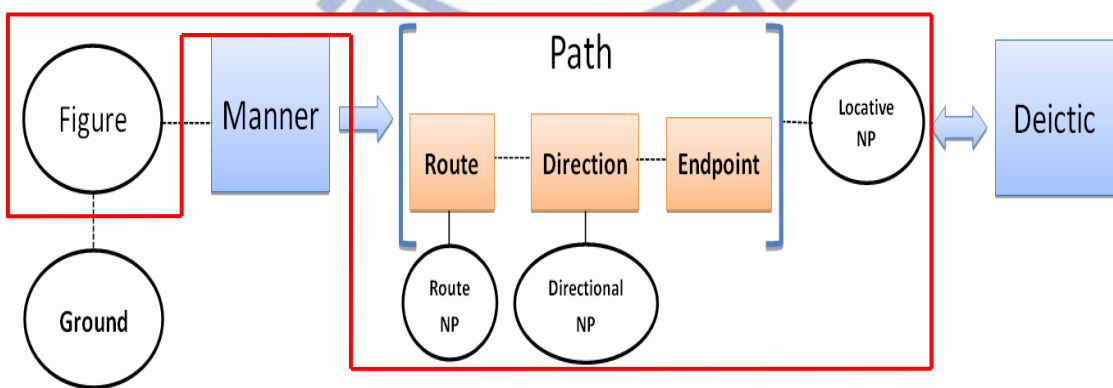
5.4.2.1 Path Primary Frame

Definition: It is a motional course in which the moving entity (Figure) moves by passing an intermediate landmark (Route NP) toward a spatial orientation (Directional NP) to reach a final destination (Locative NP).

Representative lemmas: *guò* 過 ‘pass’, *yuè* 越 ‘go over’, *xiàng* 向 ‘face’, *wǎng* 往 ‘go toward’, *shēng* 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-shēng* 上升 ‘go up to ascend’, *shàng-shàng* 升上 ‘ascend to go up’, *tuì-huí* 退回 ‘recede to return’, *huí-tuì* 回退 ‘return to recede.’

Core Frame Elements: Figure, Route NP, Directional NP, Locative NP

Conceptual Schema:



Defining Patterns:

- a. Figure [NP] < *

[海平面/Figure] 上升

Hai pin mian shang shen

Sea-level go-up

‘The sea level rises.’

- b. Figure [NP] < * < Locative [NP] < (Deictic [VP])

葉子降落地面

Yie zi jian luo di mian

Leaf fall-to-descend ground

‘The leaf falls to the ground.’

- c. Figure [NP] < * < Route [NP] < {到} < Locative [NP]

旅客從香港經東京到休士頓

Lu ke cong xiang gang jing dong jin dao xio shi dun

Traveler from Hong Kong pass-by Tokyo arrive Huston

‘The traveler from Hong Kong passed Tokyo to Huston.’

- d. Figure [NP] < * < Directional [NP] < {到} < Locative [NP]

[工人們/Figure]巴士坐著[往/Direction][南/Directional NP]到[邊境的加工出口區/Locative NP]

gong ren men ba shi zuo zhe wang nan dao bian jing de jia gong chu kou qu

Workers bus take ASP go toward south arrive-at export-processing-zone

‘Workers take the bus going toward south to arrive at the export processing zone.’

5.4.3 Layer 3: Basic Frame

According to Liu and Chiang (2008), under the primary frame, basic frames are semantically more restricted frames. Each basic frame focuses on a narrower scope of meaning. Liu and Chiang (2008) has defined basic frames as “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, each basic frame has its distinctive syntactic representations and highlights its unique frame elements. In addition, a set of basic frame may inherit the defining patterns from their primary frame since they all come from the same primary frame, and each basic frame still has its unique syntactic pattern which separate them distinctively from one another. Verbs in the Path primary frame are divided into many basic frames which includes Route, as specifying a motional contour, Direction, as specifying a spatial orientation, Endpoint, as specifying a motional destination, and other sequential combinations. This study focuses only on the Direction basic frame under the Path primary frame. **Only Direction basic frame under the Path primary frame is discussed in the following section.**

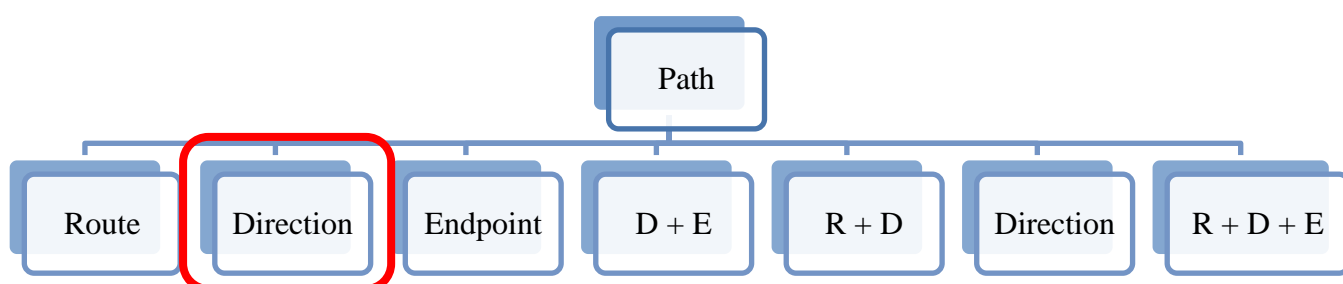


Diagram (15): Direction basic frame under Path primary frame

5.4.3.1 Direction Basic Frame

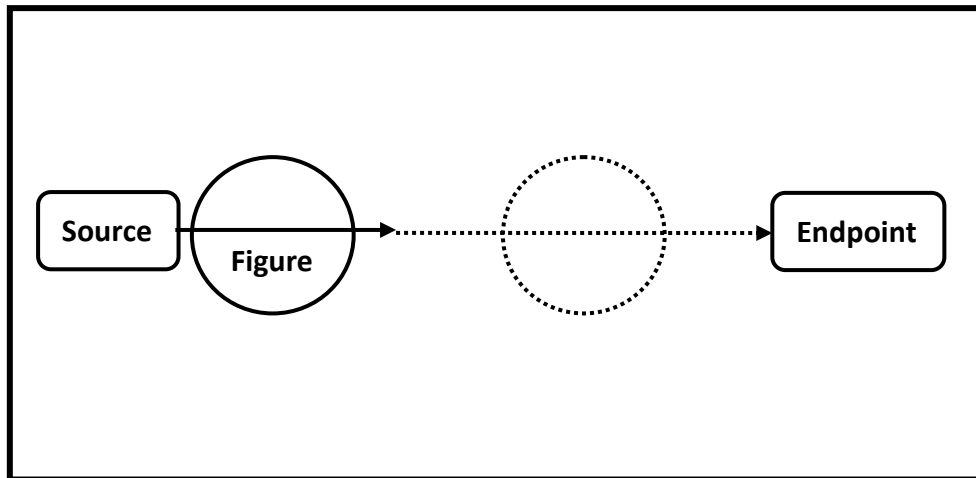


Diagram (16): The conceptual schema of Direction frame

Definition: Direction refers to the spatial orientation with which the moving entity (the Figure) moves with respect to a referential object or in relation to the location of the speaker. The uniqueness of Direction can be evidenced by a set of directional NPs, such as *dōng* 東/*xī* 西/*nán* 南/*běi* 北/*qián* 前/*hòu* 後/*zuǒ* 左/*yòu* 右/*shàng* 上/*xià* 下, or a locative NP such as 加州/車站.

Lemma: *xiàng* 向, *wǎng* 往

Frame Elements: Figure, Manner, Direction NP, Locative NP, Deictic

Defining Patterns:

- a. Figure [NP] < Manner [VP] < * < Locative NP < (Deictic [VP])

[候鳥/Figure][飛/Manner][向/Direction][南方/Locative NP]

hòu niǎo fēi xiàng nán fāng

Migratory-bird fly face south

‘The Migratory birds fly to the south.’

[她/Figure].....[飄/Manner][往/Direction][大門/Locative][去/Deictic]

tā... piāo wǎng dà mén qù

Shefloat go-toward gate go

‘She.....floating toward the gate.’

b. Figure [NP] < * < Locative NP < (Deictic)

[大千/Figure].....一會兒[往/Direction][北平/Locative]，一下子去上海

dà qiān ...yì huǐ er wǎng běi píng , yí xià zi qù shàng hǎi

Daqian.....CL go-toward Beiping CL Shanghai

‘Daqian goes toward Beiping and Shanghai.’

[一輛計程車/Figure][往/Direction][市區/Locative][去/Deictic]

yí liàng jì chéng chē wǎng shì qū qù

CL taxi go-toward downtown go

‘A taxi goes toward the downtown.’

c. Figure[NP] < * < Directional NP < {到} < Locative NP

[工人們/Figure]巴士坐著[往/Direction][南/Directional NP]到[邊境的加工出口
區/Locative NP]

gōng rén men bā shì zuò zhe wǎng nán dào biān jìng de jiā gōng chū kǒu qū

Workers bus take ASP go toward south arrive-at export-processing-zone

‘Workers take the bus going toward south to arrive at the export processing zone.’

Chapter 6

Conclusion

6.1 Conclusion

As stated in the introduction under Chapter 1, this paper explores the issue of Mandarin motion event discussed in Liu et al. (2012) by investigating Direction markers in the Proto-motion Event Schema (Liu et al. 2012). Through investigating the behavior of each Direction marker, this study attempts to give a direction to the identification of a possible answer to the question that has been under debate about the differentiations for the seemingly resembling structures of Direction markers.

In order to provide distinctions among the Direction markers, this paper basically explores the unique distinction of each Direction marker and at the same time provides a frame-based explanation of the Direction markers under Mandarin motion event. Syntactically, *miàn* 面, *cháo* 朝, *xiàng* 向, and *wǎng* 往 can be divided into two main structures: preverbal use of Direction markers (coverbs), and postverbal use of Direction markers (serial verb). But only *xiàng* 向 and *wǎng* 往 in postverbal structure are the main concern since they function syntactically and semantically similar in many cases. *Xiàng* 向 indicates only direction while *wǎng* 往 modifies not only the direction but also a possible path for an entity moving toward the endpoint.

Moreover, by adopting the theory of Fillmore and Atkins (1992)'s Frame semantics and the hierarchical structure established by Liu and Chiang (2008), this

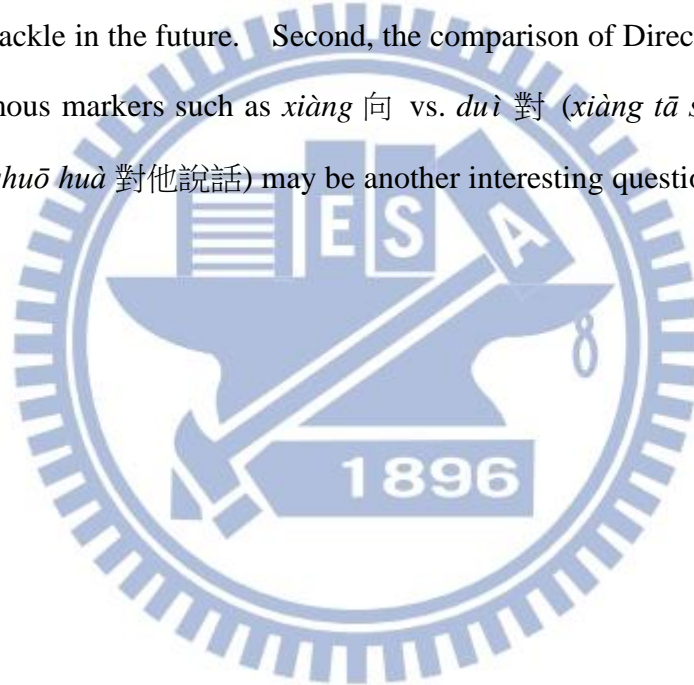
study presents a frame-based and corpus-based investigation of Direction markers under Mandarin motion event. Motion verbs can be categorized into different layers of frames based on the conceptual schema of the Proto-motion Event Schema, the hierarchical frame concerned in the present focus including: Archiframe (Self-initiated Motion), Primary frame (Manner, Path, Deictic), Basic frame under Path primary frame (Route, Direction, Endpoint, Route + Direction, Direction + Endpoint, Route + Direction + Endpoint) and Microframe.

6.2 Significance of the Study

Mandarin directionals are a frequently discussed topic, but Direction markers themselves have not received their due attention. In previous studies about Direction markers (e.g., *cháo* 朝/*xiàng* 向/*wǎng* 往), it is believed that they are prepositions or coverbs that cannot take aspectual markers. The use of serial verb patterns (e.g., V 往/V 向) and the syntactic and semantic distinctions of each marker were rarely discussed. The goal of this paper is to focus on proposing the variation of *miàn* 面, *cháo* 朝, *xiàng* 向, and *wǎng* 往 syntactically and semantically and incorporating into a frame-based analysis of Direction markers based on the Proto-motion Event Schema in Mandarin motion event. In this study, *miàn* 面, *cháo* 朝, *xiàng* 向, and *wǎng* 往 can be divided into two main patterns: preverbal use of Direction markers (coverbs) and postverbal use of Direction markers (serial verb). By discussing and analyzing those seemingly similar yet different behavior of Direction markers in Mandarin, their distinctive syntactic differences and distributional behaviors are being unveiled. In addition, this paper presents a thorough comparison between preverbal and postverbal use of Direction markers to give a clearer look of the Direction markers.

6.3 Future Research

Based on the result of this paper, some potential issues for the exploration in the future still exist. First, since the notion of Direction markers in Direction basic frame is originated from Path primary frame, the basic frames under the Path primary frame may be inseparable in some cases. Thus, a more thorough comparison between three pure Route, pure Direction, and pure Endpoint basic frames will be interesting to tackle in the future. Second, the comparison of Direction markers with other synonymous markers such as *xiàng* 向 vs. *duì* 對 (*xiàng tā shuō huà* 向他說話 vs. *duì tā shuō huà* 對他說話) may be another interesting question to tackle in the future.



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Website Resources

Sinica Corpus (中研院平衡語料庫)

<http://dbo.sinica.edu.tw/SinicaCorpus/index.html>

Chinese Word Sketch (中文詞彙特性速描系統)

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

FrameNet

<http://framenet.icsi.berkeley.edu/>

Google Search

<http://www.google.com.tw/>

